

# Healthy Parks—Healthy Person App

Drew Baker, Elizabeth Hughley, Chinemerem Iweala, Andy Pineda

Jack Ramos, Jian Soriano

Under the supervision of Professor T.J. Rainsford

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Gerrit Knaap, NCSG Executive Director  
Kimberly Fisher, PALS Director



## Table of Contents

<b><i>Introduction</i></b> .....	<b>3</b>
<b><i>Methods</i></b> .....	<b>3</b>
<b><i>Deliverables and Descriptions</i></b> .....	<b>4</b>
<b>Wireframes</b> .....	<b>4</b>
<b>Application Features</b> .....	<b>4</b>
<b>Design Specifications</b> .....	<b>5</b>
<b>Comparative Analysis: Tennessee Healthy Parks App</b> .....	<b>6</b>
<b><i>Recommendations</i></b> .....	<b>8</b>
<b>Marketing and Advertising</b> .....	<b>9</b>
<b>Usability and Accessibility</b> .....	<b>9</b>
<b>Development Process</b> .....	<b>9</b>
<b><i>Conclusion</i></b> .....	<b>10</b>

## **Introduction**

Through its Department of Parks and Recreation, Prince George's County is looking for ways to improve community health by developing a mobile application to aid in physical and mental wellness. This application will be used as a tool to promote and track the use of parks, trails, and open space and the reported impacts on health outcomes. With the stress induced by the events of the past year (including but not limited to the COVID-19 pandemic), physical and emotional health concerns have become increasingly prevalent issues that the County's Department of Parks and Recreation could help address.

This project's objective is to track the impact and performance of methods like ParkRx, which could prescribe the use of parks to citizens to increase healthy lifestyles in Prince George's County. This will be accomplished by designing a mobile application that connects residents with available county parks, trails, facilities, and programs. The app will include a reward system that incentivizes engagement with these offerings, as well as track use metrics such as age, gender, and basic demographic information to help the county understand who is using what facilities and how often. The data collected through the app will be used by the Department of Parks and Recreation to assess the usage of its parks, facilities, and programs, to gauge where to focus its efforts in creating a physically and mentally healthier environment for Prince George's County's residents.

The people involved in this project included teams from Prince George's County Department of Parks and Recreation. Katrina Williams, Edeline Dormevil, Edith Michel, Thomas Paolucci, Lynell Poyner, Michael Wigglesworth, and Bonnie Man were involved in developing the wireframes for this project.

## **Methods**

Initially the design team was tasked with creating the blueprints for a mobile application that would incentivize park use in Prince George's County by offering rewards for wellness activities associated with the parks.

After communicating and exchanging ideas with County officials, we adapted our project to cater to the community rather than specific individuals. We outlined ideas for the app in meetings with Prince George's County staff. At each meeting, the product was refined and altered to more closely align with the client's goals.

We also spent time learning and understanding the goals of Prince George's County's Department of Parks and Recreation and ParkRx. Understanding their perspectives allowed the team to make more informed decisions that led to a better end product.

## Deliverables and Descriptions

Wireframe of app in Figma: <https://www.figma.com/file/SAZZ4a5CToFET2y61Z4PNA/Healthy-Parks-App?node-id=0%3A1>

### Wireframes

The wireframes of the Healthy Parks—Healthy Person app have all the necessary features for a future development into a fully functional app. The app’s wireframes contain the main features: a home page, a settings page, and a profile page. The home page’s main components are trails, parks, community centers, events, outdoor activities, and ParkRx.

The short-term goals of these deliverables are to describe what the app might look like, how it will function, and the features it will include. The wireframes also have long-term goals including the app’s eventual development and implementation, facilitating the accessibility and use of park prescriptions (such as the ParkRx program), and providing the community with information about Department resources.

### Application Features

As mentioned, many features were implemented into the app’s wireframes. On the home page are a “Trails” button, “Parks” button, “Community Centers” button, “Events” button, “Outdoor Activities” button, “ParkRx” button and the “Important News!” feature. The trails, parks, community centers, and outdoor activities buttons all function in a similar way. These buttons connect to another screen showing Parks and Recreation offerings for these specific amenities. The buttons present a main page for each amenity, showing what they offer and leading the user to click on the parks, trails, or outdoor activities the county offers to learn more.

The community centers button is different. Instead of explaining the types of facilities, it shows a picture of them, their name, and location.

