



PROPOSAL

National Park Service of Intermountain Region Permits & Reservation App

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1.0 Client

**Sue Masica, Regional Director
Intermountain Region
National Park Service Office**

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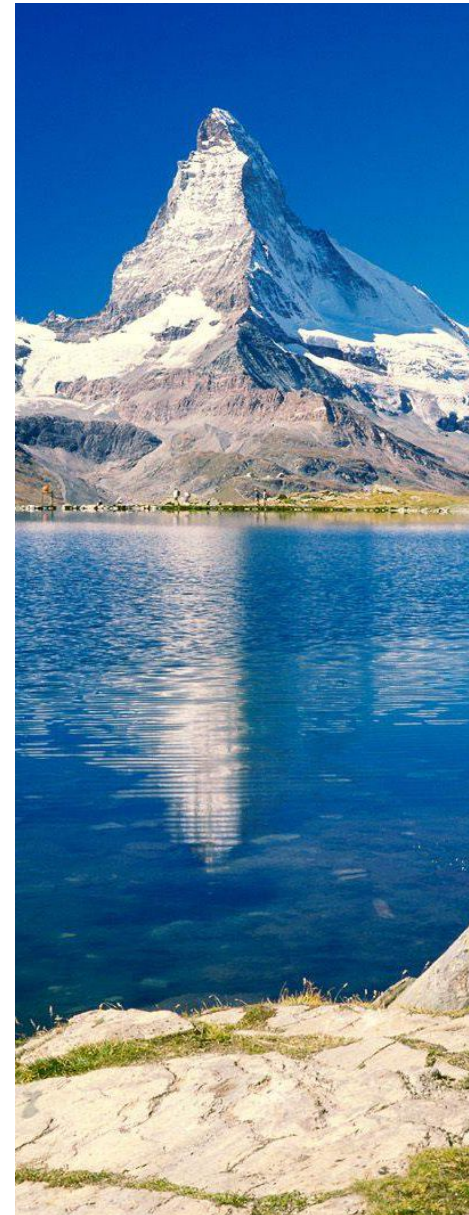


2.0 Statement of Need

The National Park Service Office, of the Intermountain Region, is dedicated to retaining the environment, assigning out current permits and coordinating National Park facilities along with keeping track of human traffic throughout the parks. These acts are planned to reduce environmental decay, injuries and human loss or fatalities on National Parks grounds. In an attempt to make the process run more smoothly to reach the needs of the National Park's audience, the National Park Services wants a mobile app that contains content about the park and it's current rules, notifications about emergency warnings, reservations forms to keep track of campgrounds and given tours, and a permit program that will locate active permits in the area along with a simple step by step process of obtaining permits for the given audience.

3.0 Client Goals

- Promote awareness of the current park's regulations and emergency activities
- Guide individuals to campground and tour reservations with ease
- Locate current individuals who hold current or expired permits
- Give out park permits by making it more accessible for individuals to obtain
- Display open and closed trails for individuals



4.0 Proposed Solution

To meet the needs of the National Park Service, the Digital Media (DGM) Team proposes making a mobile app that will contain three features that the National Park Service could use while maintaining their parks. The first feature will display park regulations of do's and dont's and content of information pertaining to certain parks and their availability. The second feature will focus on reservations forms towards campsites, permits, tours, and trail activity. The last feature will use the mobile GPS unit to:

- 1- Locate certain individuals during an emergency.
- 2- Notify individuals about current events (trail activity and current vacancies).

With all features in place, the National Park Service will have ease of transition from web to mobile.



5.0 Deliverables

- Proposal
- Assets Collections of Park Info
- Design Document
- Framework Layout
- Three features built and working on mobile
- Study Group Surveys

6.0 Success Metrics

With the release of these videos, the client hopes to see the following benefits:

- An increase in awareness of the Parks regulations and updated content
- An increase in reservations online then in person
- A decrease in lost personnel in the Park



7.0 Audience/Stakeholders

7.1 Target Audiences

- Backpackers

Typically between the ages of 18-50 who are somewhat experienced. They are in search of permits and trail information.

