Test Coverage Report
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Unit tests
- Right now we have 6 unit tests, mostly built around ensuring functions handle simple tasks. We plan to add more tests for each feature that we implement, but most of our functionality has to be tested in a live emulator environment.
- Our unit tests are currently covering 50% of our survey and user classes, at around 25% of all lines in those packages. We hope to get this number up as functions are added and implemented. A good deal of our functions right now are around halfway written, just waiting on another piece to be in place before connecting them.

Integrated tests
- We can use a text file with sample inputs to automatically emulate a full survey for testing.
- We're experimenting with a script to automate random user input for the surveys, but haven't quite figured it out. When complete, we can automatically test that the app handles multiple permutations of sequences and inputs. Right now we just do this with the manually created instructions.

Emulator runthrough
- Our main source of testing is through manual survey input through the emulator. Because we have extensive logs of errors, we can watch the app transition through the various states and verify that the final result is correctly uploaded to our AWS service.
- We have been consistently performing full app run-throughs upon every commit or feature addition to verify the proper connection of the end-to-end system. This includes the local emulator, the connection to web elements, and the sorting of data on the backend.

Problems uncovered
- We discovered some problems in our credentials checking function. This is called when trying to log in. We found that the program was checking for the file before it finished downloading, so we stubbed the function to allow for proper testing when implemented correctly.

Expected problems in future
- We expect that when we begin to link more of the account-identity features there will be context errors regarding data being changed after logging in and out.
- Password hashing and secure storage/transfer of account data must be verified extensively.