The events button takes the user to a page of its own that features a calendar of upcoming events and a list of the events that are happening closest to the current date. The user can click on any of the listed events to learn more.

The ParkRx button connects to the county’s partner and their objective in creating this app. The important news portion of the home page will show the user the most prevalent and important news that the user should know.

Another component is a side bar accessed by tapping three lines in the screen’s top left corner that reveals buttons connected the app’s various features. The first one is the “Check-in”

button, which takes the user to a page where they can input where they've been, for how long, on what date, and what they did exactly.

After being submitted, this information is displayed on the next button, the "My Activity" page. This button shows the user recent activity they submitted and graphs the weekly totals of each activity.

The "My Prescriptions" button takes the user to a page showing a template of a prescription and a few prescriptions that might be given to them.

The next button is "My Points" where the user can view a log of their different activities and point values for each activity. A button in the top right, "Redeem my points" takes the user to the "My Rewards" page where the user can view the different rewards that the Department of Parks and Recreation offers and how many points it takes to receive a specific reward.

The "Contact Us" button takes the user to a page showing how to contact the Prince George's County Department of Parks and Recreation and a survey for feedback on the app.

The "How Do I..." button is where a user's question might be answered.

The final button on the sidebar is the "About" button where a user can learn more about the Prince George's County Department of Parks and Recreation.

The sidebar also features a "Logout" button, where the user is returned to the login screen, and the "Profile" that takes the user to the profile screen.

The app's remaining features are the buttons along the bottom of the screen. The left button, a gear icon, takes the user to the settings page where they can adjust the app's settings. The middle button, a house icon, returns the user to the home page. The right button, a person icon, takes the user to the profile screen. Here the user can input demographic information to build a profile to help the Department of Parks and Recreation understand their users.

### Design Specifications

The first design specification was to provide a reward system that tracks a user's park visits. The more parks they visit, activities they participate in, and demographic information they provide, the more points they will earn toward rewards. Points can be redeemed for free Park and Recreation activities, items, and gift cards.

Users also need a way to leave feedback on the app itself, for example, how it compares to other apps with similar features. The app should also gather users' feedback on the parks, facilities, and programs, including what they liked, disliked, would add, would remove, , etc.

A user's survey should also let them give their insight on the app itself and their current level of activity, such as whether they exercise often or take regular walks. This information will allow the app to be customized to provide users with activities they can do efficiently and enjoy. The survey should also allow users to express their physical and emotional needs, which will in turn allow for further development of Department offerings.

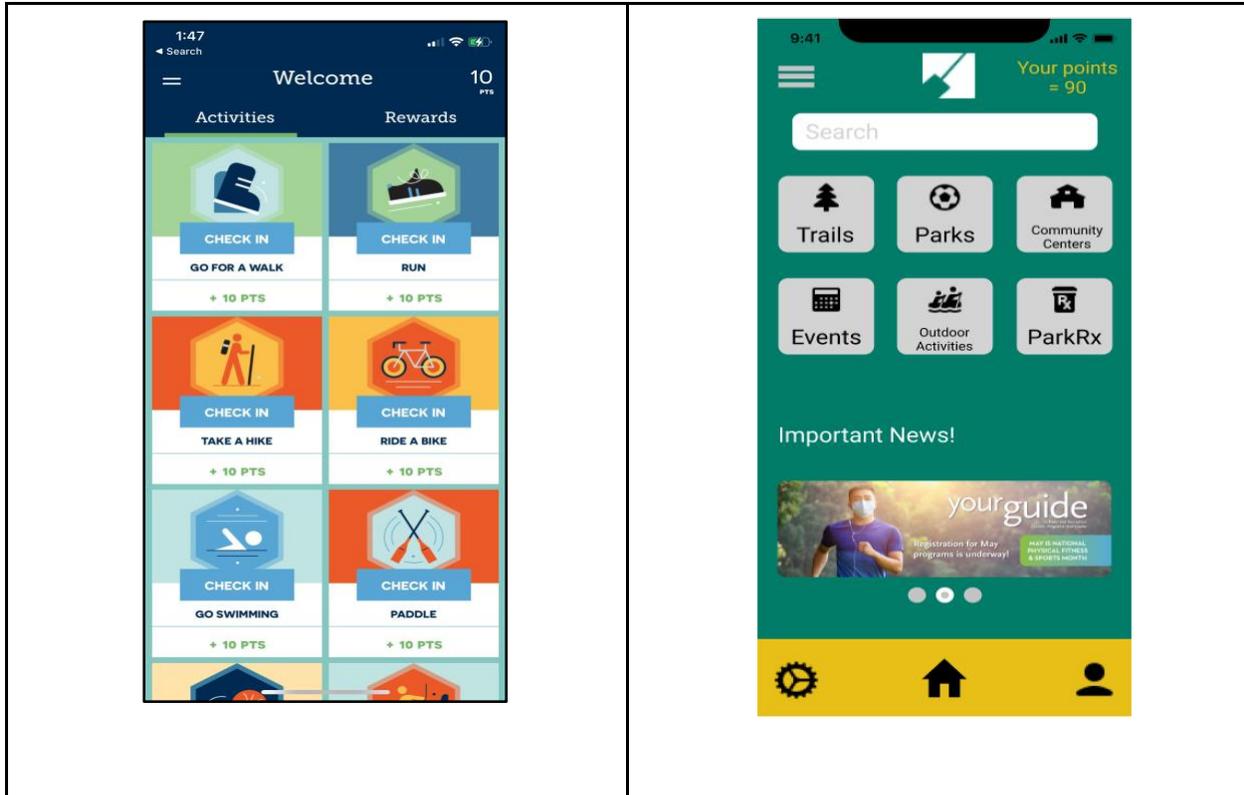
#### Comparative Analysis: Tennessee Healthy Parks App

