



Eagle Eye Scavenger Hunts

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Statement of Purpose

- ❖ Scavenger hunts are a popular puzzle activity that many people enjoy, and those who want to create or participate in one should be able to do so without physically going to each location to plant clues or being a physical object. Instead, they should be able to create a list of virtual clues and drop a pin at each location and view a clue when they get close enough to the location. Scavenger hunts have various purposes, including team building, exploration, adventure, and fun. However, the few providers who offer scavenger hunts are subscription-based, which discourages people from using them for social events. Most companies use pre-made hunts instead of allowing users to create their own. Since a hunt is web and GPS-based, it is tied to an internet address and a mobile device's location to reveal clues, making it easily accessible and encouraging more people to use the app without a financial commitment. To maximize the app's use, its key features should be free, user-friendly, and customizable.

Statement of Purpose (cont.)

- ❖ Problem
 - ❖ Physically placing clues
 - ❖ Subscription
 - ❖ No order
 - ❖ Pre-made hunts by co.

- ❖ Solution
 - ❖ Drop clue pins
 - ❖ Free
 - ❖ Ordered clues
 - ❖ User creates custom hunts

Research & Background

- ❖ Researched existing companies and scavenger hunt opportunities
- ❖ Ruby on Rails & JavaScript
 - ❖ Completed tutorial concurrent with a class
 - ❖ Additional time and research to utilize more complex concepts
 - ❖ YouTube and web articles by education companies
- ❖ Refreshed HTML skills

Project Language(s), Software, and Hardware

- ❖ Ruby on Rails
- ❖ HTML
- ❖ JavaScript
- ❖ CSS
- ❖ AWS (Cloud9)
- ❖ Heroku
- ❖ Google Maps API
- ❖ Geocode

Project Requirements

- ❖ Internet Access
- ❖ Link to my web app
- ❖ Location enabled device

Project Implementation Description & Explanation

- ❖ Test Plan
 - ❖ Integrated testing suite with Ruby on Rails
 - ❖ Manual/functional testing

Project Implementation Description & Explanation (cont.)

- ❖ Positive Test Results
 - ❖ Static pages function
 - ❖ Home, About, Contact, Help
 - ❖ Home page removes sign up when logged in
 - ❖ User can create an account
 - ❖ User email activation
 - ❖ User sign in
 - ❖ User edit their account information
 - ❖ User forgot password reset
 - ❖ Create page shows start pin form
 - ❖ Admin user page
 - ❖ Admin delete users
 - ❖ Admin has extra help display
 - ❖ App functions on mobile view
 - ❖ Embedded Google Maps using APIs
 - ❖ Geo-tagging from IP Address

Project Implementation Description & Explanation (cont.)

- ❖ Negative Test Results
 - ❖ Placing multiple pins
 - ❖ Linking pins together as a hunt
 - ❖ Starting a hunt
 - ❖ Device location gathering
 - ❖ Ask location permission
 - ❖ Email activation in publication

Project Implementation Description & Explanation (cont.)

- ❖ Challenges Overcome
 - ❖ Learning Languages
 - ❖ Google Maps API Integration
 - ❖ Course Overload

Project Implementation Description & Explanation (cont.)

- ❖ Corrective Actions/Future Enhancements
 - ❖ Start pins displayed within radius of user on homepage
 - ❖ All hunts created by user displayed on their profile
 - ❖ Pause hunts
 - ❖ Hunt history displayed on user profile
 - ❖ Hunt characteristics: radius, sub-radii, difficulty level, group
 - ❖ Hunt sharing link
 - ❖ Edit clues
 - ❖ Active/inactive hunts

Lessons Learned

- ❖ Scope
 - ❖ Well Defined & Predetermined Priorities
 - ❖ Underestimated Complexity
- ❖ Languages
 - ❖ Well-Rounded Programmer by Learning New Languages
- ❖ Detailed planning/Phased Approach
 - ❖ Milestones & Dependencies
 - ❖ Diagrams & Mock-ups
 - ❖ Rehearsal of Concept Drills & Simulations

Links

- ❖ GitHub Repo:
 - ❖ <https://github.com/mdstargel/CSU-Senior-Project-2023>
- ❖ Heroku App:
 - ❖ <https://eagle-eye-hunts.herokuapp.com/>



Questions?