

Wizard of Oz Usability Evaluation of the IBM WebSphere “WebVoice” Demo

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Abstract

We ran a Wizard of Oz (WOZ) usability evaluation of the “WebVoice” demo. The primary purpose was to ensure that the component applications were consistent with draft speech user interface usability guidelines, and to ensure that following the guidelines produced a usable interface. Another purpose was to determine the preferred command for ending a call (which was “Exit”). The applications were generally easy to use. Because users did not know the command for leaving the system and returned to the Main Menu to find it, we recommend adding an Exit option to the Main Menu.

ITIRC Keywords

ViaVoice
Automated Speech Recognition (ASR)
Speech User Interfaces
Telephony
Wizard of Oz Methodology
Usability Evaluation

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Introduction

This report describes a Wizard of Oz (WOZ) usability evaluation of the IBM WebSphere “WebVoice” demo. The primary goal of this demo was to provide sample code to illustrate some key VoiceXML coding techniques. Its three component applications perform basic library, banking, and calendar functions. The purpose of the usability evaluation was to ensure that the applications were consistent with speech user interface usability guidelines planned for publication in an associated programmer’s guide (IBM, in preparation), and to ensure that following the guidelines produced a usable interface.

Because a working prototype was not available for testing, we used the WOZ usability evaluation technique¹. Doing a WOZ study requires a functional specification of the application, but does not require a working prototype. The purpose of a WOZ prototype is to find out via simulated speech-enablement of an application if the designed grammars match what people are likely to say to control the application. In a WOZ study, people who are representative of the target product audience attempt to use speech to control a simulation of the application. This procedure requires a setup in which the users can, in the case of developing telephony interfaces, hear and speak to the application. What the users cannot see is the “wizard behind the curtain” – the person who mimics the application appropriately when a user calls.

¹ Scientists at IBM’s T.J. Watson Research Institute, such as John Gould and Jeff Kelley, pioneered this technique in the early 1980s. For example, see Gould, J. D., Conti, J., and Hovanyecz, T. (1981) or Kelley, (1985). For more recent work using WOZ to develop speech systems, see Bernsen, N. O., Dybkjaer, H., and Dybkjaer, L. (1996).

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Method

Participants

Seven people (four males and three females, all employees of a temporary employment agency) participated, using the demo to complete three tasks in each of the three applications - Library, Banking and Calendar. The participants had no prior exposure to the demo system. Six of the seven participants had no experience using telephony products with speech user interfaces, although one participant had 5-10 exposures. Two of the participants were age 20-39, three were 40-59, and two were over 59 years of age. Three of the participants graduated from high school, while the other four had at least some college education (most had a bachelor's degree or higher level of education). Refer to Appendix A for specific descriptions of the individual participants' demographics.

Apparatus

The participants used a telephone in one cubicle to call an experimenter (the "wizard") in an adjacent cubicle. While visually obscured from the participant, the experimenter used the application scripts to produce the appropriate system response to participants' actions in accordance with the WOZ technique. The experimenter simulated the system, including appropriate responses to silence timeouts and out-of-grammar (OOG) utterances.

Procedure

Each participant completed a non-disclosure statement and provided demographic information. The participants received a briefing on the basic procedure and explanations of the scenarios. The scenarios (see Appendix B) were identical for each participant across applications. Participants were required to navigate from the main menu to the appropriate application and to complete three tasks with each application.

Although some users will hang up to leave a system, many prefer to exit the system and receive confirmation of successful system exit before hanging up (Enterprise Integration Group, 2000). To help us get information about user expectation regarding the most appropriate commands for ending a call, we required participants, after completing all tasks, to leave the system by saying whatever they thought would be an appropriate command.

All participants completed the tasks in the same order – first the library tasks, then the banking tasks, and finally the calendar tasks. After completing the tasks for an application, participants rated that particular application using the After-Task Questionnaire (ATQ). After completing all tasks, participants rated the demo system as a whole, using the ATQ and the Computer System Usability Questionnaire (CSUQ)². Participants also provided suggestions for exit commands and provided ratings for their suggestions and the potential exit commands, "Exit", "Quit", and "Goodbye"³.

² We modified the CSUQ items slightly to make them more appropriate for use with a telephony system.

³ The study was in progress when we started collecting this information, so we got input from five of the seven participants.

Unclassified

Results

Preferred Exit Command

The demo did not present explicit instruction on how to leave the system until the last self-revealing help prompt available - normally the second or fourth self-revealing help prompt. A portion of this prompt (which also included information unrelated to exiting the system) informed the user, “You can leave the demo by hanging up or saying ‘Goodbye’.” Only one participant encountered this prompt, however, and this participant still did not know how to exit the system without hanging up. This may have occurred because the user was focusing on a particular task rather than trying to establish how to leave the system. Without exception, all participants navigated back to the Main Menu hoping to discover a “path” out of the system. Every participant reported the lack of exit information as a “negative” aspect of the system on the ATQ(s).

Each of the last five participants in the study provided a set of words in response to the question, “What words would you select to allow a user to leave the system?” The experimenter then prepared a list of commands for the user to rank in order of preference as a command for this purpose. This list included the words provided by that participant and always included the words “Exit,” “Goodbye” and “Quit”. The words “Exit,” “Quit” and “Goodbye” consistently ranked in the top three for the overwhelming majority of participants. Other words generated by the participants included, “Done,” “Finished,” “Thank you,” “Complete(d)”, and “Terminate.” Due to variability in the lists that participants generated, the only words that appeared frequently enough for statistical analyses were “Exit,” “Quit” and “Goodbye.” A Friedman rank-sum test indicated that there was a significant preference difference among these exit commands ($\chi^2(2) = 4.8, p \leq .10$), with “Exit” the most-preferred choice.

Table 1. Mean rankings for the three exit commands most preferred.

Word	Mean Ranking (1 = most preferred)
<i>Exit</i>	1.2
<i>Quit</i>	2.4
<i>Goodbye</i>	2.4

ATQ Ratings

After using each application (Library, Banking, and Calendar), the participants rated that application using the After-Task Questionnaire (ATQ) (Lewis, 1995). After using all the applications, the participants rated the overall WebVoice system using the ATQ. Table 2 provides a summary of these results. Tables 3-6 provide the raw data for each application and the overall system. The ATQ items were:

1. Overall, I am satisfied with the ease of completing this task.
2. Overall, I am satisfied with the amount of time it took to complete this task.
3. Overall, I am satisfied with the support information provided when completing this task.

