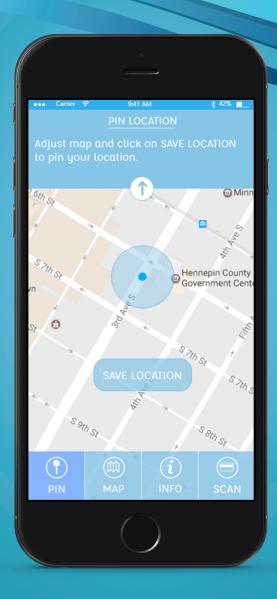# My Parking App

MOBILE APPLICATION
USABILITY REPORT

INTRODUCTION

For this project, our task was to plan and design the whole process of creating a mobile application. We decided to create a simple parking application that will guide our users back to their car after placing a pin on their phone.

Throughout the project we will be applying the MVP methodology to our project. What we are trying to do with the MVP methodology is a strategy for avoiding the development of products that customers does not want. The idea is to rapidly build a minimum set of features that is enough to deploy the product and test key assumptions about customers' interactions with the product.
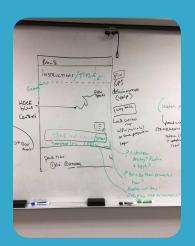
APP AND FEATURES

The first steps of the project was defining what will our app do and what are the key features we want to incorporate into the application. We started brainstorming some ideas and finally thought of 4 features we could add to the application. These features were:

- Let the user pin his parking location
- Let the user get directions from his location to the pinned point
- Get information about activities around your position
- Parking rate calculator.

METHODOLOGY

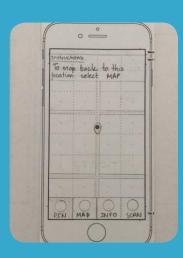## ① Whiteboard Sketching & Planning

We used a whiteboard to plan and layout the different elements we wanted to be visible on our screens. We started off with a first layout that we started to comment in order for us to discuss some choices and why we have chosen an element over another. . These sketches also help us a lot when starting designing all of our screens for the app because we knew what direction we were heading with these sketches.

First Round of Wireframes ②

. With our first round of design, we still had an approximate idea to what our final designs will be looking like. The design that you can see on the right, was used for a critique, where as a team we went through the different screens and pointed out what might not work and what could be done differently.

③ Testing

Using the recently created Wireframes, we've put our app to the test of 5 different users. The test process is prepared beforehand with the creation of a script. Testing helps us get some additional feedback on important issues such as navigation, usability and general look and fell of the app.

④ Critique & Redesigns

Once the Testing is done and that we have obtained our results, we can now critique and discuss the testing results and possibly redesign our screens based on the feedback. Our "Location" screen has gone through different interfaces based on the feedback of the testers and critique.
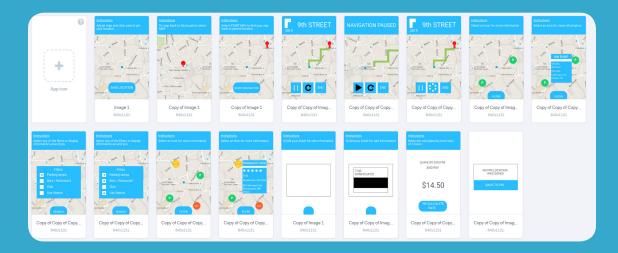
⑤ Second round of testing

We then put to the test our redesigned screens. We target the specific redesigns with appropriate questions to the user in order to only extract valuable feedback from the testers.

⑥ Marvel Prototype

Now that we have a good idea of the interface and usability we can import our designs into Marvel to create a High Fidelity Prototype of the App. As you can see below, all of our screens were redesigned for Prototyping.
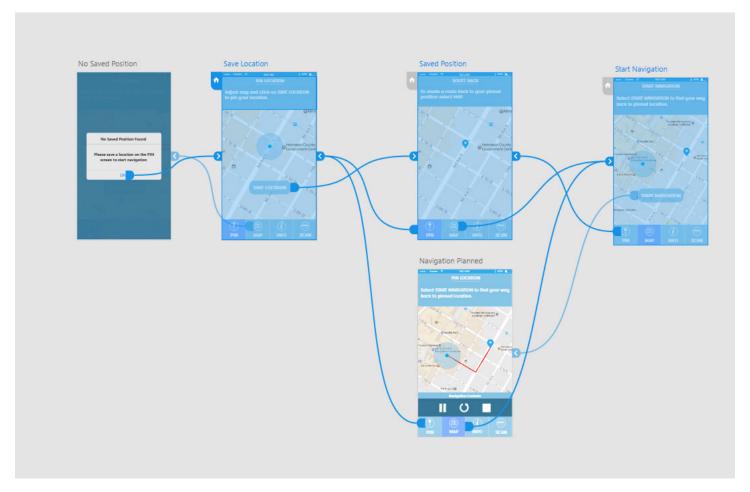
⑦ Final Testing

We can now test our High Fidelity Prototype and extract the last feedback from the testers. All the feedback that is gathered here should only be slight changes or user preferences, in any case we should be doing drastic changes to the app.

