

Achievement Table

ID	Requirement	Priority	State	Contributors
1	Basic animated figure that appears situated in world space in an app on an Android phone	Must	✓	Lilly
2	Takes voice input from user	Must	✓	Lilly, Oliver
3	Has text input as an alternative	Must	✓	Lilly, Dillon
4	Answers basic questions from the user, specific to IBM	Must	✓	Lilly
5	Shows a simple map of the building when asked	Must	✓	Lilly
6	Interfaces with a basic staff directory to provide room numbers and contact info for staff	Must	✓	Oliver, Lilly
7	Basic error recovery / user prompts (i.e. encouraging the user to move away, communicating that it doesn't know the answer to a question)	Must	✓	Lilly, Oliver
8	Basic ability to adapt the avatar chatbot engine to different organisations by providing API-like functionality to edit the chatbot's recognised question and answers	Should	✓	Lilly, Oliver
9	Ability to adapt the chatbot engine to different organisations by providing functionality to edit a database of staff info and room location	Should	✓	Oliver
10	Integrates with an text system to notify a staff member by text that someone is ready to see them	Should	✓	Oliver, Lilly
11	Displays more complex information about the organisation when asked	Should	✓	Lilly
12	Is able to give basic directions	Should	50%	Oliver, Lilly
13	Is able to integrate with a basic calendar system to give information about events happening in the building	Should	✓	Oliver, Lilly
14	Text information adjusts size, rotation and position based on user	Should	✓	Lilly
15	Floor Trigger image recognition	Should	✓	Lilly
16	Avatar reacts to users position and follows with body/eyes/face	Should	✓	Lilly
17	User interface for non-technical users to edit the chatbot for their organisation	Could	X	
18	More complex and lifelike animation	Could	X	
19	iOS support	Could	X	
20	Tablet View	Could	X	
21	Long Tail question answering using Watson Discovery to add unusual answers	Could	X	
22	Map / Direction system which locates the user in the building and is able to show them their location on a map, as well as information about where they want to go	Could	X	
23	Collect and display basic analytics about how users are interacting with the AR	Could	X	
24	Basic sentiment analysis of the user's input to adapt the conversation	Could	X	
	<b>Key functionalities (Must and Should have)</b>		90% complete	
	<b>Optional functionalities (Could have)</b>		0% complete	

NB:

No.8 This requirement was deliberately vague because we were not sure when we started the project how much we would be able to adapt our chatbot to different organisations. We have certainly met the first part "ability to adapt the avatar chatbot engine to different organisations" because we have provided three different types of chatbot (IBM office, GP and library), and this has been a significant part of our work this term. This demonstrates to our client and users that our avatar is adaptable to different settings. There is "API-Like functionality" to edit "the chatbots recognised answers" through the Watson Assistant GUI and the Azure SQL database editor, but we did not build any new API. We have marked this requirement as complete because we believe we achieved the overall objective of demonstrating that the chatbot is adaptable to different organisations, and we put in significant work to do this.

No.12 "Basic Directions". Our avatar offers some direction in the form of a) telling a user vocally which office someone has and b) showing them a map. It does not give directions such as "go straight ahead and turn left." We realised this was much more complicated than expected to implement and we did not have time to do so. Therefore we have marked this requirement as 50% complete.

No. 14 In our final avatar, very little text is displayed to the user in world space because people found this confusing and difficult to see. The text that is displayed adjusts rotation and position but not size. This is because we realised it was unnecessary to change the text size, because a user would just move closer to see the text bigger.

No. 16 This requirement originally said follows with "eyes/face". We conducted experiments with eye and face rotation but found it was significantly more complicated than expected, and rotating the avatar body achieved the same result to the user. See Design page, Experiments section.