Participant's rated these items on a scale of 1 – 7, with 1 indicating strong agreement and 7 indicating strong disagreement. This data provides a baseline against which to assess future working versions of the demo.

Table 2. ATQ ratings for the three applications and the overall WebVoice system (means and 90% confidence intervals)

		Item 1	Item 2	Item 3	Overall
<i>Library Application</i>	Upper	2.7	3.0	4.9	3.5
	Mean	2.0	2.1	3.4	2.5
	Lower	1.3	1.3	1.9	1.6
<i>Banking Application</i>	Upper	2.5	2.4	3.5	2.7
	Mean	1.7	1.7	2.7	2.0
	Lower	0.9	1.0	1.9	1.4
<i>Calendar Application</i>	Upper	3.2	2.6	3.3	2.9
	Mean	2.1	1.9	2.4	2.1
	Lower	1.1	1.1	1.6	1.4
<i>WebVoice Demo</i>	Upper	2.4	2.6	3.8	2.8
	Mean	1.9	1.9	2.7	2.1
	Lower	1.4	1.1	1.6	1.5

Table 3. ATQ ratings for the Library application

Participant	Item 1	Item 2	Item 3	Overall
1	1	1	1	1.0
2	2	2	3	2.3
3	3	4	4	3.7
4	1	1	1	1.0
5	3	3	7	4.3
6	1	1	4	2.0
7	3	3	4	3.3
<i>Mean</i>	2.0	2.1	3.4	2.5
<i>Std Dev</i>	1.0	1.2	2.1	1.3
<i>Count</i>	7	7	7	7
<i>sem</i>	0.38	0.46	0.78	0.49
<i>df</i>	6	6	6	6
<i>Crit-t</i>	1.943	1.943	1.943	1.943
<i>90% CI delta</i>	0.7	0.9	1.5	1.0

Table 4. ATQ ratings for the Banking application

Participant	Item 1	Item 2	Item 3	Overall
1	1	1	3	1.7
2	2	2	2	2.0
3	4	3	4	3.7
4	1	1	1	1.0
5	1	1	2	1.3
6	1	1	4	2.0
7	2	3	3	2.7
<i>Mean</i>	1.7	1.7	2.7	2.0
<i>Std Dev</i>	1.1	1.0	1.1	0.9
<i>Count</i>	7	7	7	7
<i>sem</i>	0.42	0.36	0.42	0.34
<i>df</i>	6	6	6	6
<i>Crit-t</i>	1.943	1.943	1.943	1.943
<i>90% CI delta</i>	0.8	0.7	0.8	0.7

Table 5. ATQ ratings for the Calendar application

Participant	Item 1	Item 2	Item 3	Overall
1	3	2	2	2.3
2	2	2	2	2.0
3	5	4	4	4.3
4	1	1	1	1.0
5	1	1	4	2.0
6	1	1	2	1.3
7	2	2	2	2.0
<i>Mean</i>	2.1	1.9	2.4	2.1
<i>Std Dev</i>	1.5	1.1	1.1	1.1
<i>Count</i>	7	7	7	7
<i>sem</i>	0.55	0.40	0.43	0.40
<i>df</i>	6	6	6	6
<i>Crit-t</i>	1.943	1.943	1.943	1.943
<i>90% CI delta</i>	1.1	0.8	0.8	0.8

Table 6. ATQ ratings for the overall WebVoice Demo

Participant	Item 1	Item 2	Item 3	Overall
1	1	1	1	1.0
2	2	2	2	2.0
3	3	4	4	3.7
4	2	1	1	1.3
5	2	2	5	3.0
6	1	1	3	1.7
7	2	2	3	2.3
<i>Mean</i>	1.9	1.9	2.7	2.1
<i>Std Dev</i>	0.7	1.1	1.5	0.9
<i>Count</i>	7	7	7	7
<i>sem</i>	0.26	0.40	0.57	0.36
<i>df</i>	6	6	6	6
<i>Crit-t</i>	1.943	1.943	1.943	1.943
<i>90% CI delta</i>	0.5	0.8	1.1	0.7

CSUQ Ratings

Participants also rated the WebVoice demo using the Computer System Usability Questionnaire (CSUQ) (Lewis, 1995). It was necessary to tailor some of the questions in the CSUQ to address the speech user interface (as opposed to a software program with a GUI). Four additional questions supplemented the CSUQ. Two additional satisfaction ratings contributed to the overall score and two open-ended questions queried participants for positive and negative comments about the system. See Appendix C for a copy of this version of the CSUQ. The CSUQ allows calculation of an OVERALL score and three subscale scores: 1) SYSUSE – System Usefulness, 2) INFOQUAL – Information Quality, and 3) INTERQUAL – Interface Quality. Because the modified questions addressed the same usability attributes as the original questions, there were no changes required in the scoring method⁴. Table 7 summarizes the CSUQ results. This data provides a baseline against which to assess future working versions of the demo. (See Appendix D for the CSUQ raw data and summary statistics.)

Table 7. CSUQ – Data Summary

	SYSUSE	INFOQUAL	INTERQUAL	OVERALL
<i>Upper</i>	2.8	2.8	2.4	2.7
<i>Mean</i>	2.1	2.1	1.9	2.1
<i>Lower</i>	1.4	1.4	1.4	1.4
<i>Std Dev</i>	1.00	0.95	0.71	0.86

⁴ Strictly speaking, these types of changes could have affected the underlying factor structure of the CSUQ, but such an effect is unlikely given the slight degree of modification.

Usability Problems

In general, the participants had very few problems using the three demo applications. The two primary usability issues were:

- Users did not know the voice command for leaving the system.
- The prompt users received after entering a reminder confused them. (Note that their next task was to review a reminder).

Other usability issues included:

- The remote placement of instructions regarding the procedures for repeating information or prompts.
- The non-directive wording of the initial main menu prompt.
- Some inconsistency of commands and prompts within applications.

We categorized the recommendations by priority and application. Appendix E provides the original WebVoice scripts. Appendix F presents a revision that reflects the recommended changes in the WebVoice scripts. (Development is likely to implement recommendations that only affect the wording of menus, prompts, and help, but will likely defer implementation of recommendations that affect program flow.)

