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Computer Science Special Degree Research Project

Live Tour Guide

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TITLE OF THE RESEARCH PROJECT:
Live Tour Guide

INTRODUCTION
In general if any tourist plans for any tour they must consult any travelling agency for purchasing package and they need a tour guide throughout their whole journey. The main purpose of having a tour guide is to provide the safest directions to the tourists. With the enhancement of the technology most of the people are equipped with the Smartphones. It'll be more efficient of having a mobile application as a tour guide without having a physical tour guide. It'll be very cost effective to the tourists. Live Tour Guide will give the directions to the tourist when he enter the destination and it will display the available locations that the tourist can enjoy throughout his tour.

Tour guides are the people who gain foreign currency to the country. Since this mobile application is based on an automated tour guide, still it is capable of gaining foreign currency to the country by offering tour packages to the tourists. Therefore this application will be capable of doing reservations for the tour packages as well. This mobile application will make customers' lives easy and it will be beneficial to the travel agencies too, since the number of tourists will be increased due to the easiness of this mobile application.

This research is mainly based on the educational purpose, since the mobile application is not included as a course module within the university degree program.

PROBLEM STATEMENT
Sri Lanka is a popular country for the tourism due to the nature and the location of the country. Most of the tourists depend on the tourist guides since they are not familiar with the country. But in Sri Lanka most of the tour guides are cheating and charging high prices from the tourists. They will cheat to their own travel agencies too. This results in customer dissatisfaction and it will directly affect to the profits of the travel agencies.

Normally in order to do the reservations for the tour packages, the customers need to contact the agencies or step in to the agencies. It will also leads to the customer dissatisfaction as it is consuming more time. It will make the whole process inefficient.

PROPOSED SOLUTION

The above mentioned problems of the Travel Agency and the customers lead to the proposed solution of a Live Tour Guide which is an application based on the mobile platform. It will be beneficial to the customer as well as the Travel Agency. The benefits of the proposed system can be given as follows:

- Improves the efficiency of the customer as well as the Travel Agency.
- Cost effective.
- Lead times can be reduced.
- It's very user friendly.
- It will increase the profits of the Travel Agency.

RESEARCH AIMS AND OBJECTIVES

Aim

To have a system which is automated the manual process of the travel agency and reduce the workload by an efficient, cost effective system with the ability function for durable period which also could be used effectively to their business process.

Objectives

- To develop a Smartphone based application for the Android platform mobile in order to come up with a solution for the above mentioned problems.
- Learn how to develop Android applications through the use of the eclipse development software and test through the Android eclipse emulator.
- To learn of obtaining the locations by using GPS and Google Maps
- To pay more attention on the concept of Green IT.
- To learn how to use wireless access and communication methods to develop such an application.
- To increase the efficiency of the travel agency.
- To provide user friendly environment by adopting technology.
- To minimize the manual work.
- To compete in the market with confidence.
- To gain reputation of being equipped with latest technology.
- To provide better customer care.
- To enhance my knowledge and skills in this research area.

METHODOLOGY

- RAD (Rapid Application Development) methodology will be used to develop the system.

RAD (Rapid Application Development)

It is a software development methodology that uses minimal planning in favor of rapid prototyping. In RAD model the functional modules are developed in parallel as prototypes and are integrated to make the complete product for faster product delivery. By using this model it makes easier to incorporate the changes within the development process. RAD is a concept that products can be developed faster and of higher quality. According to the above mentioned facts of RAD it is chosen as the most suitable methodology in developing the Automated Voyage Management System.

