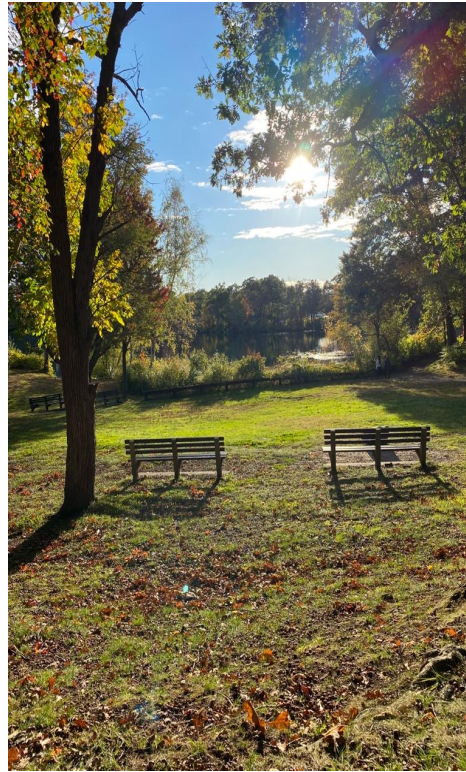# Project Report
Blue Hills App Development Project

By
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Glimpse of Blue Hills

Project background

Sponsor Background

- Friends of the Blue Hills is a non-profit organisation dedicated to conserving and protecting the Blue Hills Reservations' natural beauty and diversified ecology.

- The reservation has diverse natural features such as trails, hills, beaches, ponds, quarries and wooded areas.

- The park offers various activities such as hiking, camping, canoeing, and spaces for public gatherings. The park is also home to a museum and weather observatory.

- Currently all news, events, and scheduled activities are posted primarily on the organization's website, which limits its reach to a larger audience.

- In order to reach a larger audience, we proposed a project to research similar organizations to learn how they attract more visitors. Based on that work, we proposed an app including a number of features that will enhance visitors' experience.