Unclassified

Recommendations

High Priority

1. Main Menu - The demo did not explain how to leave the system unless users triggered a second-level self-revealing help prompt. Because the users quickly became proficient with the application, most users never heard this information. Users expressed concern about leaving the system without some type of 'closure.' This finding is consistent with other reports of interaction with telephony systems (Enterprise Integration Group, 2000). In this study, the typical user behavior was to return to the Main Menu looking for an exit option.

Recommendation: Include an Exit option at the end of the Main Menu.

2. Calendar – After participants created a reminder, the next system prompt was, “Create reminder, invitation, or appointment.” If the users’ next goal was to review rather than create an entry, this prompt effectively directed users to perform a task other than the one desired. The same situation arose after reviewing entries. The system directed users to continue reviewing rather than allowing users to decide to Create or Review. During testing, we found substituting the prompt “Create or Review” allowed users to efficiently choose between reviewing Calendar entries or creating more. The recommended approach comes at a cost of one additional command if the user decides to Review after creating an entry or vice versa. There was a cost of two additional commands with the current approach given those same circumstances.

Recommendation: Present the prompt, “Create or Review” after users finish creating or reviewing entries. This allows users to decide whether they want to create or review subsequent entries rather than the system assuming the next task will be the same as the last.

3. Main Menu - The current demo did not explain how to have prompts and other information repeated until users triggered a second-level self-revealing help prompt. Because user quickly became proficient with the applications, (and, consequently, did not trigger second-level help prompts) the majority of users (6 out of 7) never heard this information. Thus, participants did not hear how to direct the demo to repeat prompts or information.

Recommendation: Add “Repeat” to the list of always-active commands in the Main Menu introduction. The suggested introduction would be, “Welcome to the IBM WebSphere and Lotus Domino Speech Demo. At any time you can say Main Menu to return here, or say Repeat to replay system messages.”

Medium Priority

4. Main Menu - After testing, users listed words they felt conveyed the intention and desire to leave the system. The words “quit,” “goodbye” and “exit” were added to the list if participants did not generate them. Users ranked these exit command words for preference. Users consistently ranked the words, “quit,” “goodbye” and “exit” in the top three preferred exit commands. A statistical analysis indicated the word “exit” was significantly preferred ($p \leq .10$) over both “quit” and “goodbye.”

Recommendation: Use the word “Exit” as the primary externalized command to leave the system. However, the words “Quit” and “Goodbye” should be included in the internal grammar set due to their consistently high rankings.

5. Main Menu - Five out of seven users did not recognize the prompt, “Main Menu: Library, Banking, Calendar” was a request for input. Those five users produced ‘Silence Time Outs’ resulting in the first-level help prompt, “Please say Library, Banking or Calendar” which was effective in moving the users forward.

Recommendation: Add the word “or” before the last option in the initial prompt (and subsequent tapered prompt) to help indicate that user should choose one of the options. Also, make the timeout for this prompt shorter than the usual seven seconds so new users will hear the explicit prompt soon after the presentation of the anchored (“Main Menu”) prompt, but more experienced users will be able to move forward quickly by providing the desired option in the shorter recognition window.

Low Priority

6. All Applications - Several users expressed a preference to have the option to “Exit” added to prompts for new transactions. Participants expressed concern that information regarding how to leave the system provided in the Main Menu may be forgotten, overlooked, or users may presume this command option is only valid within the Main Menu itself.

Recommendation: Add the option “Exit” to prompts for new transactions. For example, “Create, Review or Exit?” or “Choose one: Inquiries, Transfers or Exit.”

7. Calendar - The Calendar interface presented inconsistent prompts after creating entries. For example, after creating a reminder or invitation the user received the prompt, “Create reminder, invitation, or appointment.” However, after an appointment was created the prompt stated, “Please say one of the following calendar entry options: Create, Review.”

Unclassified

Recommendation: Present users with a consistent prompt after successfully creating or reviewing reminders, invitations or appointments. Specifically, we recommend using the prompt “Create or Review” (See Recommendation 2).

Unclassified

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Unclassified

Appendix A. Participant Demographics

Participant	Gender	Age Group	Education	Telephony Experience
1	Female	59+	High School	None
2	Male	40 – 59	B. A.	None
3	Female	20 – 39	Some College	None
4	Male	59+	High School	None
5	Female	40 – 59	M. A.	None
6	Male	20 – 39	B. A.	5 – 10
7	Male	40 – 59	High School	None

Unclassified

Appendix B. Task Scenarios for WebVoice Applications

The following four pages display the task scenarios that participants completed using the appropriate application within the WebVoice demo. The participants completed the Library tasks, Banking tasks, and lastly, the Calendar tasks. The order of the Calendar tasks varied slightly during testing to determine the affects of a prompt-change in that application. Therefore, this appendix contains both Calendar scenarios (A and B).

Part 1 of 4

WebVoice – Library Scenarios

Please use the WebVoice system to complete these 4 transactions in a single phone call (i.e., do not hang-up to start a new transaction).

1. Please search for a book written by Nora Roberts and obtain the catalog number.

Catalog Number _____

2. Please search for a book called “Rivers End.” Listen to the system’s description of the book then briefly describe below what the book is about.

“Rivers End” is about...

3. Please search for a book about Science and obtain the catalog number.

Catalog Number _____

4. Please leave the system before hanging up.

_____ Completed successfully
_____ Unsuccessful

Part 2 of 4

WebVoice – Banking Scenarios

Please use the WebVoice system to complete these 4 transactions in a single phone call (i.e., do not hang-up to start a new transaction).

1. Please find out what your savings account balance is.

Balance _____

2. Please transfer \$500 from savings into checking.

_____ Completed successfully

_____ Unsuccessful

3. Please find out what your checking account balance is.

Balance _____

4. Please leave the system before hanging up.

_____ Completed successfully

_____ Unsuccessful

Part 3 of 4

WebVoice – Calendar Scenarios (A)

Please use the WebVoice system to complete these 4 transactions in a single phone call (i.e., do not hang-up to start a new transaction).