- Campers

Families of 2+ who are new to the area and need certain facilities. They are unaware of parks regulations and site locations in the park. Ages range from 8-54 in using mobile park information. Planning to stay in advance.

- Hikers

New to the area or are looking for new trails. They are in need of visible tour schedules and park hours. They do not stay in the park overnight. They need parking and trail information easily accessible.

7.2 Key Stakeholders

- Ray Todd
Director, DSC

Ray wants to ensure that the mobile app will have all the up-to-date content. This way, individuals will have less hassle while they enjoy their time in the park. Ray also wants to increase organization in permit request. He wants all permits to be filled and easily accessible to the public. He especially wants the number of missing individuals in the parks reduces dramatically.

- Natalia Sanchez
Pathway Coordinator,
IRNPs

Natalia wants to promote reservations to be more online than in person. She feels that Park Rangers should focus more on environmental matters and keeping regulations in place then to spend time filling out documents for individuals who can easily do it online. She also feels that more people are on their phone more than on desktop. Being able to set up a reservation from mobile would reduce the amount of in-person contact.

- Mara Spicer
Marketing Coordinator, NPS

Mara wants the design of the app to give the National Park Service a prestigious look and up-to-date feel. She wants individuals to have an easy time of navigating through the app, especially when it comes to planning a trip to a park and reserving an area. She wants the app to have the ability to share on social media and show others fun events in their parks.

8.0 Requirements

8.1 Content/Data Requirements

- Feature displaying park regulations of do's and dont's and content of information pertaining to certain parks and their availability.
- Feature focusing on reservations forms towards campsites, permits, tours, and trail activity.
- Feature using the mobile GPS unit to locate certain individuals during an emergency and notify individuals about current events (trail activity and current vacancies).

8.2 Functional Requirements

- Reservations will link to mobile calendar with reminder notifications and locations will pop up on maps to direct individuals to their destination. Content will then be displayed through short video for current regulations and a link to more content.



Function

Reservation forms can be filled out on mobile (while showing up-to-date permits and open camp areas).

Email will be sent to confirm reservations.

App will display link of content for regulations(video or website) and link to adding event to calendar.

Scenario

Head of household is planning a weekend trip with the family to a National Park. They open up the app and clicks on reservations.

The app will give step by step instructions of where they can stay in park they chose. They are then given options of what lots are available on which dates. They click on a lot, fill out their information and hit submit. An email pops up saying their reservations is confirmed and the app has a confirmation page that gives a link of learn more about the park(with regulations) and a link to add to your calendar or go to maps to search more about the park.

8.0 Requirements cont.

8.3 Product Qualities

This section describes experience attributes the product should provide or convey

- Motivate people to stay overnight in the National Parks.
- Provide easy access to obtain permits and information about the parks.
- Individuals feeling satisfied with their app experience by achieving the following usability goals:

Usability Goal

- Effectiveness:
Content should be simple to navigate through and forms should follow an easy step by step process giving the individual all they need to know about the park and it's facilities.
- Satisfaction
The app should be perceived as helpful for those visiting the park and useful to park rangers in updating their content.

Measure

We will test a group of 10- 15 potential users, asking them to navigate through the app while recording how long it takes them. We will ask them to find certain content and request specific permits to see how easy the process is for them. We will also ask some Park Rangers to fill out content for their parks and measure how much time and effort it takes them to do so.

8.4 Constraints

- Meet all deadlines for documentation and product reviews and sign offs outlined by senior project instructor.
- Get permission on content assets to place in app.
- Set up permission request to use location while user is in app.
- Obtain licensing to use National Park Service logos and content.
- Ensure final product will run on any mobile device (android, windows, or apple) with all bugs covered and fixed.