Project Overview & Objectives

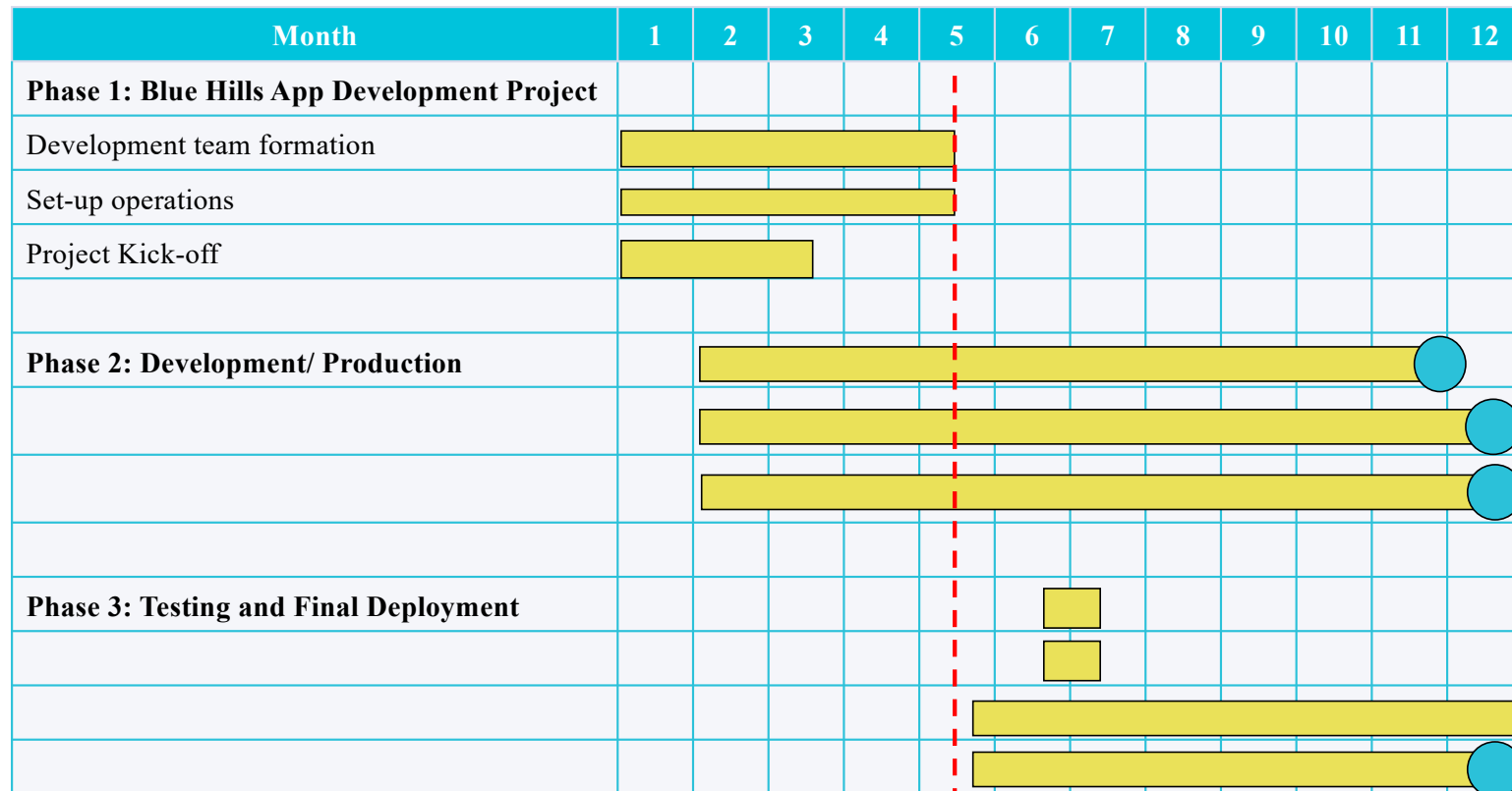|	
Current Situation	The Friends of the Blue Hills currently offers its services through its existing website, which lacks features and functions that would enhance the user experience and increase accessibility of necessary information and resources.
Challenge	**Business Problem:** The changes we were seeking was to design a feature rich app for Blue Hills so that people explore the beautiful natural resources that the park has to offer. The existing platform-website offers majority of services, events, news and updates which are not sufficient in in bringing all the features together and providing information regarding tours, sporting events, rentals and dining options. **Opportunity:** The biggest opportunity is to increase awareness about all the activities that are frequently organized at the park and broaden the reach to a larger user base. The app will resolve these issues and add new features that can help the larger community members to explore the park.
Project Objectives	To research similar organizations and gain insight around what kind of features can be included in the design of a web application and propose a list of relevant findings and budget estimation to build such an app.

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Project Outcomes

Objective 1	Objective 2
Feature Suggestion to include in the App • Navigation integration within the app for hiking • Recreational activities • Public transport connectivity to the park • Dining facilities nearby	**Work Completed** • The visitors and key personnel who are in connection with the Blue Hills were contacted to collect their opinions and suggest features, However; we did not hear back. • We researched sites of other organizations that are associated with the Blue Hills to understand what features we may want to replicate on our app.
Objective 3	**Objective 4**
Current Status • Majority of people in connection with the Blue Hills were inquired. • Web-portals of the similar NGO's were thoroughly researched to collect curated features.	**Recommendations for future** • Designing the prototype/layout of the app pages. • Budget estimation to build the app for both iOS and Android platforms.

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Issues & Risks to Project Success

	Risk	Rating	Mitigation	Residual Rating
Risk A	Connectivity issues which can become a problem for people while tracking.	High	Plot milestone stating with numbers to track down the route.	Medium
Risk B	Risk of getting lost while hiking on a trails.	**High**	GPS enabled map service within the app for every trail and park directions	**Medium**
Risk C	Risk of sudden change in weather including storms	Medium	Weather forecast would be enabled in the app which will notify people while in the park and provide alert notifications upon reaching to the danger zones.	Medium

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Suggested Timeline

Month	1	2	3	4	5	6	7	8	9	10	11	12
Phase 1: Blue Hills App Development Project												
Development team formation												
Set-up operations												
Project Kick-off												
Phase 2: Development/ Production												
Phase 3: Testing and Final Deployment												

Stage Gate 1
50% of development is completed &
UAT test can be started

Stage Gate 2
Development and Beta-testing is completed, and
app is ready for final release.