1. Please use the system to establish a reminder that you have a meeting this Christmas Day from 11:00am until 1:30pm.

_____ Completed successfully
_____ Unsuccessful

2. Please determine if the reminder is in the system.

_____ Completed successfully
_____ Unsuccessful

3. Please use the system to set up a lunch appointment from 12:00pm until 2:00pm for New Years Day.

_____ Completed successfully
_____ Unsuccessful

4. Please leave the system before hanging up.

_____ Completed successfully
_____ Unsuccessful

Part 4 of 4

WebVoice – Calendar Scenarios (B)

Please use the WebVoice system to complete these 4 transactions in a single phone call (i.e., do not hang-up to start a new transaction).

1. Please use the system to set up a lunch appointment from 12:00pm until 2:00pm for New Years Day.

Completed successfully
 Unsuccessful

2. Please use the system to establish a reminder that you have a meeting this Christmas Day from 11:00am until 1:30pm.

Completed successfully
 Unsuccessful

3. Please determine if the reminder is in the system.

Completed successfully
 Unsuccessful

4. Please leave the system before hanging up.

Completed successfully
 Unsuccessful

Unclassified

Appendix C. Computer System Usability Questionnaire (CSUQ)

The following pages contain a copy of the Computer System Usability Questionnaire (CSUQ) administered to all participants.

1. Overall, I am satisfied with how easy it is to use this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

2. It was simple to use this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

3. I could effectively complete the tasks and scenarios using this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

4. I was able to complete the tasks and scenarios quickly using this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

5. I was able to efficiently complete the tasks and scenarios using this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

6. I felt comfortable using this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

7. It was easy to learn to use this system.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

8. I believe I could use this system very effectively in the future.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

9. The system gave error messages that clearly told me how to fix problems.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

10. Whenever I made a mistake using the system, I could recover easily and quickly.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

11. The introduction to the system was clear.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

12. It was easy to obtain the information I needed.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

13. The information provided by the system was easy to understand.

STRONGLY									STRONGLY
AGREE	1	2	3	4	5	6	7		DISAGREE

COMMENTS:

Unclassified

14. The directive help messages/instructions were effective in helping me complete the tasks and scenarios.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

15. The organization of information was clear and logical.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

16. Overall, the speech-based interface of this system was pleasant.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

17. I liked using speech to control this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

18. This system has all the functions and capabilities I would expect it to have.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
---------------------------	----------	----------	----------	----------	----------	----------	----------	------------------------------

COMMENTS:

19. Overall, I am satisfied with this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
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COMMENTS:

20. I would use this system.

STRONGLY AGREE	1	2	3	4	5	6	7	STRONGLY DISAGREE
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COMMENTS:

Appendix D. CSUQ Raw Data and Summary Statistics

Participant	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1	1	1	1	2	2	1	2	2
2	2	2	2	2	2	2	2	2
3	4	4	3	4	4	5	4	4
4	2	1	3	1	2	2	1	1
5	2	2	2	2	2	2	1	1
6	1	1	1	1	1	1	1	1
7	3	2	4	3	3	2	2	3
Mean	2.1	1.9	2.3	2.1	2.3	2.1	1.9	2.0
Std Dev	1.07	1.07	1.11	1.07	0.95	1.35	1.07	1.15
Count	7	7	7	7	7	7	7	7
sem	0.40	0.40	0.42	0.40	0.36	0.51	0.40	0.44
df	6	6	6	6	6	6	6	6
Crit-t	1.943	1.943	1.943	1.943	1.943	1.943	1.943	1.943
90% CI delta	0.8	0.8	0.8	0.8	0.7	1.0	0.8	0.8
Upper	2.9	2.6	3.1	2.9	3.0	3.1	2.6	2.8
Mean	2.1	1.9	2.3	2.1	2.3	2.1	1.9	2.0
Lower	1.4	1.1	1.5	1.4	1.6	1.2	1.1	1.2

Participant	Q9	Q10	Q11	Q12	Q13	Q14	Q15
1	2	2	1	1	1	2	1
2	2	2	2	2	2	2	2
3	3	3	2	3	3	3	3
4	1	1	1	1	1	1	1
5	7	5	2	2	1	5	2
6	1	1	2	1	1	1	2
7	3	2	3	3	3	4	3
Mean	2.7	2.3	1.9	1.9	1.7	2.6	2.0
Std Dev	2.06	1.38	0.69	0.90	0.95	1.51	0.82
Count	7	7	7	7	7	7	7
sem	0.78	0.52	0.26	0.34	0.36	0.57	0.31
df	6	6	6	6	6	6	6
Crit-t	1.943	1.943	1.943	1.943	1.943	1.943	1.943
90% CI delta	1.5	1.0	0.5	0.7	0.7	1.1	0.6
Upper	4.2	3.3	2.4	2.5	2.4	3.7	2.6
Mean	2.7	2.3	1.9	1.9	1.7	2.6	2.0
Lower	1.2	1.3	1.4	1.2	1.0	1.5	1.4

Participant	Q16	Q17	Q18	Q19	Q20	Q21
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	2	3	4	4	4
4	1	1	2	2	1	1
5	1	2	2	3	1	2
6	1	2	2	1	1	1
7	3	3	3	3	3	3
Mean	1.7	1.9	2.1	2.3	1.9	2.0
Std Dev	0.95	0.69	0.69	1.11	1.21	1.15
Count	7	7	7	7	7	7
sem	0.36	0.26	0.26	0.42	0.46	0.44
df	6	6	6	6	6	6
Crit-t	1.943	1.943	1.943	1.943	1.943	1.943
90% CI delta	0.7	0.5	0.5	0.8	0.9	0.8
Upper	2.4	2.4	2.6	3.1	2.7	2.8
Mean	1.7	1.9	2.1	2.3	1.9	2.0
Lower	1.0	1.4	1.6	1.5	1.0	1.2

Participant	SYSUSE	INFOQUAL	INTERQUAL	OVERALL
1	1.5	1.4	1.0	1.3
2	2.0	2.0	2.0	2.0
3	4.0	2.9	2.7	3.4
4	1.6	1.0	1.3	1.3
5	1.8	3.4	1.7	2.3
6	1.0	1.3	1.7	1.2
7	2.8	3.0	3.0	2.9
Mean	2.1	2.1	1.9	2.1
Std Dev	1.00	0.95	0.71	0.86
Count	7	7	7	7
sem	0.38	0.36	0.27	0.33
df	6	6	6	6
Crit-t	1.943	1.943	1.943	1.943
90% CI delta	0.7	0.7	0.5	0.6
Upper	2.8	2.8	2.4	2.7
Mean	2.1	2.1	1.9	2.1
Lower	1.4	1.4	1.4	1.4

Appendix E. Original CTC WebVoice Scripts

The following pages contain the CTC WebVoice scripts as used for this evaluation.

