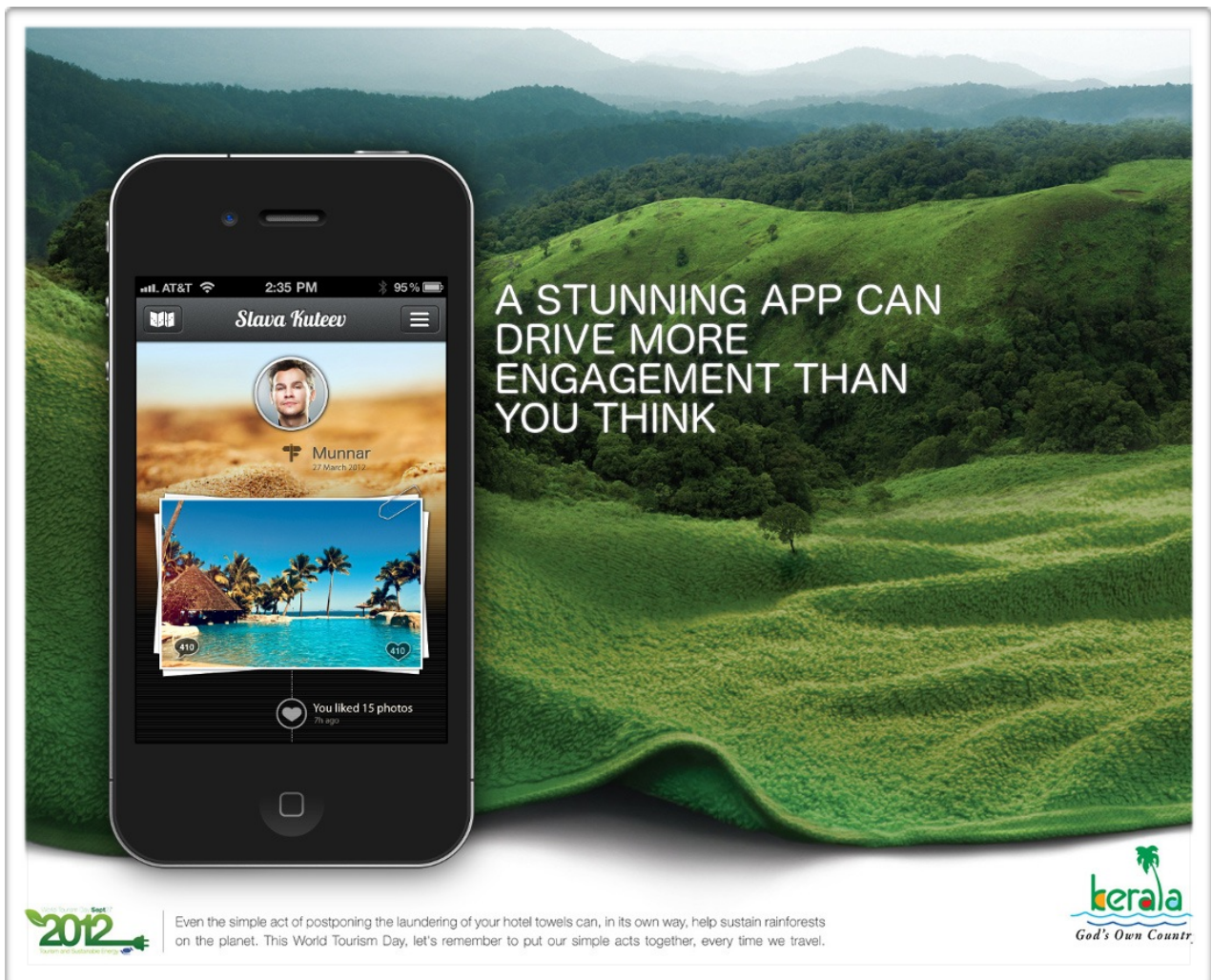


SUBIN SEBASTIAN



# Kerala Tourism Mobile Application Project Proposal

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Idea Proposal Number : 1

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## EXECUTIVE SUMMARY

### One Liner

**A learning enabled tour suggestion system for travellers.**

### Objective

Many tourists come to Kerala and spend a lot of money here, and on the end of the day, they leave Kerala with a lot of disappointment due to highly rotten management they deal with, by the tour operators, different departments as well as civilians of this state. Aware of the current flawed system here in the domain, the objective of the proposed project is to encourage the engagement in tourism and related operations from inside Kerala. The total revenue acquired through tourism in Kerala has to be upped by this project. It has to be a primary tool for travellers, guides and associates during any tour pack.

