

National Institute of Business Management

Place4me

Project Proposal



B.Sc. Special (Honors) Degree in Computing

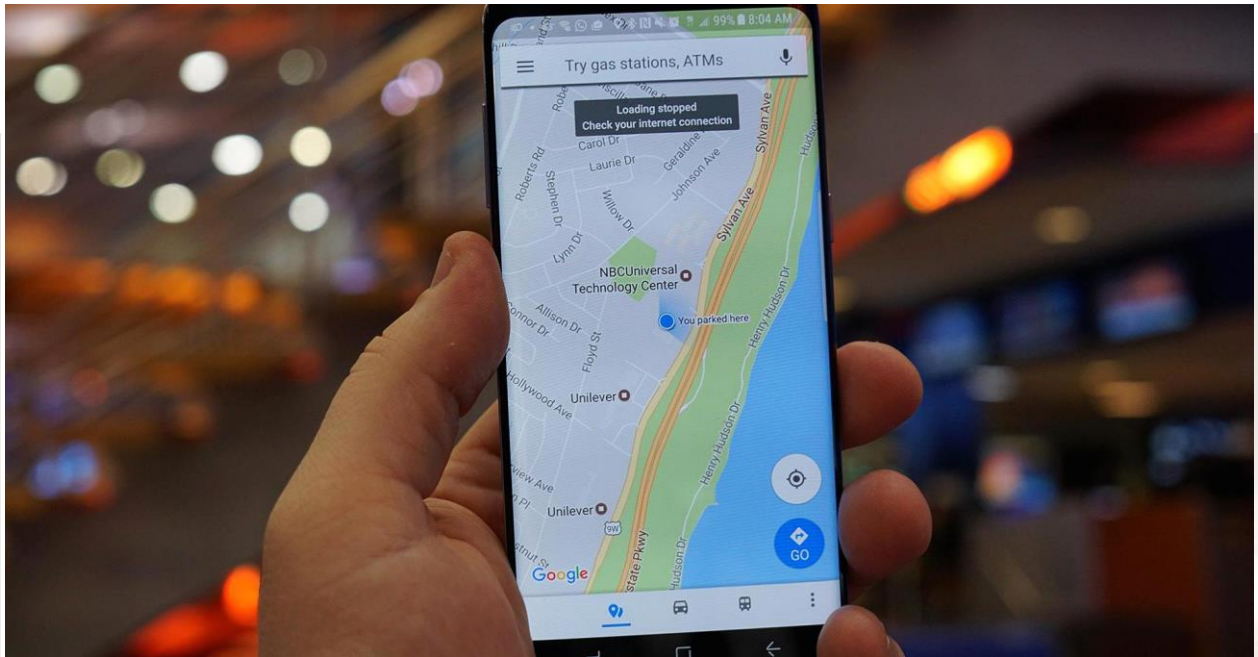
Background

Now a day if you want to park your car, there are thousands of apps to find the best car park for you. But what happened if there are no free slots for you? How do you going to know that? Those apps can't help you except the "**Place4me**".

Place4me is created as solution for the above matter. It will navigate you to the free slot. You don't have to worry about driving through the whole car park while looking for a free slot.

We studied some existing apps and systems and found that it quite inefficient and there are overall many drawbacks in those systems than benefits.

The logo for "Place 4 me" is displayed in green. It features a stylized green 'P' that incorporates a white car icon. To the right of the 'P', the words "Place 4 me" are written in a bold, sans-serif font. The entire logo is set against a white rectangular background.



'[Google](#) has officially rolled out a new feature to Google Maps on iOS and Android that will [help you find your parked car](#).

Google already offers automatic parking location detection in some cases (I've noticed it works when it wants to) so you may have seen it before. Now it's easier to control manually, complete with notes about exactly where you left your car.'

Todd Haselton (Technology Product Editor for CNBC) provide a detail about latest app for smart car park. Available from: <https://www.cnbc.com/2017/04/26/how-to-find-where-you-parked-with-google-maps.html> [Accessed 26th Wednesday April 2017]

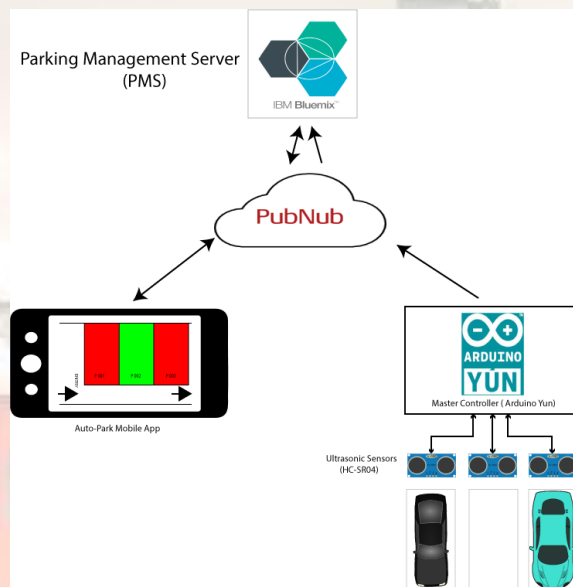
We know these details are not enough for find a place to park your car, so we are going to give you the real-time information about the free spaces in the particular car park that gives you to park your vehicle nice and easy.



