Park Elsewhere

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21/01/2019

Professional Development

CONTENT

INTRODUCTION

As part of our professional development, we have undertook a project with Digital Labs to complete and provide an application called: Show You Care Park Elsewhere.

The application will attempt to provide better parking solutions for when people park poorly. This will be able to show how their actions have affected you. We have three people using our app; Jethro who generates the stickers, Alice will buy these stickers from Jethro and place them on a car who has inconvenienced her journey for the final user is Bob whose car has affected Alice. Bob will scan the sticker that is placed on his car by Alice and can choose whether to apologise or not.

The team involved in creating our final project are:

- Rebecca Clarke - Developer
- Kishan Chavda - User Advocate
- Mehdi Ahmadi - Project Manager
- Mirza Asaas Arshad Baig - Technical Lead
- Ali Chaudrhy - Client Advocate

Our project manager is responsible for making sure all tasks are complete and everyone on the team stays on task. The user advocate is responsible for making sure the app would be usable for the desired users (Alice and Bob). The technical lead is responsible for making sure answers about technical questions which may affect the development are researched and answered to make sure the rest of the team can carry on. Client advocate is in control of making sure Digital Labs (our clients) are happy with our project, progress and how the app is being developed in general, they will meet with them weekly to make sure this is happening. The developer is the extra member on our team and they are responsible for filling any roles/tasks which need to be done which don’t come under any role.

Our team aims to get several aspects out of this project such as; experience in developing applications using Ionic and Cordova, how to solve problems, being able to communicate effectively as a team and being able to split tasks efficiently therefore being able to stay on our deadlines which we set to be able to complete the whole project on time.

Requirements

The requirements of our projects will be challenging, we will be learning and implementing different types of applications. We need to be able to learn and use:

- Ionic
- Cordova
- AngularJS
- OmniDB
- Swagger
- Heroku
- GitHub
- Trello

We will be using the above programs to help us develop the application, we aim to use resources online that can help us build the project quicker, we are going to be using several things to help us build different parts of the application such as, Ionic and Cordova in order to create a mobile application for Alice to allow her to be able to scan a QR Code so that she can easily report an incident that has occured.

Throughout Heroku, Swagger, AngularJS and OmniDB, will be used, these are required to link everything together to create APIs. These are created to push, get and report the ‘stickers’. GitHub will be used to branch our data, this is done by creating repositories to link the different aspects together such as our Single Page Web Application, Mobile Application and API.

The first required aspects we will aim to do is to create a draft and study the project so the whole team knows everything about what we’re meant to do. We will be using whiteboards, paper and demo examples that we will make in order for our planning so that we get a clear idea of what to do next.

As explained, we will then use the different types of software application to create and use throughout the whole project for the Mobile Application and Web Application.

Design

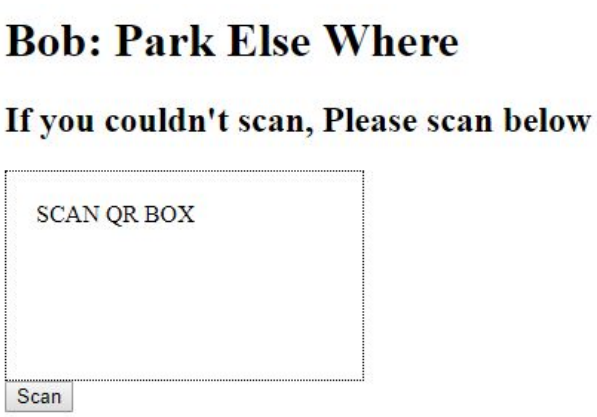
The designs that we have created includes our first draft plans that our whole team and client Digital Labs is able to explain and deliver to us on how to create and develop the project.

We have designed many examples such as, first plan idea of how the Single Page Web App for Bob and Jethro will look like. We have designed these on a whiteboard to give us an insight of what the web page will look like. This has helped us a lot because it gives us a clear idea of where to begin to create it.

In addition, we have created wireframes which are digital versions of the designs that we created on Pencil. This is a good insight for us as we have a digital and external view of how we are going to create the project.

As well as, we have further designed and developed our understanding and knowledge by working with Digital Labs and explaining how the project will work in depth by making different diagrams and pictures to get a clear insight of what we are meant to do.

(Below are Design examples of our Single Page Web Application)



(Below are examples of our Wireframes designs)

Implementation

We are aiming to implement our first plans that we have created by our requirements lists as we have mentioned above. We worked with Digital Labs on how these plans to learn about how the project should be developed.

Our first draft plans were to design diagrams and plan out the whole project process of how Alice, Jethro and Bob will use the applications.

During our plans that we have discussed, we aim to implement our desired software that will help us develop our project.

For example, we made the decision to use Ionic and Cordova for the Mobile Application as it will help us build one that Alice can use to scan the sticker.

The decision for the Single Page Web Application, we will aim to use Heroku, Swaggar, AngularJS and OmniDB to create and push data so it can generate QR Codes that can be scanned through the Cordova App. Another Single Page Web Application will also be created for Jethro to apologising.

User Guide

The guide of how the use the Single Page Web Application and the Mobile Application is by following what Jethro, Alice and Bob are doing within our Project and then basically using these instructions to perform the project.

For example, once we created everything, Jethro is the one who has the stickers and Alice will buy these stickers from Jethro that they can use.