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Recommendations

Planning Your Trip	Get Involved	Support The Blue Hills
• Seasonal events • Options for restaurants/food stalls • River restoration/clean-up/trail maintenance works- volunteer enrolment • Park facility rental options to organize social events • Hours & Schedule + Parking • Buying options for tickets and passes of all events • **Get Outdoor:** summer camp, school vacation camps, day/night camps	• Store for winter gear BHO shirts, T-shirts, caps, tents, weather gears (gloves, socks, boots) or rental options for the same • Policy & advocacy (land conservation, wildlife, ecological management, climate change) • Advocacy action centre and legislator contact option	• Support/Donate • Membership options • Subscribe (newsletters, magazines etc., emails) • Photo/video gallery/sharing option • Visitor feedback options (messages-comment section, ratings, audio/video/picture Upload/download option)

How will we Create and Capture Value?

Business Model Canvas

Key Partners	Key Activities	Key Resources	Value Propositions
• Blue Hills Ski Area • Blue Hills Observatory Science Centre • Mass Dept of Conservation & Recreation • Mass Audubon Society • Neponset River Watershed Association • Brookwood Community Farm	• Feature Collection/ Requirements Gathering • App Development, testing and deployment	• Development team, QA/QC, Project Team, UX/UI designers • Hardware and software infrastructure • Servers and licencing • 1 Year time span	• More visitors • More shopping locations • Place rentals for events • Sporting stores • Seasonal events • Additional help for conservation and maintenance of parks and trails • More App users • More social media coverage • More revenue

Cost structures
$63,450- iOS & $60,750- Android (Without Back-end)

(For detailed breakdown visit (Here)
https://estimatemyapp.com/

Revenue Streams
• Trailing and hiking camps
• Winter sporting events
• Stores, stalls and restaurants
• Educational workshops
• Paid telecast of live events on app
• Selling of books and magazines
• Guest rooms/hotels arrangements

Research Summary

Key research finding 1:	Key research finding 2	Key research finding 3
• Based on following NGO websites we collected the features that can be integrated within our App for UX enhancement and fast growth of the reservation. **References** • Neponset River Watershed Association • Brookwood Community Farm • Mass Audubon Society (runs the Trailside Museum) • Mass Dept of Conservation & Recreation (DCR) • Blue Hill Observatory Science Center • Blue Hills Ski Area	• Researched the park by making a personal visit to know which features can be included. Also, to know that how can we increase the access of community to the different locations of park. **Findings:** • MBTA services required to make a good reach to park • Direction boards to navigate within the park • Dining facilities • Events • Sports activities	• Contacted relevant people from different organization to know their suggestion for park to be included in the app, however we have not heard back. • Explored other organizations that are associated with the Blue Hills to understand what features we may want to replicate on our app. • **Findings:** included in recommendations section

SWOT Analysis

Strengths	Weaknesses
• App will include potential features for community to connect with nature as well as people around. • Increased interest of people, outreach of the park and social media presence. • Built-in map to filter out hike based on terrain and location.	• Secured data storage platform needed to avoid data malfunction and to maintain user privacy. • Weak performance of the app may not attract number of targeted users. • Strong back-end support team is required to maintain the app well-functionable.
Opportunities	**Threats**
• Choose activity/event based on age group. • Integrated pre=downloaded map to access it offline. • Application will share survey for feedback analysis, rating and reviews on the app store/play store. • App will show nearby restaurants, restrooms, fountains, sports gear store along with their relative options, categories and pricing.	• Heavy rush of visitors on app during the peak season and hours might leads to more down time. • Revenue might not be generated as expected in all seasons as it depends on the number of visitors. • Some features working on a third-party license agreements might not work due to lack of support from vendor's end. • App development and deployment could be delayed due to unavailability of unskilled developers and coding errors.

Technology Requirements

Business requirements	• The technology adaptation must be sufficient to satisfy all the requirements of the visitors which would help in improving visitors' experience of the Blue Hills.		
Use cases	• Navigation for tracking/hiking	• App must include dining options	• Connectivity options to reach the park
Data	• Sources, capture, Storage, transformation, visualisation / presentation, interpretation		
3rd party platforms, systems and tools to be used	• Facebook, Instagram, Share Point, YouTube, Twitter		
Custom software / integration requirements	• API integration		
Infrastructure requirements	• Amazon cloud server		
Additional detailed requirements	• Separate file attached.		

Thank You