

Patchy Fog

Executive Summary

Community Partner

Damon Hargraves

Student Consulting Team

Kalen Gressler

Siddharth Paratkar

Max Sobkov

Background

Patchy Fog is an organization that is based on the idea that technology is both vital to modern learning and detrimental. So, they created the SpotBox Program in Kodiak Alaska to get children out to explore the island. Patchy Fog was created by Damon Hargraves, and is effectively a one person consulting company. As a result, there is a lot of flexibility with what we can do since the company is small. Patchy Fog does work closely with the school that Damon teaches at, so there is support since often, the mission of Patchy Fog aligns with those of schools.

Project Description

The main problem we're solving is improving the outreach of the Spotbox program, and through our project, we can expand its audience to a larger area. This is to be done with a place for people to learn about Spotboxes via a Twitter Group and a platform for people to submit their own Spotboxes. A secondary opportunity that came up during the course of the project was the creation of what could be a new course for highschool students. The client posed the idea of the students being able to work within the codebase with maintenance of the project rather than a software engineer role while giving high school students practical experience.

Project Vision

The goal of our project is to create some platform for contributors to Spotboxes to be able to upload locations and information about the boxes and for consumers of the contents of the boxes to find these boxes and read the information. A secondary objective is to have contributors be able to connect and share content with each other. Our hope is to create a framework that can scale to support this.

Project Outcomes

We completed 5 “must have” objectives with our project. Three are accomplished with our Twitter community solution, where those who want to be a part of the Spotbox program can collaborate with each other and support each other in building out the program. These are about constructing, advertising, and sharing Spotbox related material. Two are delivered through our custom Node/React app, which entail finding and uploading Spotboxes to the platform.

Project Deliverables

The main deliverable for this project is the GitHub repository, which contains all of the code that represents the website that we built for the Patchy Fog organization. The repository contains two main subdirectories: a frontend directory and a backend directory. Once authenticated with Twitter, the front page displays a Google Form that can be used to submit Spotboxes, which are integrated via a Google Sheet with the map and display new points dynamically with user reloads.

Recommendations

The main recommendation that we provide is to develop the website out more to include more of the Nice To Have features that we discussed with our community partner. We were unable to complete all of the stretch goals that we had planned. The main goals we tried to accomplish but ultimately weren't able to complete are having a properly integrated database, working with an integrated form on the website and, connecting Twitter login to the website even more by autofilling the Spotbox form based on the user's Twitter information.

Student Consulting Team

Kalen Gressler is a Junior in Information Systems. She worked primarily on the map and the graphic design of the site, along with a troubleshooting guide for the map and its data pipeline.

Siddharth Paratkar is a Junior in Information Systems. He worked primarily on the frontend part of the project, and extensively documented that part of the codebase. Additionally, he spent a lot of time on administrative tasks within the group, such as setting up the GitHub repository to integrate with SSH Keys, and led the handoff with Anthony White, the technical head of Patchy Fog.

Max Sobkov is a Senior in Information Systems with a minor in Business Administration. He worked both on the backend and the frontend, documenting high level details about languages and frameworks as well as more complicated pieces of code, especially those related to Oauth, since they are rather inaccessible to highschoolers who haven't worked with HTTP requests and routing.