Alice will need to use the app to scan the QR Code to put onto the car as she wants to report an incident.

Bob will come and scan this QR Code which then he can choose to apologise or not.

Following this simple instruction between these three people. The way our project will work is that:

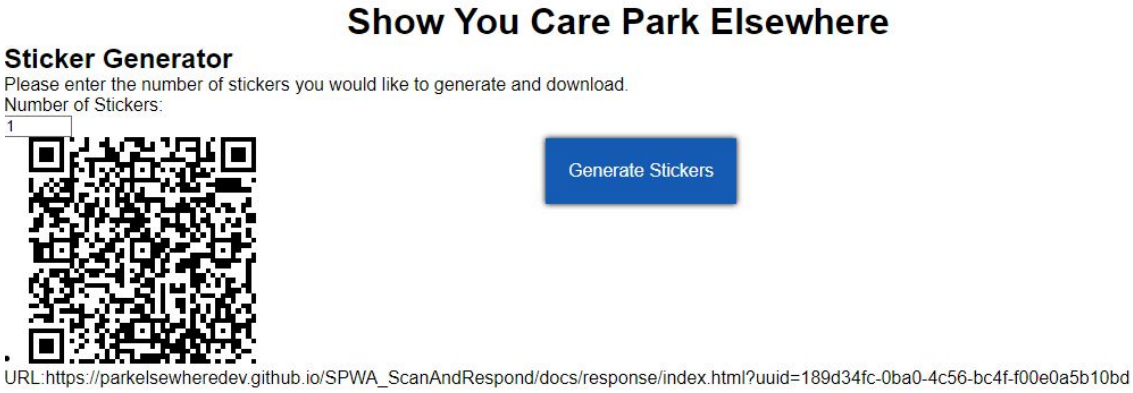
1) A Single Page Web Application is used to generate the QR sticker by how many the user would desired to have.
2) This will have its own UUID which then can be used to place the QR Code on a car to report an incident.
3) The user will scan the QR code using the Mobile Application which then they can register the incident.
4) The owner of the car who sees the QR code can then scan it with the Mobile Application to view it.
5) The owner will then be able to either apologise or ignore it.

For an inexperienced user

1) Navigate your way to the Single Page Web App for the QR Sticker Code Generator, this is found at:
   https://parkelsewheredev.github.io/SPWA_ScanAndRespond/docs/generate/index.html

   This is what the page will look like:

2) Next, hover over the box that contains the number '1' and click on the up and down arrows.
3) Next, You can choose the amount you would like to generate.
4) After you are happy with your number in the box. Click on the blue button (Generate Stickers).
5) This will generate you a QR code, this is an example of what your page will look like.



App Scanning

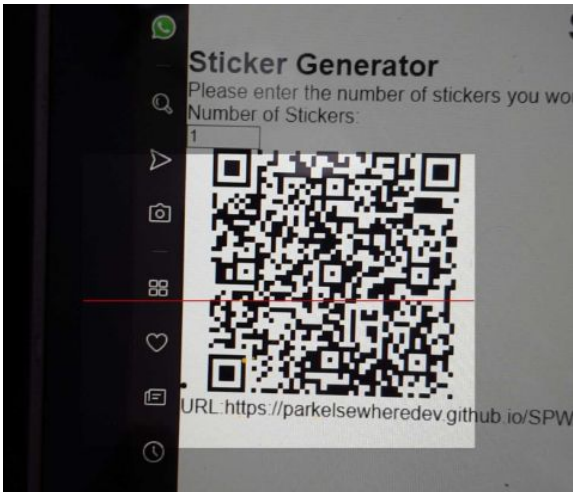
1) Open up the Application on your phone which is shown as ‘sycpestarter’.
2) This will load up your QR Code Scanner.
3) Click on the button called ‘Retry’ to connect it.
4) Next, click on the button called ‘Scan QR Code’.

Connected.

Scan QR Code

UUID:

5) Your camera will load up.
6) Point your phone camera at the generated QR Code shown above.
7) This will scan the QR Code.



8) This will then subscribed it to the database.
9) Put the sticker on the car.

Apologise

1) Open your phone camera that you normally take pictures on your phone.
2) Scan over the QR code sticker on the car by pointing your phone camera on it.
3) This will scan the QR Code and bring you to a webpage.
4) If this webpage does not appear. Please enter the following URL onto a web browser: (it should look something like this with numbers after the HTML) *https://parkelsewheredev.github.io/SPWA_ScanAndRespond/docs/response/index.html*

   It should look like the screenshot below.

5) After you have brought up the web application, you will need to decide if you want to apologise or not.
6) Click on the blue buttons 'Yes, I'm really sorry!' or 'No, I don't think so!'.
7) This will then send a push notification to the person that placed the sticker onto your car.

CONCLUSION

In our conclusion, we have learnt a lot throughout the project such as: learning how to use Ionic, Cordova which are mobile application developments on our phones. Using different type of software applications like GitHub, Trello, AngularJS, OmniDB and Heroku.

Overall as a team, we have learnt a lot throughout the year. We have developed our knowledge and skills such as Problem Solving, Researching skills, Time-Management, Technical Skills and Communication Skills.

This has helped us a lot as it gets us prepared what it would be like working in a professional environment.