Google Home Trivia App

Monthly Report

Team MGN

October 27, 2017

Summary

During the month of October, Team MGN created multiple project reports detailing requirements, plans, and objectives for the Google Home Trivia App system. We also created some basic proof of concept Google Actions to test some small pieces of the system and, in doing so, gained a better understanding of how the system will have to be implemented. Going forward, we will continue to create proof of concept functionality for the server implementation of the system, as well as finalize with Team LER where trivia data will be stored, the format data will be stored in, and how the data will be retrieved by either system.

Monthly Efforts

Project Planning

- Key topics discussed in team meetings this month
    - Trivia data storage – the initial plan was to store the data as a JSON file inside the server component and hold the trivia data in memory during the life of the server
        - Pros: easy to implement, trivia data would be easily accessible
        - Cons: trivia data wouldn't be easily queried, updating trivia data would likely require restarting the server app
    - Maintaining game state – determining what phase of the game a session is in will be maintained by appending questions, answers, and game phase data to the Google Action conversation's data field
        - This implementation will be relatively similar to Math Flash's implementation for maintaining game state
        - The different game states will detail if the current session is choosing the game difficulty, choosing the number of players, playing the quiz, or ending the quiz
- We also met with Team LER (the team working on the Amazon Alexa Trivia Game App) on 10/27 to discuss a common data store and format for trivia game questions

    - The consensus is that we will have a Node server serve up trivia questions to both the Amazon Alexa Trivia App and the Google Home Trivia App
    - To begin with, the trivia data will be stored in a JSON file, but if time is permitting the data will be stored in a remote database and be operated on via the Node data server

Reporting

- We finished a Software Requirements Specification Report detailing requirements, software constraints, hardware constraints, the sequence of operations, and so on and so forth
- Finished a Software Architecture Specification Report outlining the different components of the system and the interfaces each component provides the other
- Started a Software Detailed Design Report which will describe in more detail the software tools employed to develop the system, the code interfaces each component of the system provides, and the data design for persistent data
- All reports are available at the project website (https://mgncapstone.github.io/)

Immediate Objectives For November

Software

- Continue prototyping various pieces of the server component to expand our understanding of the system's requirements
- Work on and connect to the Node data server that will be providing trivia questions to the two trivia game apps

Reporting

- We will finish the Software Detailed Design Report that we've started
- We will create an OSS Selection Report