- Data collection and analyzing will be done by using questionnaires.
   Through questionnaires it will be easy to identify the problems of the existing system and the requirements of the customers as well as the Travel agency that they are expecting from the new mobile application.
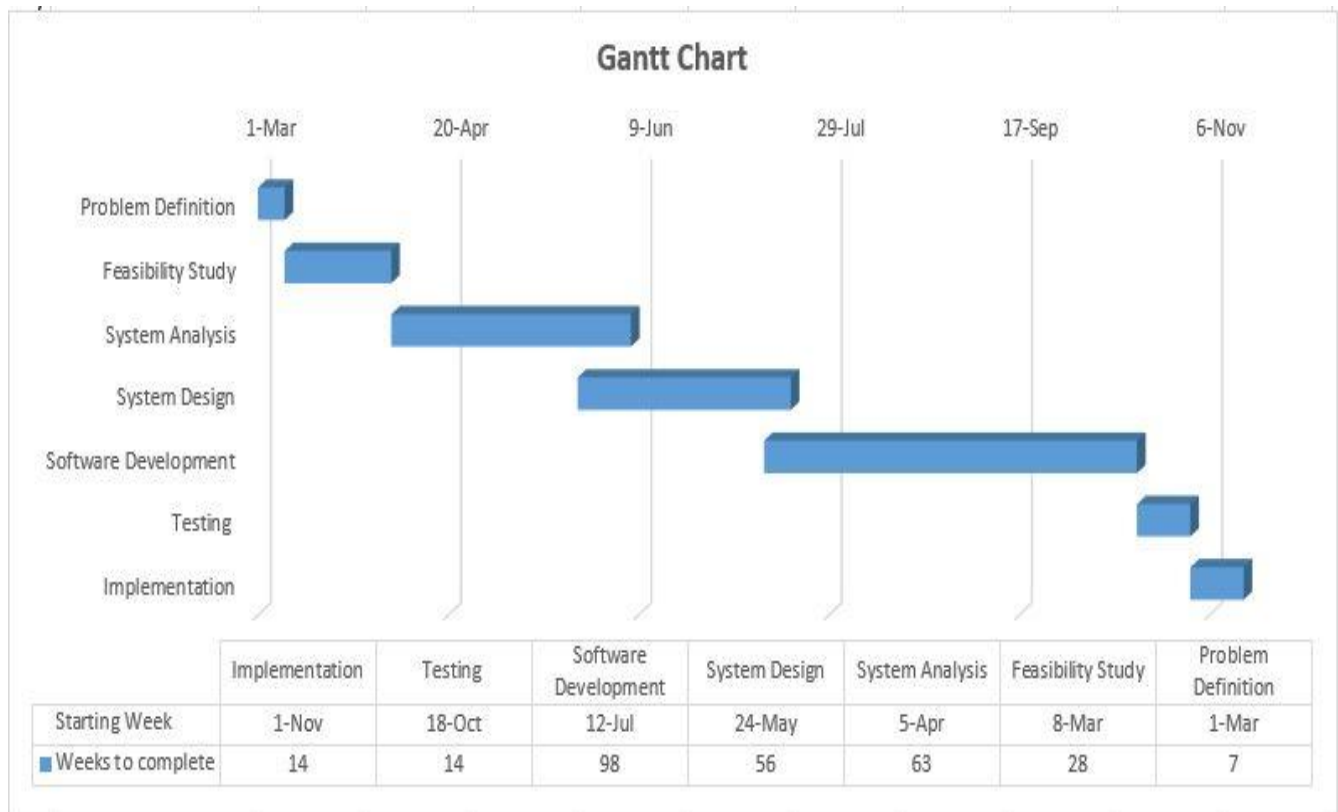
HARDWARE AND SOFTWARE REQUIREMENTS

Server Side

	Component	Minimum System Requirements
Hardware Requirements	Processor	Intel Xeon 2.0 GHz or higher
	Memory	2 GB RAM or higher
	Hard Disk	160GB or higher
	Disk Drivers	DVD ROM
	Power	Redundant suitable secondary Power source (Minimum up time 99%)
Software Requirements	Operating System	MS Windows Server 2007
	Application Platform	Java / HTML / XML / Ajax / PHP
	IDE	Eclipse, Netbeans
	Hosting Platform	Apache
	Database	My SQL

Clients

	Component	Minimum System Requirements
Hardware Requirements	Processor	Intel P41.8 GHz or higher , Samsung Galaxy Tab Pro
	Memory	512MB RAM or higher
	Hard Disk	80GB or higher
	Disk Drivers	DVD ROM
	Power	Redundant suitable secondary power source (Minimum up time 99%)
Software Requirements	Operating System	MS Windows XP or higher

TIME LINE

Gantt Chart

	Implementation	Testing	Software Development	System Design	System Analysis	Feasibility Study	Problem Definition
Starting Week	1-Nov	18-Oct	12-Jul	24-May	5-Apr	8-Mar	1-Mar
Weeks to complete	14	14	98	56	63	28	7

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