Key

C = Computer speech

H = Human input

Main Menu

C: Welcome to the IBM WebSphere and LOTUS Domino Speech Demo.

C: You can return here at any time by saying Main Menu.

C: Main Menu: Library, Banking, Calendar.

Help prompt 1: Please say Library, Banking, or Calendar.

Help prompt 2: This demo includes three applications, Library, Banking, and Calendar. To start an application, say the application's name. You can return to the Main Menu at any time by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Library, Banking, Calendar.

H: Library

Library

C: Welcome to The Library Catalog System (or Welcome BACK to The Library Catalog System, if you were previously there in the same session.)

C: You can return here at any time by saying Library.

C: Please choose one of the following searches: Subject, Author, Title.

Help prompt 1: Please say Subject, Author, or Title.

Help prompt 2: This application lets you find books in a small library with five books. To use this application, you need to tell the system what to search by: Subject, Author, or Title. You can restart the Library at any time by saying Library, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Subject, Author, Title.

Unclassified

Search By Author

H: Author

C: Please state the author's first and last name.

Help prompt 1: Please choose one of the following authors: Nora Roberts, Brian Green, William Lace, Dr. Seuss, Galen Grimes.

Help prompt 2: This is a small library, with books by five different authors. From here, you can pick one of the authors, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following authors: Nora Roberts, Brian Green, William Lace, Dr. Seuss, Galen Grimes.

H: <Selected author's first and last name>

C: Found <Book Title> by <Book Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Read Book Jacket

H: Read Jacket

C: Please wait for jacket information. (Computer retrieves and reads a short synopsis of the book.)

C: Choose one: Read Jacket, Catalog Number, New Search (Note that the prompt is shorter this time to demonstrate tapering – only need to taper within this app – no need to do session tracking)

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog

Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Search By Title

H: Title

C: Please state the title.

Help prompt 1: Please select one of the following titles. You only need to say a few words from the title to select it, and you can make your selection at any time: Sports Great Nolan Ryan, River's End, The Cat in the Hat, 10 Minute PC Upgrades, The Elegant Universe.

Help prompt 2: This is a small library, with only five books. From here, you can pick one of the titles, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following titles: Sports Great Nolan Ryan, River's End, The Cat in the Hat, 10 Minute PC Upgrades, The Elegant Universe.

H: <Selected book title>

C: (Computer retrieves and reads book information.) <Book title> by <Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Unclassified

Get Library Catalog Number

H: Catalog number

C: The Library Catalog Number for <Book Title> is <Catalog Number>.

C: Please choose one of the following searches: Subject, Author, Title.

Help prompt 1: Please say Subject, Author, or Title.

Help prompt 2: This application lets you find books in a small library with five books. To use this application, you need to tell the system what to search by: Subject, Author, or Title. You can restart the Library at any time by saying Library, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Subject, Author, Title.

Search By Subject

H: Subject

C: Please state the subject.

Help prompt 1: Please say one of the following subjects: Sports, Kids' Books, Novels, Computers, Science.

Help prompt 2: This is a small library, with only five books. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Sports, Kids' Books, Novels, Computers, Science.

H: <Selected book subject>

C: (Computer retrieves and reads book information.) For <subject>: Found <Book title> by <Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Banking

H: Banking

(Users can say this option at any point in the sample.)

C: Welcome to the Banking system.

C: You can return here at any time by saying Banking.

C: Please say one of the following options: Inquiries, Transfers.

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Inquiries, Transfers.

Inquiries

H: Inquiries

C: Inquiries. Savings or checking?

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

H: Savings

C: Your Savings account balance is \$1,250.53.

Unclassified

C: Choose one: Inquiries, Transfers. (This is a shorter prompt, demonstrating the technique of tapering.)

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Inquiries, Transfers.

H: Inquiries

C: Inquiries. Savings or checking?

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

H: Checking

C: Your checking account balance is \$953.28.

C: Choose one: Inquiries, Transfers.

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Inquiries, Transfers.

H: Inquiries

C: Inquiries. Savings or checking?

Unclassified

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

H: Savings

C: Your savings account balance is \$1,250.53.

Transfers

H: Transfers

C: Transfers. Accounts or bills?

Help prompt 1: Please say either Accounts or Bills.

Help prompt 2: From here, you can transfer funds between your accounts, get the status of an automatic bill payment, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Accounts, Bills, Banking.

H: Accounts

C: Bank systems updating. Transfers not currently available. Please call back later.

C: Choose one: Inquiries, Transfers

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Inquiries, Transfers.

H: Transfers

C: Transfers. Accounts or bills?

Help prompt 1: Please say either Accounts or Bills.

Help prompt 2: From here, you can transfer funds between your accounts, get the status of an automatic bill payment, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Accounts, Bills, Banking.

H: Bills

C: Paid this month's utilities two days ago.

Calendar

H: Calendar

(Users can say this prompt at any point in the sample.)

C: Welcome to the LOTUS Domino Calendar system.

C: You can return here at any time by saying Calendar.

C: Please say one of the following calendar entry options: Create, Review

Help prompt 1: Please say either Create or Review.

Help prompt 2: This application simulates some simple calendar functions. To use this application, you need to tell the system whether you want to create or review calendar entries. You can return to this part of the demo at any time by saying Calendar, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Create, Review.

H: Create

C: Create reminder, invitation, or appointment?

Help prompt 1: Please say the type of calendar entry you want to create: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to create, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again,

Unclassified

say Repeat. To continue, please say one of the following choices: Reminder, Invitation, Appointment.

H: Reminder

C: Please complete the reminder form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Important event, Do today, Birthday, Medical.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Meeting, Important event, Do today, Birthday, Medical.

H: Medical

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: June twentieth

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Unclassified

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: 9 AM.

C: Add reminder with subject Medical starting June twentieth at nine AM. Yes or no?

Help prompt 1: Please say Yes or No.

Help prompt 2: If you say Yes, the system add the reminder. If you say No, the system will discard the reminder. Add reminder?

H: Yes.

C: Reminder added.

C: Create reminder, invitation, or appointment?

Help prompt 1: Please say the type of calendar entry you want to create: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to create, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminder, Invitation, Appointment.

