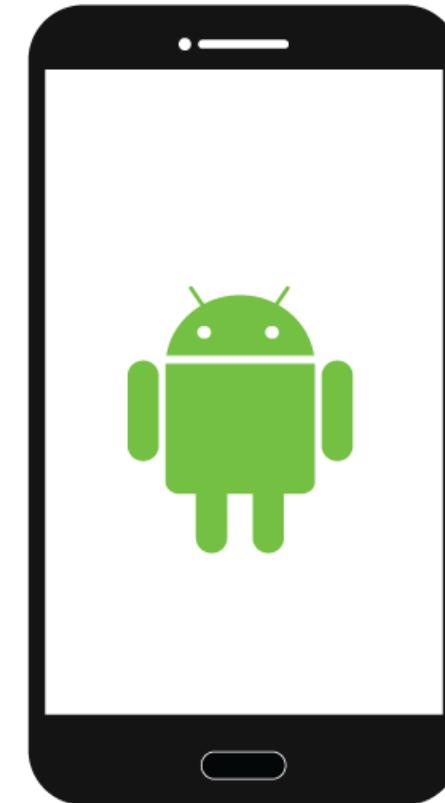


Palisadoes Foundation  
Calico Challenge 2017  
Project: DoRoad  
Jhamali Vassell

# The Beginning

- ▶ I had little initial knowledge of the required languages and programming frameworks.
- ▶ I learned the language's basic features during the first few weeks with the help of my mentor.
- ▶ I used my initiative. I learned as I went along.
- ▶ My experience with other programming languages allowed me to progress smoothly and without much difficulty even though the concepts were new.



# The Beginning

- ▶ My mentor was Agyei Masters.
- ▶ He started the DoRoad project about half a year before
- ▶ He is a Computing student at the University of Technology(UTech)
- ▶ He is currently in his final year pursuing a Bachelors in Computing and a minor in Enterprise Computing.
- ▶ He is also the Student Branch Chair of the UTech IEEE club.

# The Beginning

- ▶ The framework used for the project was Ionic.
- ▶ A framework is specialized software which provides the generic functionality of a programming language, as well as other features which allow the user to use complex functions more easily.
- ▶ The Ionic Framework TypeScript/JavaScript
- ▶ JavaScript is the programming language used to add functionality to the different elements of the application.
- ▶ For the project, TypeScript is used, which was developed by Microsoft.
- ▶ This is a superset of JavaScript, meaning it provides the same functionalities as JavaScript, along with some additional features.

# The Project

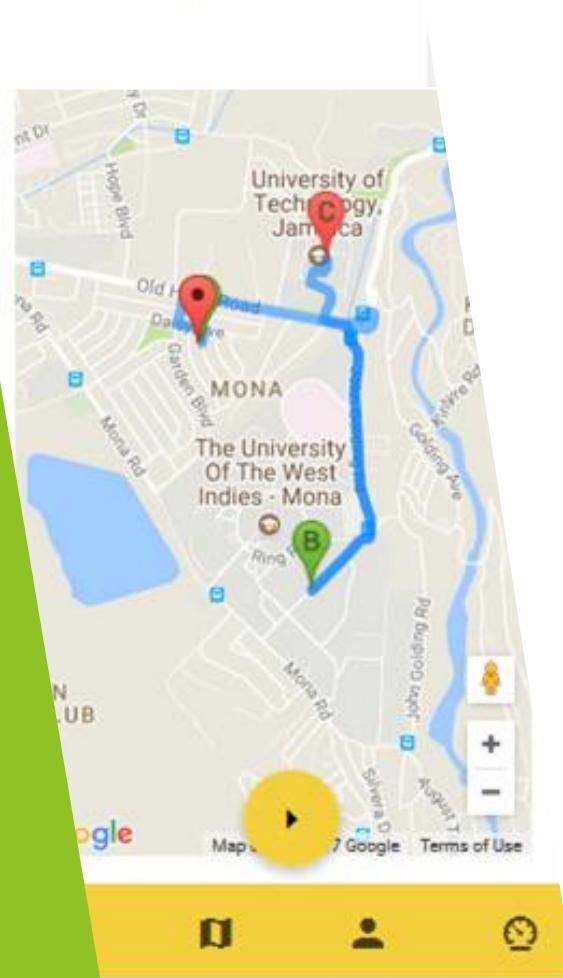
- ▶ For the Calico Challenge, I was chosen to work on DoRoad, one of two apps, the other being OneStop.
- ▶ DoRoad was made to be used by drivers, and OneStop by passengers
- ▶ These apps are intended to make the public interaction with transportation more efficient and simple, allowing them to charter vehicles, and track taxis and buses.
- ▶ The inspiration for creating this app was personal experience with the public transportation system in the country

# The Project

- ▶ Quite often one would be waiting for a taxi or bus to arrive for a lengthy amount of time with no idea how far away it is and how quickly it could reach.
- ▶ DoRoad aims to track the vehicles and provide a sense of relief for commuters while waiting.
- ▶ By tracking the drivers, it also allows the users to know which vehicle is closest to them, allowing them to make delays as small as possible when chartering.

