

Team 2 - Project Worldwide

# Cognitive Walkthrough

1 / 29 / 2026

# Users and Environment

- Primary Users
  - Scientists - Collect Data for Research
  - Grad Students - Uses Data for Master's/Doctorate Research
- Secondary Users
  - Locals - Submit Photos to Site
  - Tourists - Submit Photos to Site
    - Many may need English Translation
  - Park Staff / Faculty - Promote Usage of App to Locals/Tourists
- Tertiary Users
  - Gov. Officials - Use Data to Monitor Volcano
  - Undergrad Students - Use Data as Evidence for a Research Paper
  - Hobbyists - Look at data / Time Lapses for Entertainment
- Environments
  - Viewer - Outside, Exposed to Weather, Close to Volcano
    - Current Weather Conditions may Affect Site Usage
    - If Volcano is Erupting, may be Impossible to Safely Get a Picture
  - Scientist - Lab Environment or Office, Safe from Elements

# Nominal Use Scenario

A user traveled from another country looking to climb mountains in Guatemala. They are directed by a guide up a mountain nearby Volcan de Fuego. They stop near a stand on the mountain top, and scan a QR code on the post. This takes them to a website with information about the volcano and instructions on how to use the stand to take a consistent photo. After taking a photo the site instructs them to upload the photo and links to a second page that guides the user through uploading the photo to the database. After they upload the photo, it redirects the user to another page with a generated timelapse that they can view with their photo at the end. On this page, they can also look at other timelapses generated from other photos on the database.

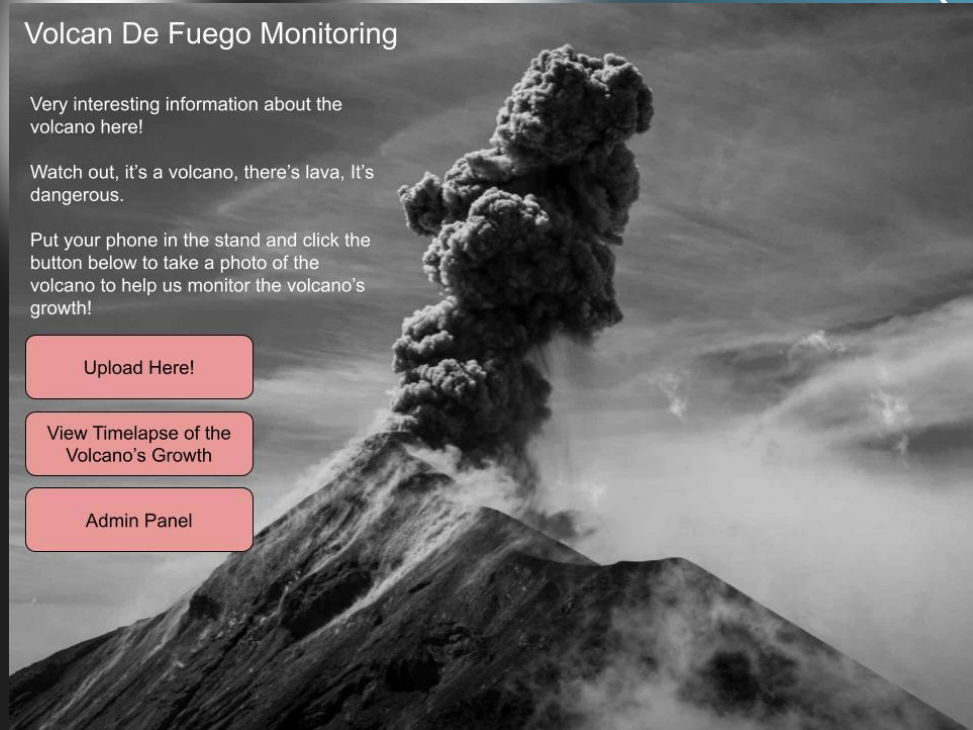
# Error Use Scenario

A user has made the climb up a neighboring mountain to view Volcan de Fuego. They stop near a stand on the mountain top, and scan a QR code on the post. This takes them to a website with information about the volcano and instructions on how to use the stand to take a consistent photo. However, they skip over the instructions and decide to take a photo that is not at the same aspect ratio. They upload this photo to the website, it is appended to a prepared timelapse and returned back to them. However in the background, this image is flagged as improper and will not be included in any publicly available timelapses.