H: Invitation

C: Please complete the invitation form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Conference call, Area function, Lunch, Corporate event.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Meeting, Conference call, Area function, Lunch, Corporate event.

Unclassified

H: Meeting

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: May twenty-third

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: 10 AM

C: End time is?

Help prompt 1: Please state the end time.

Help prompt 2: State the end time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. End time is?

Help prompt 4: From here, you can provide an end time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying

Unclassified

Goodbye. To hear a prompt again, say Repeat. To continue, please state the end time in hours and minutes. End time is?

H: 11 AM

C: Location is?

Help prompt 1: Please say one of the following locations: My office, Your office, My manager's office, At headquarters, To be determined.

Help prompt 2: This system allows you to select from a small list of locations. From here, you can pick one of the locations, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following locations: My office, Your office, My manager's office, At headquarters, To be determined.

H: My office

C: Attendees are?

Help prompt 1: Please say one or more of the following members of your attendees list: Steve, Ron, Peggy, Mary, Marshall.

Help prompt 2: For example, you could say "Mary, Steve, and Ron". Please say one or more of these attendee names: Steve, Ron, Peggy, Mary, Marshall.

Help prompt 3: This system allows you to select from a small list of attendees. From here, you can pick one or more of the attendees, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one or more of these attendee names: Steve, Ron, Peggy, Mary, Marshall.

H: Marshall and Peggy

C: Add invitation with subject Meeting starting May twenty-third from ten AM to eleven AM in my office with Marshall and Peggy. Yes or no?

Help prompt 1: Please say Yes or No.

Help prompt 2: If you say Yes, the system add the reminder. If you say No, the system will discard the reminder. Add reminder?

Unclassified

H: Yes.

C: Invitation added.

C: Create reminder, invitation, or appointment?

Help prompt 1: Please say the type of calendar entry you want to create: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to create, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminder, Invitation, Appointment.

H: Appointment

C: Please complete the appointment form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Important event, Legal, Medical, Lunch.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Meeting, Important event, Legal, Medical, Lunch.

H: Lunch

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue,

Unclassified

please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: April fifth

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: Noon <Assuming the built-in time grammar can handle this.>

C: End time is?

Help prompt 1: Please state the end time.

Help prompt 2: State the end time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. End time is?

Help prompt 4: From here, you can provide an end time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state the end time in hours and minutes. End time is?

H: One o'clock PM

C: Location is?

Help prompt 1: Please say one of the following locations: My office, Your office, His office, Her office, Restaurant.

Help prompt 2: This system allows you to select from a small list of locations. From here, you can pick a location, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue,

Unclassified

please say one of the following locations: My office, Your office, His office, Her office, Restaurant.

H: Restaurant

C: Add appointment with subject Lunch starting April fifth from noon to one o'clock PM in Restaurant. Yes or no?

Help prompt 1: Please say Yes or No.

Help prompt 2: If you say Yes, the system add the appointment. If you say No, the system will discard the appointment. Add appointment?

H: Yes.

C: Appointment added.

C: Please say one of the following calendar entry options: Create, Review

Help prompt 1: Please say either Create or Review.

Help prompt 2: This application simulates some simple calendar functions. To use this application, you need to tell the system whether you want to create or review calendar entries. You can return to this part of the demo at any time by saying Calendar, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following options: Create, Review.

H: Review

C: Review reminders, invitations, or appointments?

Help prompt 1: Please say the type of calendar entry you want to review: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminders, Invitations, Appointments.

H: Invitations

C: Invitations on what date?

Help prompt 1: Please state the review date.

Help prompt 2: State the month and day and, optionally, the year. Review date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Review date is?

Help prompt 4: From here, you can provide a review date, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state a review date, providing the month and day, and, optionally, the year. Review date is?

H: Today

C: You have _#_ invitations for today. The ___ invitation is _____, etc...

C: Review reminders, invitations, or appointments?

Help prompt 1: Please say the type of calendar entry you want to review: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminders, Invitations, Appointments.

H: Appointments

C: Appointments for what date?

Help prompt 1: Please state the review date.

Help prompt 2: State the month and day and, optionally, the year. Review date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Review date is?

Help prompt 4: From here, you can provide a review date, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please state a review date, providing the month and day, and, optionally, the year. Review date is?

Unclassified

H: Tomorrow

C: You have _#_ appointments for tomorrow. The ___ appointment is _____, etc...

C: Review reminders, invitations, or appointments?

Help prompt 1: Please say the type of calendar entry you want to review:
reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. You can leave the demo by hanging up or saying Goodbye. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminders, Invitations, Appointments.

H: Reminders

C: You have one reminder for today. Remember your medical appointment at three o'clock PM.

Unclassified

Appendix F. Revised Version of the CTC WebVoice Scripts

The following pages represent the CTC WebVoice scripts as they would appear if all the recommendations from this evaluation are accepted and implemented. Revisions are *italicized* and numbered (#) according to the corresponding identification number in the Recommendation section.

Key

C = Computer speech

H = Human input

Main Menu

C: Welcome to the IBM WebSphere and LOTUS Domino Speech Demo.

C: *At any time you can say Main Menu to return here, or say Repeat to replay system messages (3).*

C: *Main Menu: Library, Banking, Calendar, or (5) Exit (1).*

Help prompt 1: *Please say Library, Banking, Calendar or Exit (1).*

Help prompt 2: This demo includes three applications, Library, Banking, and Calendar. To start an application, say the application's name. You can return to the Main Menu at any time by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. *To continue, please say one of the following options: Library, Banking, Calendar or (5) Exit (1).*

H: Library

Library

C: Welcome to The Library Catalog System (or Welcome BACK to The Library Catalog System, if you were previously there in the same session.)

C: You can return here at any time by saying Library.

C: Please choose one of the following searches: Subject, Author, Title.

Help prompt 1: Please say Subject, Author, or Title.

Help prompt 2: This application lets you find books in a small library with five books. To use this application, you need to tell the system what to search by: Subject, Author, or Title. You can restart the Library at any time by saying Library, or return to the Main Menu

by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: Subject, Author, Title.

Search By Author

H: Author

C: Please state the author's first and last name.

Help prompt 1: Please choose one of the following authors: Nora Roberts, Brian Green, William Lace, Dr. Seuss, Galen Grimes.

