

## Project Requirements (final)

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### Definitions

*The key words "MUST", "MUST NOT", "SHOULD", "SHOULD NOT", "MAY" and "MAY NOT" in this document are to be interpreted as described in RFC 2119.*

**MUST** -- *This word means that the definition is an absolute requirement.*

**MUST NOT** -- *This phrase means that the definition is an absolute prohibition.*

**SHOULD** -- *This word means there may exist reasons to ignore an item, and we may choose a different course.*

**SHOULD NOT** -- *This phrase means there may exist reasons to implement an item, but the full implications of implementation should be understood prior to implementation*

**MAY** -- *This word indicates a truly optional item whose functionality is desired, but may fall beyond the scope of the project*

**MAY NOT** -- *This phrase indicates an item whose functionality is not explicitly required, but may be present*

**SIMULATED CONVERSATION** -- *Having a simulated conversation involves a repeating cycle of actions, including -watching a video, -recording an audio response, -choosing from a multiple choice list the response that best matches their recording*

**CONVERSATION TEMPLATE** -- *A collection of video prompts, multiple choice questions and settings generated by a researcher that a student will access to have a simulated conversation*

**CONVERSATION RESPONSE** -- *A collection of audio responses and choices made by a student traversing a template*

**CONVERSATION CYCLE** -- *A student engaging in one node of a CONVERSATION TEMPLATE, in which they watch a video, record an audio response and then answer a multiple choice question about that response one time*

### Roles

The two main users of the application are Researcher and Student. A Researcher builds conversation templates and provides Students with access to the templates. A Student participates in a simulated conversation, recording their input via the application. Researchers can review and analyze Student responses within the conversation template for research purposes.

#### A Student...

1. Must be able to have a simulated conversation
2. Must be able to view embedded videos as part of the simulated conversation
3. Must be able to record and upload audio within the application
4. Must be able to choose a textual response in order to move through the conversation template
5. Must be able to have their conversations identified/sorted by some unique identifier
6. Must be able to use the application using a Firefox version released within the last 6 months
7. Must be able to, at the option of the researcher, -hear their previous audio response while choosing their next conversation step
8. Must complete a conversation in a single session
9. Must not be able to -remove or destroy any submitted information
10. Must not have Personally Identifiable Information collected beyond the collected audio samples
11. Must not be able to control videos as they are played back (Hint ) if playback controls are disabled by the Researcher
12. Must not be able to navigate within a conversation template in any way other than what is specified by the researcher
13. Should be able to complete a conversation using any modern web browser
14. Should be able to, at the option of the researcher, review and accept a Use Policy when interacting with this application
15. Should be able to receive feedback from Researchers
16. May have their responses analyzed by speech-to-text, negating the need for a multiple-choice selection after audio recording

#### A Researcher...

1. Must be able to provide a link to an instance of a conversation for students to simulate a conversation
2. Must be able to use the application using a Firefox version released within the last 6 months
3. Must have researcher accounts to manage access
4. Must be able to -create conversation templates
5. Must be able to edit conversation templates
6. Must be able to delete conversation templates
7. Must be able to embed rich text within each Conversation
8. Must be able to provide a means for the Student to navigate a conversation
9. Must be able to embed video within each Conversation from the 3rd party video provider selected for use with the application
10. Must be able to review responses to their conversation templates
11. Must be able to review responses in sorted order (Examples: by student, by conversation, by date, by video)
12. Must be able to share copies of conversation templates with other specified researchers
13. Must be able to share responses to their conversations with other specified researchers, including the path taken through the template
14. Must not be able to access conversation templates or conversation responses that do not belong to them
15. Should, at the option of the researcher, be able to set an expiration time/date for a conversation link
16. Should be able to specify if videos within a Conversation may be watched multiple times by the Student
17. Should be able to choose on what stage of the simulated conversation cycle a template will begin in the first cycle and on what

stage it will end in the final cycle

18. Should be able to use a graphical editor to create a conversation template
19. Should be able to use the application using any modern web browser
20. Should -give feedback to a student regarding their conversation path
21. May -make a conversation response accessible to all researchers
22. May -make a copy of a template accessible to all researchers

**The Application...**

1. Must be built using best standards and practices for future maintenance and extensibility
2. Must include documentation on application setup, management and maintenance
3. Must support multiple simultaneous users
4. Must be accessible via the internet
5. Must include support for creation and deletion of Researcher accounts
6. Must store all attempted conversations, including partially-completed ones
7. Must run on a University-supplied hosting platform
8. Must store Student data in a safe and secure manner
9. Must store Student data (responses) in such a way that only logged-in Researchers may access Student data