# Paper Prototype Views

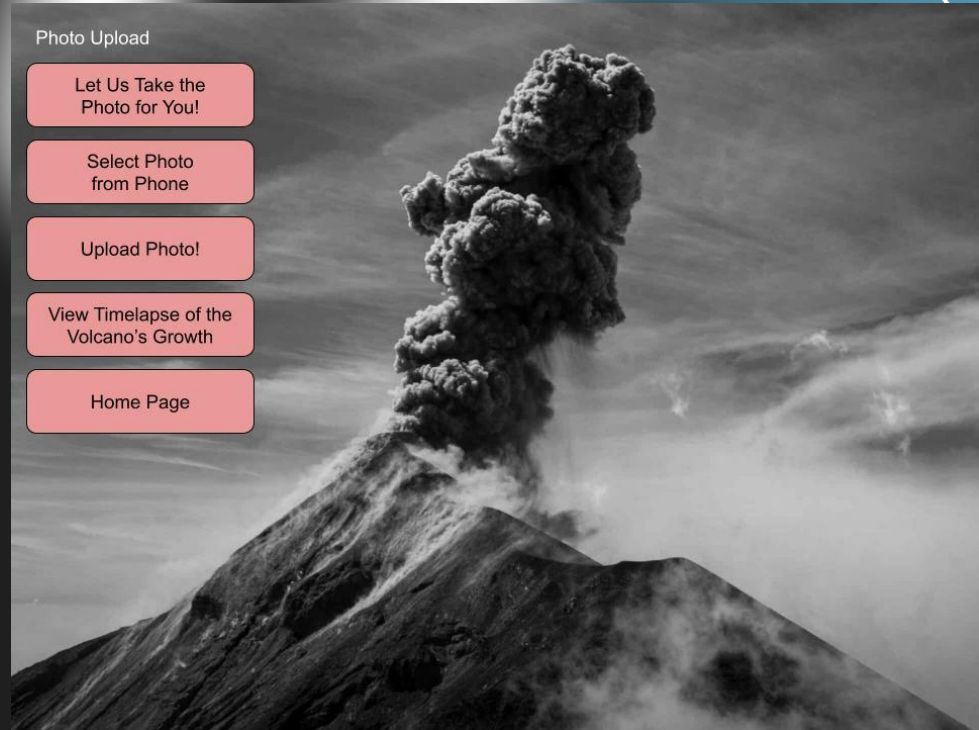
# Home/Information Page

This page will contain information about Volcan de Fuego, including safety and hazard information. This page (and all other pages) will offer the ability to navigate to any other page on the website.



# Upload Page

The upload page will have an option to either take a photo or upload a picture that has already been taken. If the user chooses to take a photo, the site will ask for access to the camera and give the option to upload it once a picture has been taken. The user will also have the option to navigate to the timelapse page or the homepage.



# Timelapse Page

The timelapse page will show a timelapse of pictures previously taken by other users, eventually ending on the picture that the user has just taken. The user's picture will also be uploaded for uses in future timelapses. The user will also have the option to view time lapses from either the past year or the past month, as well as the option to return home or visit the upload photo page.





# Usability Goals and Concerns

- Usability Goals
  - Make the backend as simple and functional as possible for research team
  - Providing as much information as we can to public users
- Usability Concerns
  - Varying Levels of Tech Literacy in Public Users
    - Users may not be able to navigate the site without heavy instruction
    - Users may not have knowledge required of camera settings to get good photo
  - None of us are spanish speakers, so we are concerned about the translation being subpar

The background features a smooth gradient from light blue on the left to a darker teal on the right. Two thin white curved lines are present: one starts at the top center and curves towards the right, while another starts at the top right and curves towards the bottom right.

# Thanks!

Any Questions?