### Goals

The primary goal of this project is to let every single tourist come to Kerala, leave a smile on the face and a strong intent to come back again. **Provide** an intelligent system to suggest tourists, the best possible tour bundle available in Kerala, *at any point of time*. For example, lakes in Kerala has more water in the post monsoon period, that is August to December, implies that it is the best time for a boating programme *to be included* in any tour package being suggested between that period of time. So, while having a list of locations of lakes with boating facility, the system can suggest a tour package which includes boating in a particular lake or two. Similarly, in the misty season, that is from December to February, it is the best time to visit places like Munnar or Wayanad where the point of attraction is the beauty of nature. Similarly, it is not desired to visit beaches in the tide periods and Ayurvedic retreat centres in summer time. Instead of manually considering factors like these, the tourists will be suggested a package based on the data acquired by the system through traveller feedbacks, travel agency reviews, and actual weather information sources. The system learns throughout its operations time, for more and more pleasant and desired travel routine to be suggested at a point of time. The user experience should be made extremely pleasing, that on a single click, the user should be able to view a list of suggested travel packages and associated data like maps and options. Given the system crowd sourced in a low scale, its knowledge is improvised by actual human feedback over the time.

### Solution

The solution includes two major splits. One is the SaaS solution that exposes a REST API that can talk to our mobile client application on different platforms. The API will be running the learning system and it will act as a data source for the rest of the solution. It does not need to be a dedicated server, although government's IT policies does matter in the decision. The mobile application will have a OAuth login to ease the signup process. The user will be able to pick a time period in which he/she would like to travel through Kerala, and the system provides them a list of suggested packages that can be covered in the tenure given by the user. Upon selecting a desired route, the system informs everything from hotel rooms to taxis to prepare

**SUBIN SEBASTIAN**

to be aligned with the schedule. The user will be free to reschedule the trip as well as cancel the same at any time before the trip, and system takes care of the rest of hassle caused.

The Server side of the system : It facilitates every service providers from hotel managers to fleet operators to list their service in a pluggable manner, so that the system picks up the data and free up resources to be used in any upcoming travel intents. Then the same system considers every single factor, from which a possible human employee can suggest a tourist a highly valuable service for his/her spendings. The system in itself avoids congestion, conflicts as well as schedule problems. The system has a very reliable offset error management system that accounts for traffic, weather condition, other natural delays on every single process it has to consider.

**Project Outline**

The following will be the outline of the project execution. This is a strict procedure as the development stages are highly dependent to each other.

1. Technology decision making. From ground up, every single piece of technology to be used in the solution has to be decided pre development stage.
2. The prototype stage for the web service. This includes a higher level architecture design, and a plan layout for the rest of the project, plus a prototype API based on the web service. It can be run free on any SaaS platforms available for free at the moment.
3. The prototype stage for the mobile application on any one of the platform - Android, iOS or Windows. This stage is mainly intended to provide a proof of concept to the client and associated departments that this project is feasible. This step encapsulates a pre feasibility study as well.
4. The advanced development of the web service. At this stage, the viable deployment solutions are decided, as well as the best possible technologies are selected from the lessons learned from stage 2. At the end of this stage, the rolled out build will be a fully capable web backend.
5. The prototype stage for other mobile platforms. All the other platforms POCs are covered in this stage, nothing else.
6. Advanced development stage for each of the mobile apps back-to-back in a rolling test release cycle. Daily builds and alpha test groups with tight VCS integration.
7. Beta release.

## BUDGET

### Web service & Mobile apps

There is one web backend for all mobile client applications. The budget outline does not include running costs for any of the deployment or app store maintenance costs. This outline does not include future maintenance cost either.

Description	~ Mahours	Unit Price	Cost
Learning engine	450	₹ 1,000	₹ 4,50,000
REST API	350	₹ 900	₹ 3,15,000
Android Application	300	₹ 1,000	₹ 3,00,000
iOS Application (If required)	450	₹ 1,000	₹ 4,50,000
Windows Mobile Application (If required)	450	₹ 800	₹ 3,60,000
<b>Total</b>			<b>₹ 18,75,000</b>