While formulating the design for the Prince George's County healthy parks application, the design team analyzed existing similar applications. The Tennessee Healthy Parks app was developed by and used in Tennessee State Parks to promote park use.

The Tennessee app can be found here: <http://healthyparkstn.com/>

This app shares the premise and fundamental goal as our app but has a smaller scope and less functionality. Nevertheless, it has several design features that were analyzed and integrated into our interface, specifically their system of rewards, which was of high priority of the design specification.

Tennessee app home screen	Healthy Parks—Healthy Person home screen
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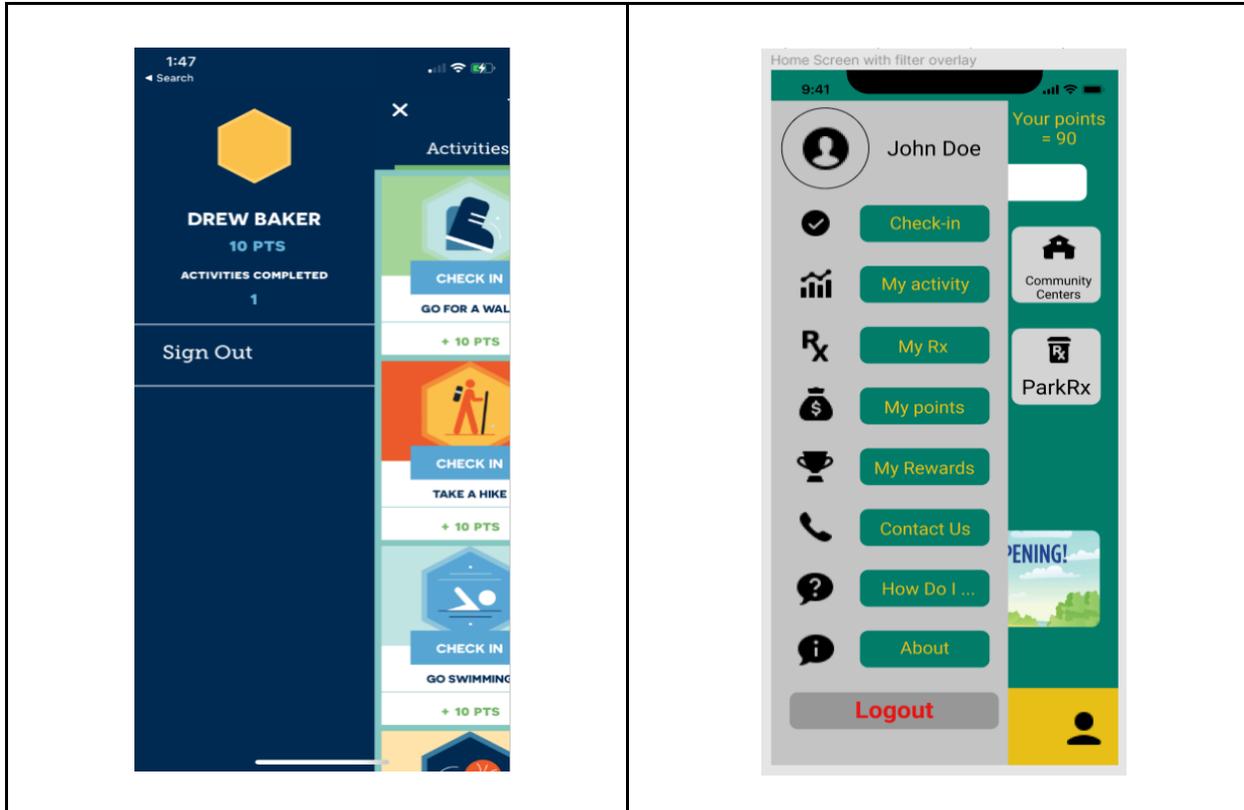


