CodeSprint 5.0

The first ever innovation battle based on data science.

PROJECT PROPOSAL TEMPLATE

Team Name	
University	
Product Name	*Where is my car?*

Problem Tackling

High rates of energy consumption are putting a strain on natural resources leading to different kinds of pollution. With the number of vehicles on the road increasing each day, fuel emissions are also on a significant rise. A measure to solve this problem to some extent is the concept of public transports for example the use of buses. However the system is inefficient because people are not sure of the exact location and time of arrival of the bus.

Solution

'Where is my car?' is a mobile phone software that provides the user with real-time information about buses "on the go" in a way which encourages them to use buses instead of private vehicles.

User Scenarios

Scenario 1: Its 10 pm. John came to have coffee with a friend after work and now wishes to go home. He is not sure of the closest bus stop and the next bus home. He also doesn't have access to the internet or a bus timetable. He can search for a bus route from current location to his house and also see the closest bus stops from that location.

Scenario 2: Tanya is going to catch a bus to work, however, the bus was involved in an accident. So the software notifies her about the problem and tells her about an alternative bus route or a special service dedicated to this problem.

Competitor Analysis and discuss on why your product is unique

- *Our software links the major learning techniques of visual aids, audio and written interaction.*
- *'Where is my car' has been designed as a lightweight template that can be easily translated into other languages and formatted to target a particular age range making it truly effective across national borders.*
- *The interface is clean and simple so even a first time user can successfully complete a learning module.*
- *The user is given real time feedback on how they are performing through an audio message.*

With the advances in Microsoft's $100 laptop project we see 'Where is my car' as having the scope to reach millions who currently are pre-literate. We have worked alongside local language institutes and Schools to develop the software and see such organisations internationally as our entry point to our target market.

Discuss Business Viability and Business Model

Discuss how you will take your application to market, including aspects such as price, location, intermediaries, etc...

*We are planning a **one-month trial** of our System in an area that encompasses one or more universities and shopping malls. This area should contain a large student population who rarely travel outside the area.*
*We have the backing of a **local transport company** willing to provide vehicles, expertise and other resources. Several organisations, such as the **Canterbury Innovation Incubator**, have offered to invest in the system. **Local and regional councils** have also expressed support.*

Assuming just 4% of students participate in the trial, our simulations of the trial indicate:

- *Waiting times averaging just over 2 minutes*
- *Travel times just 3 minutes slower than a car, excluding parking*
- *Profitability when charging just 6DHS per trip*

Profits from the trial will be used to grow the system to encompass the entire city. Later, it can be implemented in other cities.

Discussion of Data Science component

Discuss how the data science component is applied into the core idea…

We are planning to use Machine Learning to determine the best selection of busses by calculating the optimal route of travel with less obstruction. For example there might be few different direct routes but there are indirect routes which by taking transit between buses we can make it faster.

Technologies/Resources Used in the Application

Flutter
Tensor-flow
Mobile Device

Team Details

	Full Name	Phone Number	Email	NIC Number
Team Leader				
Member 1				
Member 2				
Member 3				
Member 4				
Member 5				