Questions

→ How do you detect the free spaces for parking.

→ How will you calculate distance from the car to the free slot

→ How will the placement be done i.e 8,80, L,80 or ?

→ ~~How~~ The model to connect all the individuals involved.
e.g car, parking slot, Payment method
Entrance mechanism, etc

→ How will it connect to geo-maps, what API is one required do you need permision for such integration etc.

→ The API which you will create How will it work, what are the challenges, data needed etc.

→ The GUI, you will create using which Languages, Methodology etc.

→ Integration & Payment method don't limit to mpesa be open How will you make it secure.

Problem Definition

Location of available parking slots a kilometre radius in both new and familiar places to the client, in order to save on costs.

Why IPA is necessary?

Drivers encounter difficulty in finding parking areas and mostly have to rely on the residents of a given area for information on where to park. However, this may be dangerous and/or inconvenient. In the case that they get misleading information or they cannot get the opportunity to stop and ask.

In other cases, drivers do not know how to get to the parking locations. IPA will be able to provide directions to the client.

Drivers also tend to break traffic rules, while trying to get directions to a parking area. IPA would assist in minimizing such traffic irregulations.

Objectives

Software-based

- A friendly user interface and experience – should be easy to navigate
- Integrate Google Earth and Google Maps
- Integrate M-PESA
- Create a REST-API

Client-based

- Reduce time spent finding parking area.
- Provide direction to the available parking area.
- Save on fuel cost.
- Gain information on distribution of parking areas
- Gain information on how payments are made

This is the methodology.

Proposed Solution.

To solve this problem, we propose creating a mobile application.

It will be integrated with google earth and google maps to offer the directions required to get to the parking slot. Google earth helps triangulate the location of the parking slot and offer the coordinates to google map.

We will create a user-friendly user interface using reactjs.

The pages will include sign in, and a landing page to start the search.

For the backend we will use django and django rest framework to setup accounts for the users and facilitate membership.

In addition, we will use postgress SQL to setup the database.

Im sure you can describe this in a better way. But its good currently.

When writting the methodology let the specific objectives guide you.
Since they are achievable* there is a method that can be linked to it.

Conceptual model.

See parking spaces

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PROJECT PROPOSAL

AN INTELLIGENT PARKING ASSISTANT