9.0 Development Process

9.1 Phases & Roles

Project Initiation

- DGM Team
 - Conduct audience analysis
 - Prepare proposal
 - Meet with client to get agreement and sign-off on the proposal
- NPS Team
 - Provide useful content
 - Attend kick-off meeting
 - Work on developing project goals, success metrics, and scenarios with DGM team
 - Review and sign-off proposal

Pre-Production

- DGM Team
 - Design strategy, scope, structure, and surface treatment for website
 - Create wireframes and working prototypes
 - Conduct preliminary usability tests
 - Determine the amount of material
 - Plan metadata structure
 - Research licensing for copyrighted materials
 - Prepare Design Document
 - Meet with client to sign-off design
- NPS Team
 - Review Design Document
 - Sign-off on Design Document

Production

- DGM Team
 - Code and style app
 - Transcribe, restore, index, archive and upload audio, video and images to the app
- NPS Team
 - Provide content, as desired
 - Review alpha release & provide feedback as needed

Post-Production

- DGM Team
 - Debug Features
 - Create post production test plans
 - Conduct final usability tests/make revisions
 - Collect product feedback from client and sample of potential users
 - Conduct quality assurance (QA) testing/fix any issues
 - Produce master copies of all deliverables
 - Deliver final product/get sign-off
 - Produce & submit final product documentation for DGM Department
- NPS Team
 - Provide product feedback for DGM team
 - Sign-off on deliverables

9.0 Development Process cont.

9.2 Development Tools

Deliverable

- Proposal & Design Doc
- Application
- Study Group Survey

Software

Adobe InDesign, Adobe Photoshop, Adobe Illustrator, Invision, and Google Docs
Sublime Text 3, JQuery, Firebase,
Qualtrics, Google Docs, Google Sheets

9.3 Development Team

- Kyle Johnson
Project Manager, Documentation,
Unit Production Manager
801.850.7902
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- Jeremy Ashby
Front-end Developer
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9.0 Development Process cont.

9.4 Quality Control Process

To help ensure the quality of the final application, the DGM Team will incorporate usability and functional testing throughout the development process. At the end of the process, the DGM Team will have a representative sample of users (10-15) look at the finished product and complete a study group survey. The team will also incorporate the following client reviews and checkpoints to help guarantee the client's satisfaction with the final product.

