

App Idea

-Is the app idea clear, concise and correct?

Our prior app description was "This app will allow the user to conduct a soil infiltration test with a minidisk infiltrometer, a test which would usually require two people, on their own.". After our second interview we can also say the app will allow the user to log several things about the test before and after it occurs. Before we will have them enter when they want interval beeps, suction level, kind of soil, and kind of infiltrometer. After the test they can log the location of the test, as well as add a photo with the test.

App Users

-Are specific app users identified?

The users we have identified through our interviews are soil researchers like Dr Mary Ellen, road engineers to evaluate the soil they are building on, farmers to evaluate their soil, and firefighters to evaluate the soil after a forest fire.

App Workflow

-Does the workflow clearly illustrate the use of the app?

Prior to the test the user will select which tool they are using for the test, the time intervals they want to be notified in, soil type, and suction level. After this the user will prepare the infiltrometer. Once the infiltrometer touches the ground and the water starts to flow the user hits begin. A timer going up will be displayed, as well as a small table and an area to input volume(mL). 5 seconds before the time interval there will be a different kind of beep to notify the user the record time is coming up. At the record time a louder beep will play and the user will enter volume and hit a button. This pattern continues until the water in the infiltrometer is gone. After the test the user can submit location and a picture to go along with the test. They can inspect the data to see the table and graphs that go along with the test. They can also choose to export the data, or delete the test if they choose.

App Data Type

-Are major data types that app will collect and/or present identified?

Excel doc
Time(s)
Volume(mL)

App Views

-Identification of major views and widgets

- Home page - This page will have buttons to the take test page, how to take a test, review data, and useful links page. On the home screen we will also display a map with gps markers for where previous tests by the user were conducted.
- Take Test Page - On the actual test page there is a large timer that goes up, a large box with submit to enter volume, a smaller table with previous data points, and a restart test button in case the user messes up and wants to restart.

- How to Take a Test page - This page briefly goes over how to use the app since there is nothing similar to it. This will make sure the user knows what to do and minimize error coming from the user not knowing.
- View Data Page - This allows the user to view past tests, by date, and select which one they want to view.
- Data Page - Displays data and graphs of a test at a larger scale.
- Useful links - Here we can put links to the creator of the infiltrometer, how to use the infiltrometer, and any other background information we may find useful for the user.

Implementation Challenges

-Thoughtful list of implementation and usability challenges

- It may be difficult for the user to initial grasp how to use the app, based on the app users we have. To try and mitigate this we plan on making a “how to take a test” page to explain it, but more testing will have to be done to see if this is sufficient.
- Making a fitted graph for the data could be difficult to make ourselves