	Hugh	0.7km
	Mira	2km
	Yuki	5km
	Jace	13km
	Suna	74km

CONFIRM



# The Project

- ▶ On the DoRoad app, the driver is able to see a list of passengers that would like to charter them from which they can select one or multiple if passengers choose the sharing option
- ▶ After approving their selection, a map showing the way to their destination will come up, which also provides text-to-speech direction.
- ▶ Each trip the driver makes is recorded, and they can comment on how it went.

# The Project

Previous Trips

Yuki	2017-03-09 T00:45
Mira	2017-06-09 T11:27
Jace	2017-27-08 T17:03
Suna	2017-30-09 T21:38
Hugh	2017-29-06 T20:01

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Previous Trips

Yuki	2017-03-09 T00:45
Mira	2017-06-09 T11:27
Jace	2017-27-08 T17:03
Suna	2017-30-09 T21:38
Hugh	2017-29-06 T20:01

Options

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← review

Mira 2017-06-09 T11:27

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Volvo 9843PP

Toyota 8305PP

# The Project

- ▶ It also displays possible passengers en route of the driver's destination.
- ▶ The driver is also able to register different vehicles they may own, to facilitate different size groups and purposes, which means more business for the driver

# The Project



Java™



- ▶ The project was initially done using Java, but was later changed to Ionic.
- ▶ This was done because a single Ionic applications can be used on different platforms, namely Android, iOS and Windows, which allowed us to avoid making several different applications for all users.
- ▶ After the application is made, the Ionic Framework provides function which will change it to a form compatible with a target platform.

# The Project

- ▶ The project went well for me for most of the period, with a few hitches as I went along. The version of the framework used for the project was fairly new, released about a month and half before we began.
- ▶ This was decided on to ensure we have all the latest features available so the app wouldn't lag behind in terms of modernity.

# The Project

- ▶ As the project progressed, I had regular interactions with my mentor and others working on the OneStop app.
- ▶ We discussed the progress and what feature to add next as each was finished.
- ▶ Several different tools were used to allow to be as efficient and fast as we could be, such as Trello for giving out tasks, and Google docs for progress reports.

# The Project

- ▶ The documentation for the framework was not complete, so as new tasks were given, I would have to spend a fair amount of time searching for helpful sites, which was somewhat time consuming.
- ▶ Since the framework was new, there were not many helpful results initially.

# The Project

- ▶ Ionic uses web technologies, for which I could find many helpful articles, but they were mainly written using JavaScript.
- ▶ The semantics of JavaScript and TypeScript are somewhat different.
- ▶ As I got used to the framework, it became easier and after a while I figured out how to edit the JavaScript code to work for the project.

# The Project

- ▶ The process of creating an application in the newest version of the framework was fairly different from the older version, but had the benefit of being faster.
- ▶ Though it was faster, it still had issues, and had several updates in the short period I was using it.
- ▶ Having a few setbacks is fairly normal, and my mentor assisted in resolving many of them, but because this was new, there were some issues I just had to deal with.
- ▶ Overtime, I found fixes for the problems I had during the project, and after about halfway through, I was no longer hindered by any framework issues.

# The Meetups



- ▶ Several Meetups were facilitated, each at the end of the month. The first two were at RealDecoy Global Services, and the third at the JPS Head Office.
- ▶ The meetups were a very nice part of Calico. It allowed us to interact with professionals in our field in prospective places of employment, and also other participants of Calico.
- ▶ The meetups began with a panel discussion on some topic or a few related to our line of work, headed by professionals with personal experience.
- ▶ This made the Calico project not feel impersonal, provided us with useful knowledge for the future, and assisted us with networking.



# The End

The Calico experience was good one, and I would recommend anyone intending to take up software development as a profession to apply for it, as I intend to do again next year. The experience through this program has been extremely helpful, and I now have a better idea about the professional side of software development. The program was not very intensive, so even if a participant doesn't have years of experience, the pace will allow them to catch up rather easily, along with assistance from their mentor, and they will definitely come out of it a much better developer.