JOURNEY FLOW
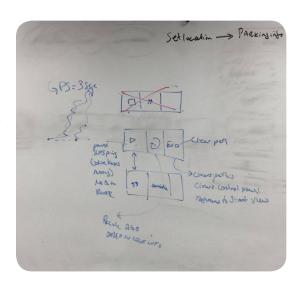

High Fidelity Journey Flow of "Start Navigation"

The First step prior to everything else was to establish the journey flow of our application. Journey Flows are useful tools when it comes to deciding what are the different interactions that the screens have. In our journey flow we were able to establish a precise chart of all the interactions and features of each screen. The image above is a Journey Flow of our Final Design. As you can see each button has a specific destination which constitutes the Journey Flow of the application. For My Parking App ,planning the first journey flow was an important step because it helped us create wireframes faster since we already had a good vision of the elements for each screen.

TESTING & CRITIQUE

Testing and Critique were essential parts of our project. The testing of our application will allow us to get some insight on the different features of our app and the interface.

Before getting in to testing, we thouroughly prepared a script that will help us conduct the test approprietly. Each of our testing questions were choosen in order to give us the best possible feedback on our application.
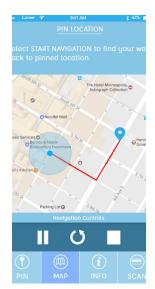
Once the testing is done and that are results are recorded, we could move on to the critiquing proces. The different feedback from the testers was analysed and discussed and with that input we could make the appropriate changes to the designs and carry on to the redesign process.

Critique & Discussions on Navigation Controls
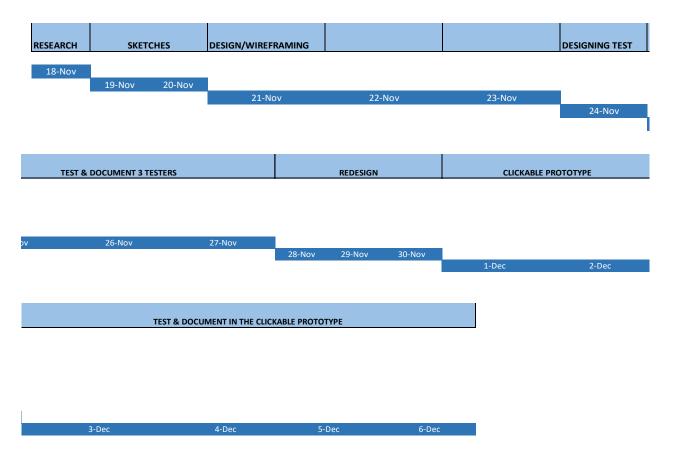
REDESIGN PROCESS

Progression of Navigation Feature through redesigns

Redesigning the application based on the critique is essential. Most of the changes we implemented throughout the whole lenght of the projects, are done accordingly to the tester feedback but also the discussions we had as a group on the different features.

The feature that has evolved the most in our application is the navigation system. The goal of this redesign was entirely focused on making everything understandable to the user and try to make him recognize some elements he might have seen before in other apps. We then sketched our new ideas for the navigation controls and finally created a new version of the controls which would include a pause, play button, a refresh button and an end task button.

PLANNING AHEAD

RESEARCH	SKETCHES	DESIGN/WIREFRAMING			DESIGNING TEST

18-Nov					
	19-Nov	20-Nov			
		21-Nov	22-Nov	23-Nov	
					24-Nov

TEST & DOCUMENT 3 TESTERS	REDESIGN	CLICKABLE PROTOTYPE

...ov	26-Nov	27-Nov			
			28-Nov	29-Nov	30-Nov
				1-Dec	2-Dec

TEST & DOCUMENT IN THE CLICKABLE PROTOTYPE

3-Dec	4-Dec	5-Dec	6-Dec

First planner established for the My Parking App

When we first started this project, we decided to plan all of the steps of the project in order to keep track of our progression throughout the lenght of the project. The chart above is the first planning table we established at the start. These tables are subject to change depending of our progression for each of these steps. One of the steps that took us longer than planned was the clickable prototype. Because of some time we lost on this step, we had to adjust the planning for the next step accordingly.

CONCLUSION

As a conclusion we can say that this project was very interesting in terms of application design but also usability. By following the MVP method, we were able to create a simple yet interesting app in 3 weeks. During these 3 weeks we were able to produce a timeline listing all of our tasks in the time frame accorded. We also created a number a sketches and designs which were then imported in Marvel app. Even though we got confronted to certain issues during testing and design, we managed to go through an entire process in 3 weeks with no budget whatsoever.