Help prompt 2: This is a small library, with books by five different authors. From here, you can pick one of the authors, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following authors: Nora Roberts, Brian Green, William Lace, Dr. Seuss, Galen Grimes.

H: <Selected author's first and last name>

C: Found <Book Title> by <Book Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Read Book Jacket

H: Read Jacket

C: Please wait for jacket information. (Computer retrieves and reads a short synopsis of the book.)

C: Choose one: Read Jacket, Catalog Number, New Search, *or Exit (6)*

Help prompt 1: To hear a brief summary of the book again, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search, *or Exit (6)*.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4)*. To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search, *or Exit (6)*.

Search By Title

H: Title

C: Please state the title.

Help prompt 1: Please select one of the following titles. You only need to say a few words from the title to select it, and you can make your selection at any time: Sports Great Nolan Ryan, River's End, The Cat in the Hat, 10 Minute PC Upgrades, The Elegant Universe.

Help prompt 2: This is a small library, with only five books. From here, you can pick one of the titles, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4)*. To hear a prompt again, say Repeat. To continue, please say one of the following titles: Sports Great Nolan Ryan, River's End, The Cat in the Hat, 10 Minute PC Upgrades, The Elegant Universe.

H: <Selected book title>

C: (Computer retrieves and reads book information.) <Book title> by <Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by*

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hanging up or saying Exit (4). To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Get Library Catalog Number

H: Catalog number

C: The Library Catalog Number for <Book Title> is <Catalog Number>.

C: Please choose one of the following searches: Subject, Author, Title or say Exit (6).

Help prompt 1: *Please say Subject, Author, Title or Exit (6).*

Help prompt 2: This application lets you find books in a small library with five books. To use this application, you need to tell the system what to search by: Subject, Author, or Title. You can restart the Library at any time by saying Library, or return to the Main Menu by saying Main Menu. You can leave the demo by hanging up or saying Exit (4). To hear a prompt again, say Repeat. To continue, please say one of the following options: Subject, Author, Title or Exit (6).

Search By Subject

H: Subject

C: Please state the subject.

Help prompt 1: Please say one of the following subjects: Sports, Kids' Books, Novels, Computers, Science.

Help prompt 2: This is a small library, with only five books. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Sports, Kids' Books, Novels, Computers, Science.

H: <Selected book subject>

C: (Computer retrieves and reads book information.) For <subject>: Found <Book title> by <Author>.

C: Say one of these options: Read Jacket, Catalog Number, New Search

Help prompt 1: To hear a brief summary of the book, say Read Jacket. To get the number you need to find the book in the library, say Catalog

Number. Or you can start over by saying New Search. Please say one of these options: Read Jacket, Catalog Number, New Search.

Help prompt 2: From here, you can get some information about the selected book, say Main Menu to return to the Main Menu, or say Library to restart the Library application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Read Jacket, Catalog Number, New Search.

Banking

H: Banking

(Users can say this option at any point in the sample.)

C: Welcome to the Banking system.

C: You can return here at any time by saying Banking.

C: Please say one of the following options: Inquiries, Transfers.

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: Inquiries, Transfers.

Inquiries

H: Inquiries

C: Inquiries. Savings or checking?

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

Unclassified

H: Savings

C: Your Savings account balance is \$1,250.53.

C: *Choose one: Inquiries, Transfers or Exit (6).* (This is a shorter prompt, demonstrating the technique of tapering.)

Help prompt 1: Please say either Inquiries or Transfers.

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. *To continue, please say one of the following options: Inquiries, Transfers or Exit (6).*

H: Inquiries

C: Inquiries. Savings or checking?

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

H: Checking

C: Your checking account balance is \$953.28.

C: *Choose one: Inquiries, Transfers or Exit (6).*

Help prompt 1: *Please say Inquiries, Transfers or Exit (6).*

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: *Inquiries, Transfers or Exit (6).*

Unclassified

H: Inquiries

C: Inquiries. Savings or checking?

Help prompt 1: Please say either Savings or Checking.

Help prompt 2: From here, you can get the balance for your savings or checking account, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Savings, Checking.

H: Savings

C: Your savings account balance is \$1,250.53.

Transfers

H: Transfers

C: Transfers. Accounts or bills?

Help prompt 1: Please say either Accounts or Bills.

Help prompt 2: From here, you can transfer funds between your accounts, get the status of an automatic bill payment, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Accounts, Bills, Banking.

H: Accounts

C: Bank systems updating. Transfers not currently available. Please call back later.

C: *Choose one: Inquiries, Transfers or Exit (6).*

Help prompt 1: *Please say Inquiries, Transfers or Exit (6).*

Help prompt 2: This application simulates some simple banking functions. To use this application, you need to tell the system whether you are inquiring about your account balances or transferring funds. You can restart the Banking application at any time by saying Banking, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: *Inquiries, Transfers or Exit (6).*

Unclassified

H: Transfers

C: Transfers. Accounts or bills?

Help prompt 1: Please say either Accounts or Bills.

Help prompt 2: From here, you can transfer funds between your accounts, get the status of an automatic bill payment, say Main Menu to return to the Main Menu, or say Banking to restart the Banking application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Accounts, Bills, Banking.

H: Bills

C: Paid this month's utilities two days ago.

Calendar

H: Calendar

(Users can say this prompt at any point in the sample.)

C: Welcome to the LOTUS Domino Calendar system.

C: You can return here at any time by saying Calendar.

C: Please say one of the following calendar entry options: Create, Review

Help prompt 1: Please say either Create or Review.

Help prompt 2: This application simulates some simple calendar functions. To use this application, you need to tell the system whether you want to create or review calendar entries. You can return to this part of the demo at any time by saying Calendar, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: Create, Review.

H: Create

C: Create reminder, invitation, or appointment?

Help prompt 1: Please say the type of calendar entry you want to create: reminder, invitation, appointment.

Unclassified

Help prompt 2: From here, you can indicate the type of calendar entry you want to create, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminder, Invitation, Appointment.

H: Reminder

C: Please complete the reminder form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Important event, Do today, Birthday, Medical.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Meeting, Important event, Do today, Birthday, Medical.

H: Medical

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: June twentieth

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: 9 AM.

C: Add reminder with subject Medical starting June twentieth at nine AM. Yes or no?

Help prompt 1: Please say Yes or No.

Help prompt 2: If you say Yes, the system add the reminder. If you say No, the system will discard the reminder. Add reminder?