Scope of Study

We hope to handle all the processes related to managing free slots in efficient way. And also, we hope to register users and provide a function to pre-booking a slot to park their vehicle.

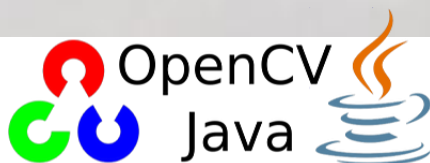
- Are we going to use some kind of hardware stuffs?
- What are the existing systems and how they implemented this?



There are some existing Arduino based car park management applications, they used ultrasonic sensor to feed their systems. Assume that what happened to these systems if the car park is getting much bigger and bigger.

Think about the no of sensor that they want to purchase and think about maintain cost, as well as the initial cost of the system.

Place4me only use one or two cameras to feed our system it will use OpenCV java, simply behind the senses it is “image processing”.



Proposed System

We propose “**Place4me**”, an Android Mobile Application, Web Application and an IoT based Image Processing System to identify the free slots of a park and navigate the user to the particular slot. In here we identify the free slots using an Image Processing System (java OpenCV) and feed our cloud database and pass it to the Mobile Application. Then user can select a slot as his desire and then system will navigate the user to the slot.

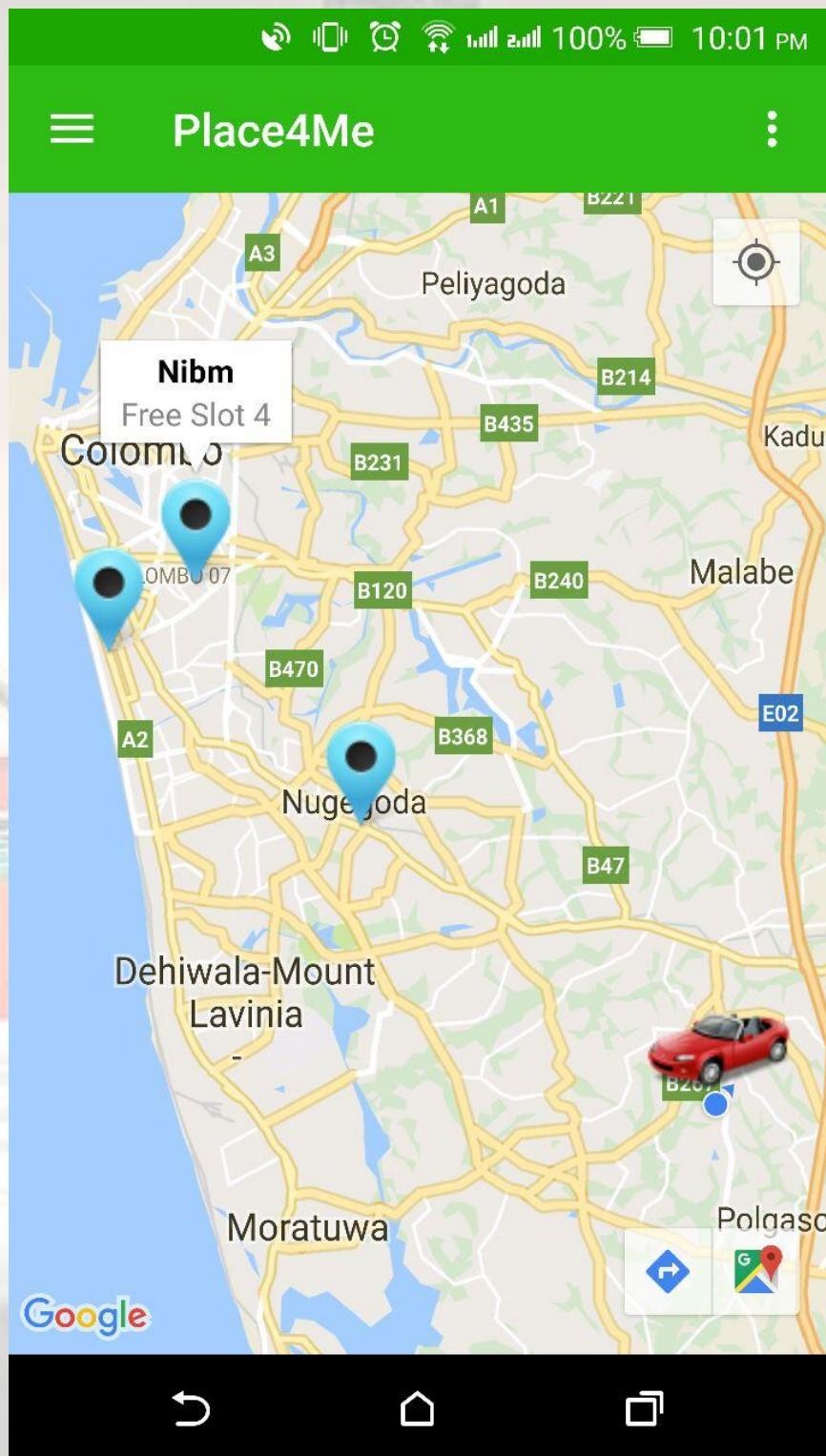


Risk Involved

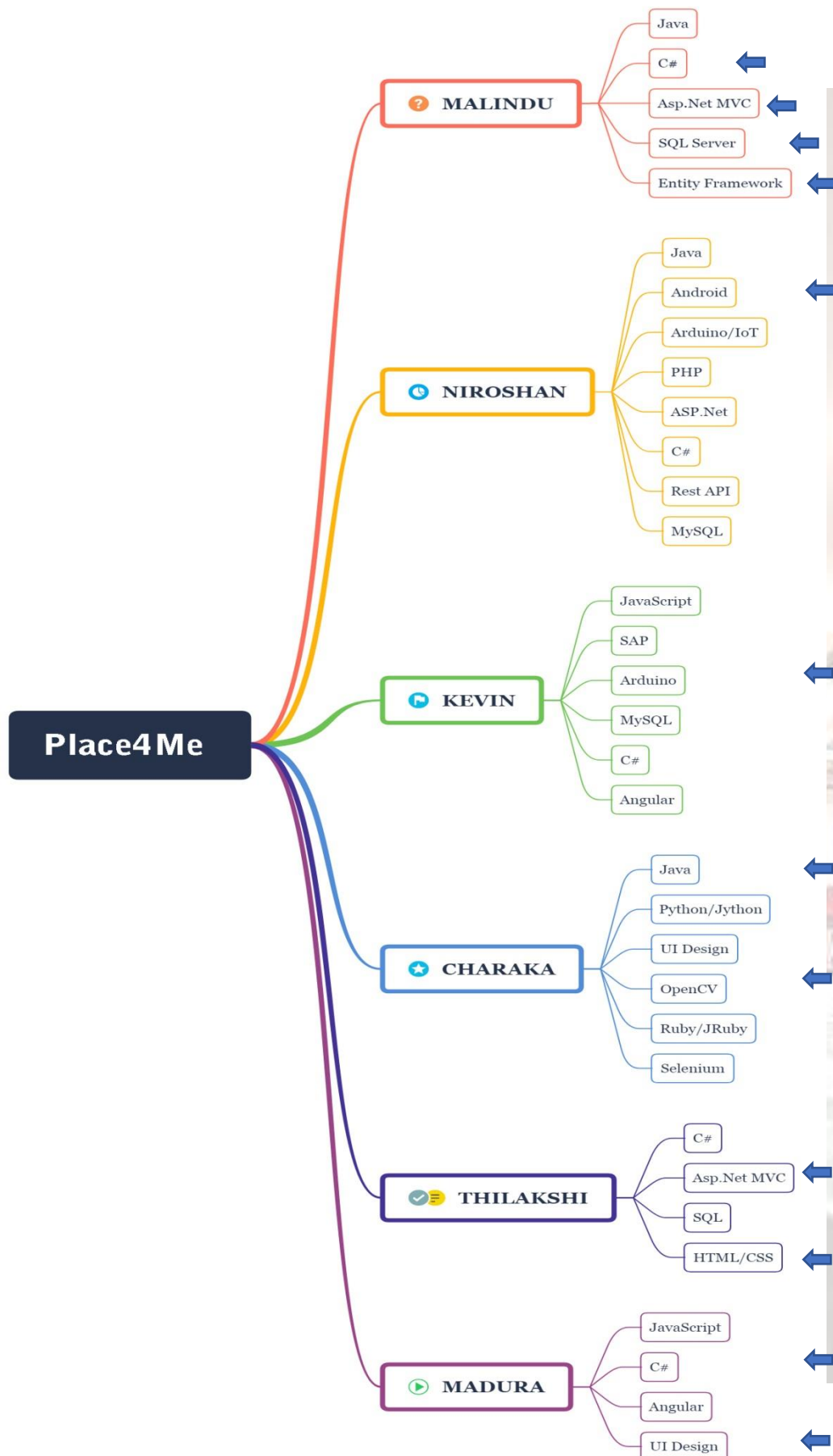
- The possible coincidence that could direct two vehicles to the same slot.
- The lack of network availability and hardware failures.



Screenshots



Description of Personal and Skills



Time Plan