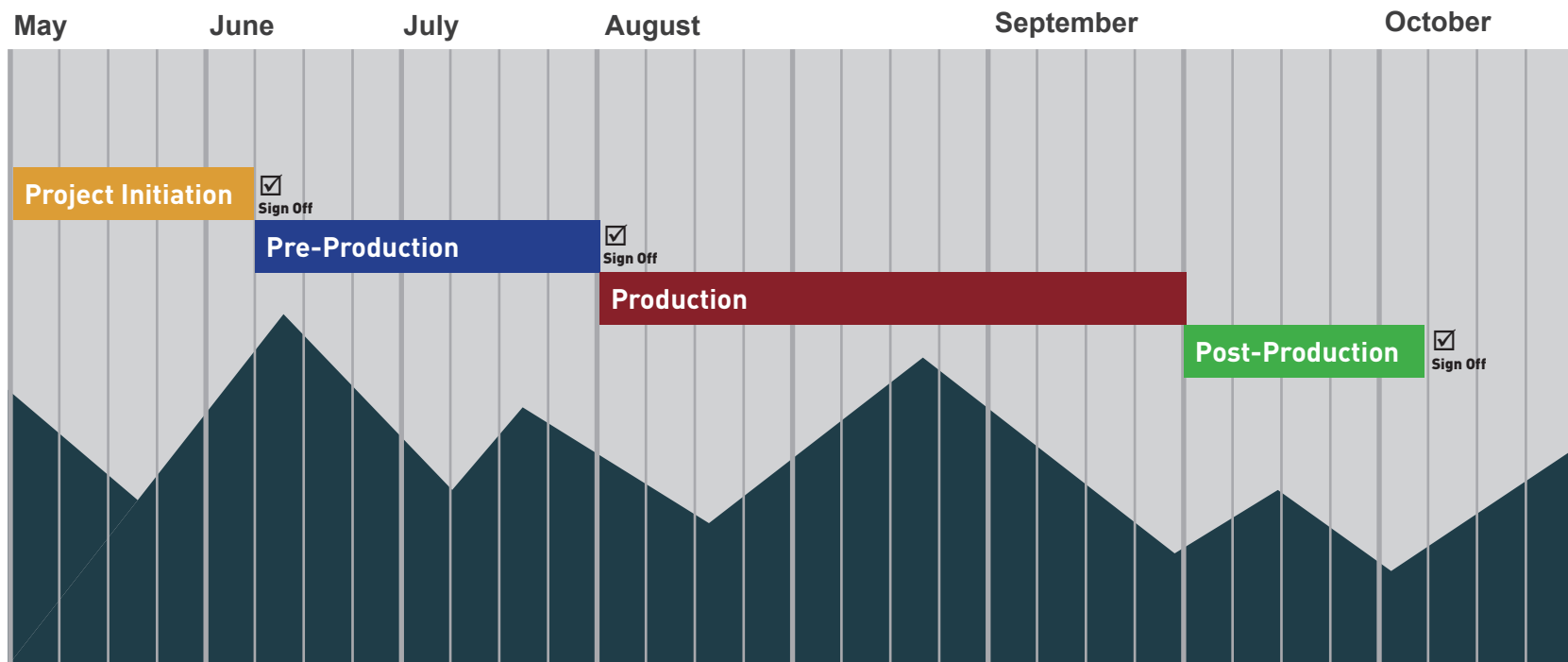
- Proposal review/sign-off
- Design Document and script review/sign-off
- Alpha release review/feedback/revisions
- Final Product review/sign-off

Upon receipt of all final deliverables the client will sign-off on the project and complete a user satisfaction questionnaire for the Digital Media Department. The questionnaire asks clients to rate their perceptions of the final product as well as the quality of the service and performance of the project team.



10.0 Timeframe

The general timeline for completion of each phase of this project is outlined below. A detailed schedule and project plan will follow in the Design Document.



11.0 Project Scope

This section describes the scope of the project in terms of factors that influence cost. The DGM Team's estimates of costs and timeframe are based on these assumptions. If the scope changes significantly, time and cost estimates will also need to be adjusted.



- Application: The DGM Team will create 3 features to help promote UX and UI design in the National Park App
- Features: The DGM Team will gather content, build out framework, and build code to correct requirements and design.
- Testing: Conduct usability tests using 5-6 users at least once during the course of development. Conduct a customer satisfaction survey with 10-15 representative users at the end of the project and provide results to the client.
- Client reviews and revisions: Clients may request revisions at the previously designated review points. Significant revisions after the alpha review may require cost and time adjustments.

12.0 Cost Estimate

Although the labor required to produce this project is being donated, the DGM team wants to let the National Park Service know the typical cost for a project of this scope. The DGM Team is sharing this information to make the National Park Service aware of the value your organization will receive for being willing to collaborate with the DGM Team in this endeavor.

A project of this scope would usually cost between \$30,000 to \$35,000 assuming student rates of \$25/hour.

A more detailed final budget and cost estimate will be included on the Appendix page.



Appendix

A brief justification of the cost estimate

Cost:

- Time Frame: 6 months = 26 weeks
- Number of Employees: 3 employees
- Hours per week: Average 15 hours per employee
- Payed per hour: Average \$25 an hour

Amount:



With a time frame of 26 weeks times 3 employees who are working 15 hours a week each with an income of \$25 an hours, the grand total comes to \$29,250. With added cost of software, testing, and traveling fees, the cost for this project comes to be between \$30,000 to \$35,000.