Like the Tennessee app, the Prince George’s County initial scope aimed to encourage participation in park and recreation activities by rewarding involvement. However, the scope grew to encompass a more holistic approach to usership and county involvement. As shown in the images above, the Tennessee app direct the user’s attention to points and rewards, whereas the Prince George’s app focuses on guiding the user toward the activity they chose.

In the upper righthand corner of both applications, the user’s points are clearly visible, but our interface is aimed toward community involvement and discovery.

Tennessee app toolbar

Healthy Parks—Healthy Person toolbar



Another difference between the two applications follows the observation that the Tennessee app is focused on rewards and redeemable prizes. While the Prince George's app contains these features, the scalability is greatly increased. In essence, our design team took the Tennessee app and converted it to a feature of our app.

The Tennessee app's reward system is also based largely on honor reporting. Redeemable points are filtered through a cool-down timer to prevent a user from spamming activities and collecting a large number of points. The Prince George's app will include this feature but may also include confirmation methods such as location snapshots requests by which the app briefly views the user location to ensure they are within a park before rewarding points. However, the rewards system in our app still requires development.

## Recommendations

For the application to reach and effectively engage its intended audience, we recommend addressing marketing and advertising, usability and accessibility, and the development process.

### Marketing and Advertising

The target audience won't know about the application if it's not advertised. When development is complete, the app should be mentioned in a variety of media. It can be mentioned in the Department of Parks and Recreation email list, on the Department's social media, including Twitter, Facebook, Photoshelter, and Instagram. The application should be featured on the Department's website, especially on the Homepage and other frequently visited pages.

The application can also be advertised physically. Mailings should include a note prompting the recipient to download the application. Promotion should include flyers and posters at community center events and facilities as well as announcements about the application and its features. Even posting about the application on a bulletin board will help to reach more members of the target audience.

### Usability and Accessibility

To engage more community members in using the application, it must be as accessible as possible. The wireframes are designed on an iPhone 11 layout but not everyone who participates in Parks and Recreation activities owns an iPhone 11.

The application should be designed to fit the display sizes of other devices, possibly from the iPhone 5 and later, as well as Samsung and Android devices. It must be available on both the App Store and the Google Play Store.

We also recommended that the application is free and funded through advertising, as to allow more users to download it.

### Development Process

The app feature that needs the most attention is the rewards system. We recommended establishing a point value system before making the application live. The system would assign a certain number of points to different trails and activities at the judgement of Department staff.

We also recommended that user feedback is recorded in an internal or external database for easy reference, allowing valuable feedback to be considered.

Updating the application on a regular schedule is also recommended, as it is a good measure to keep bugs and defects to a minimum while user engagement to a maximum.

The Department should also decide how users should submit completed activities, so they won't be able to exploit the rewards system. This could be accomplished by taking photos of the area, using locational services, or other methods that the Department can ethically employ.

## **Conclusion**

When the app's wireframes are complete and its vision and aesthetics are determined, the client should focus on marketing and advertising, usability and accessibility, and the development process.

We strongly suggest developing the rewards system so it can be properly displayed in the mobile application.

We also urge the client to take the next step and start the app development phase. Both the front-end and back-end of the application need to be created. This will allow for the mobile application to run properly and smoothly as well as create the desired aesthetics.

The application should go through multiple testing stages to fix any bugs or issues. From here the last steps are to publish the application on the desired store (Apple Store, Google Play Store, etc.) and continue application updates as needed.