H: Yes.

C: Reminder added.

C: *Create or Review (2,7)*

Help prompt 1: Please say either Create or Review (2,7).

Help prompt 2: From here, you can indicate the type of calendar entry you want to create, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. *To continue, please say one of the following choices: Create, Review or Exit (2,6,7).*

H: Invitation

C: Please complete the invitation form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Conference call, Area function, Lunch, Corporate event.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue,

Unclassified

please say one of the following subjects: Meeting, Conference call, Area function, Lunch, Corporate event.

H: Meeting

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: May twenty-third

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: 10 AM

C: End time is?

Help prompt 1: Please state the end time.

Help prompt 2: State the end time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. End time is?

Unclassified

Help prompt 4: From here, you can provide an end time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state the end time in hours and minutes. End time is?

H: 11 AM

C: Location is?

Help prompt 1: Please say one of the following locations: My office, Your office, My manager's office, At headquarters, To be determined.

Help prompt 2: This system allows you to select from a small list of locations. From here, you can pick one of the locations, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following locations: My office, Your office, My manager's office, At headquarters, To be determined.

H: My office

C: Attendees are?

Help prompt 1: Please say one or more of the following members of your attendees list: Steve, Ron, Peggy, Mary, Marshall.

Help prompt 2: For example, you could say "Mary, Steve, and Ron". Please say one or more of these attendee names: Steve, Ron, Peggy, Mary, Marshall.

Help prompt 3: This system allows you to select from a small list of attendees. From here, you can pick one or more of the attendees, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one or more of these attendee names: Steve, Ron, Peggy, Mary, Marshall.

H: Marshall and Peggy

C: Add invitation with subject Meeting starting May twenty-third from ten AM to eleven AM in my office with Marshall and Peggy. Yes or no?

Help prompt 1: Please say Yes or No.

Unclassified

Help prompt 2: If you say Yes, the system add the reminder. If you say No, the system will discard the reminder. Add reminder?

H: Yes.

C: Invitation added.

C: *Create or Review (2,7)*

Help prompt 1: *Please say either Create or Review (2,7).*

Help prompt 2: From here, you can create another calendar entry by saying Create, review entries by saying Review (2), say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: *Create, Review or Exit (2,6,7)*

H: Appointment

C: Please complete the appointment form.

C: Subject is?

Help prompt 1: Please say one of the following subjects: Meeting, Important event, Legal, Medical, Lunch.

Help prompt 2: This system allows you to select from a small list of subjects. From here, you can pick one of the subjects, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following subjects: Meeting, Important event, Legal, Medical, Lunch.

H: Lunch

C: Start date is?

Help prompt 1: Please state the start date.

Help prompt 2: State the month and day and, optionally, the year. Start date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Start date is?

Help prompt 4: From here, you can provide a start date for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state a start date, providing the month and day, and, optionally, the year. Start date is?

H: April fifth

C: Start time is?

Help prompt 1: Please state the start time.

Help prompt 2: State the start time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. Start time is?

Help prompt 4: From here, you can provide a start time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state the start time in hours and minutes. Start time is?

H: Noon

C: End time is?

Help prompt 1: Please state the end time.

Help prompt 2: State the end time in hours and minutes.

Help prompt 3: For example, ten o'clock AM or three-thirty PM. End time is?

Help prompt 4: From here, you can provide an end time for the reminder, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state the end time in hours and minutes. End time is?

H: One o'clock PM

C: Location is?

Help prompt 1: Please say one of the following locations: My office, Your office, His office, Her office, Restaurant.

Help prompt 2: This system allows you to select from a small list of locations. From here, you can pick a location, say Main Menu to return to

the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following locations: My office, Your office, His office, Her office, Restaurant.

H: Restaurant

C: Add appointment with subject Lunch starting April fifth from noon to one o'clock PM in Restaurant. Yes or no?

Help prompt 1: Please say Yes or No.

Help prompt 2: If you say Yes, the system add the appointment. If you say No, the system will discard the appointment. Add appointment?

H: Yes.

C: Appointment added.

C: *Create or Review (2,7)*

Help prompt 1: *Please say either Create or Review (2,7).*

Help prompt 2: This application simulates some simple calendar functions. To use this application, you need to tell the system whether you want to create or review calendar entries. You can return to this part of the demo at any time by saying Calendar, or return to the Main Menu by saying Main Menu. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following options: *Create, Review or Exit (2,6,7).*

H: Review

C: Review reminders, invitations, or appointments?

Help prompt 1: Please say the type of calendar entry you want to review: reminder, invitation, appointment.

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: Reminders, Invitations, Appointments.

Unclassified

H: Invitations

C: Invitations on what date?

Help prompt 1: Please state the review date.

Help prompt 2: State the month and day and, optionally, the year. Review date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Review date is?

Help prompt 4: From here, you can provide a review date, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please state a review date, providing the month and day, and, optionally, the year. Review date is?

H: Today

C: You have _#_ invitations for today. The ___ invitation is _____, etc...

C: *Create or Review? (2,7)*

Help prompt 1: *Please say either Create or Review.(2,7)*

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4).* To hear a prompt again, say Repeat. To continue, please say one of the following choices: *Create or Review (2,7).*

H: Appointments

C: Appointments for what date?

Help prompt 1: Please state the review date.

Help prompt 2: State the month and day and, optionally, the year. Review date is?

Help prompt 3: For example, July third. Or you can say 'today' or 'tomorrow'. Review date is?

Help prompt 4: From here, you can provide a review date, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar.

Unclassified

You can leave the demo by hanging up or saying Exit (4). To hear a prompt again, say Repeat. To continue, please state a review date, providing the month and day, and, optionally, the year. Review date is?

H: Tomorrow

C: You have _#_ appointments for tomorrow. The ___ appointment is _____, etc...

C: *Create or Review?(2,7)*

Help prompt 1: *Please say either Create or Review.(2,7)*

Help prompt 2: From here, you can indicate the type of calendar entry you want to review, say Main Menu to return to the Main Menu, or say Calendar to restart the Calendar application. *You can leave the demo by hanging up or saying Exit (4). To hear a prompt again, say Repeat. To continue, please say one of the following choices: Create or Review (2,7)*

H: Reminders

C: You have one reminder for today. Remember your medical appointment at three o'clock PM.