

Study Slug - SplashActivity Testing

Functionality

SplashActivity controls all of the login functions.

The main functionality of it are:

- Allow users to log into Firebase
- Restrict clients domains to “@ucsc.edu” addresses
- Add new users to the database on their first visit.

Testing Procedures

The SplashActivity was constructed using tutorials provided by Google to create login functions that interact with their login API as well as Firebase. These tutorials produced code that is not unit testable without extreme refactoring which we were not able to accomplish during any of our sprints. We were also unable to find any documentation to mock the login process of the Google Login API. Therefore all our testing is functional. The tests are described below.

- Allow users to log into Firebase
 - Test1
 - Run application on Android Phone
 - Click Sign-In
 - Should result in user being sent to next page as well as debug logs printing out proper login status.
- Restrict Clients Domains to “@ucsc.edu”
 - Test1
 - Run application on Android Phone with a “@ucsc.edu” user signed in.
 - Click Sign-In
 - User should be sent to FindPeople page and debugger should print proper log in status
 - Test2
 - Run application on Android Phone with a “@gmail.com” user signed in.
 - Click Sign-In
 - User should be prompted to log in with a new email address and debugger should print that an invalid domain has been attempted.
 - Test3
 - Run application on Android Phone with a “@gmail.com” and “@ucsc.edu” user signed in.
 - Click Sign-In

- User should be prompted to select an account, where only the “@ucsc.edu” account is an option.
 - After selecting that account, user will be sent to FindPeople and debugger will print proper log in status.
 - Test4
 - Run application on Android Phone with two “@ucsc.edu” users signed in.
 - Click Sign-In
 - User should be prompted to select one of the two accounts.
 - After selecting that account, user will be sent to FindPeople and debugger will print proper log in status.
- Add new Users to Firebase
 - Test1
 - Run application on Android Phone with a new “@ucsc.edu” user signed in.
 - Click Sign-In
 - User should be sent to FindPeople page and debugger should print proper log in status
 - We then check the database to ensure a single new user with that email address has been added.
 - Test2
 - Run application on Android Phone with a “@ucsc.edu” user that has signed in previously to the application.
 - Click Sign-In
 - User should be sent to FindPeople page and debugger should print proper log in status
 - We then check the database to ensure that user has not been duplicated and a single user entry for that “@ucsc.edu” address is in the database.
 - Test3
 - Run application on Android Phone with a “@gmail.com” user signed in.
 - Click Sign-In
 - User should be prompted to log in with a new email address and debugger should print that an invalid domain has been attempted.
 - We then check the database to ensure that no new user has been added to the database.