Evaluation Assignment 1

Swept Away - Team 5

Sandeep Battula - Grad 9

App Idea: WEPP Model

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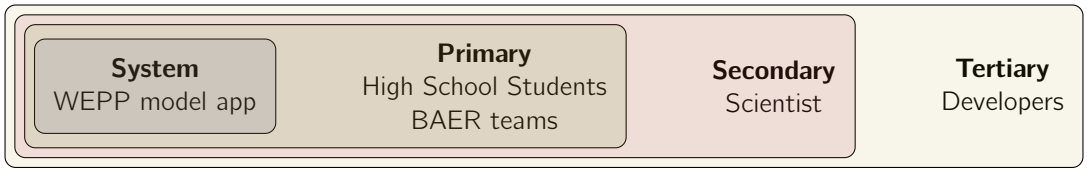
1 System Description

The Swept Away(Team 5) group is developing an app that uses the WEPP model. The app will use multiple sources of data. One of which is a data stream which is normally meant for forest managers and has a lot of extraneous data for our app. The main goal is to make an app that can help educate students the effects of erosion, while also being helpful to other scientists to model erosion in an area.

2 Stakeholders

2.1 Onion Diagram



2.2 Stakeholder Descriptions

2.2.1 High school Students

The students who learning about erosion and specifically about the affects of soil erosion in their local area. Students are also learning about citizen science.

2.2.2 BAER Teams

Teams who can use this tool, in addition to other data like weather, to model a fire, then stop it.

2.2.3 Scientist

Can use the data collected from the app to advance the app (and their research, but this case won't be used).

2.2.4 Developers

Make this app work by the end of the semester, resulting in a good grade.

2.3 Goal Influence Table

Stakeholder	Goals	Influences
High School Students	To learn about citizen science and erosion	As citizen scientists to help improve the science of erosion, adding data to the app.
BAER teams	To prevent loss of forests via fire prevention and minimizing fire damage	Uses this and other data to model where the fire might start or go
Scientist	Get to define the app	Checks if we are doing good
Developers	Develop an application	Help make a good app and get good grades

2.4 Personas

2.4.1 HS Sophomore Stephanie

A sophomore at Houghton High School who is learning about citizen science and has chosen to contribute to the WEPP model project. She has dreams of being a geologist.

2.4.2 BAER member Alexis

A retired fire fighter who has expertise on where fires go when they go wild. She is interested in predicting on minimizing fire damage in forest thru modelling.

2.4.3 Scientist Hannah

A scientist who wants an app on showing children about erosion and its affects.

2.4.4 Scientist Montana

A scientist who wants an app to show off what citizen science can accomplish.

3 Simplified Hierarchical Task Analysis

GPS or location is inputted

Set parameters

- Erosion Constants
- Landcover Plants
- Weather Conditions

See erosion results

Choose to update data

- Landcover Plants
- Weather Conditions
- Type of Soil

Upload

3.1 Summary

As this is a brand new app, we do not have a exact idea of what it's going to look like.
However I do expect some sort of location request, that takes you the app where a user can choose to simulate or to upload a new data.

4 Appendix

4.1 Meeting 1 Notes

Educate students on the causes and effects of soil erosion in a specific location

Potential Users:
High School Students
BAER (Burned Area Emergency Response) Team Members

Overall App Idea
Appeal students
Usable for researchers

Other notes:
GPS coordinates, (maybe?)
Use databases
There is a website