

## **App Idea**

This app will allow users to report and check trail conditions. This data will eventually be used to create a predictive model, but can also be used to check if the trail is in good riding condition before actually traveling to the trail.

## **Users**

1. Students/Researchers- Will be able to access and update data from stream sensors, and use the data to develop predictive models. Age will generally trend younger, but expertise with technology may vary.
2. Trail Users - Will use the app to see the condition of the trail, and post updates regarding condition. Age and expertise with technology will likely vary.
3. Government/Trail managers - Will use the app to monitor trail conditions, but will also have access to the data if needed. Age/ Expertise still needed

## **App Usage**

Used before/while/after using the trail as there is currently no way of tracking the trail conditions. Current goal is to use for logging and checking conditions but future use would allow for a predictive model. (We are not responsible for the predictive model.)

The app usage workflow would, for the typical user, likely involve opening the website, entering general observations on the trail conditions, and optionally selecting the specific trail they walked on or otherwise giving further detailed information. They may be prompted to allow access to location data when submitting. A student or researcher may log in in order to upload more specific information, such as sensor data or experienced observational data.

Finally, anyone can visit the app in order to view conditions, in a simple interface that effectively presents the data as reported by other users; once again, logged-in students or researchers have access to more data.

## **Data**

- General observations of conditions for overall trail
  - Note the specific path taken
- GPS tag for problem areas, with options for different conditions
- For privileged users: stream sensor data and scientific observations