

Smart City Guide Developments and Transformations

Dr. S. Sivasubramanian¹, Madhamanchi Hemanth², Uppu Pavan Kumar³, Umapathi Naveen Kumar⁴

Assistant Professor, Department of Computer Science and Engineering¹

Student, Department of Computer Science and Engineering^{2,3,4}

Dhanalakshmi College of Engineering, Chennai, Tamil Nadu, India

Abstract: Nowadays, mobile phones are a needful part of people's lives. There is a continuous rise in the number of mobile computing applications, concentrating on the people's daily life. In such applications, location dependent systems have been detected as a significant application. Such an application which presents the architecture and implementation of such a location is commonly known as Smart City Guide. The main motive of the project is to explore how to realize a mobile city guide using the Android platform, including a prototype of the city guide. The project uses the research method design science. Through designing and implementing an artifact (that is prototype of city guide), the goal project is reached. Finally, the project is assessed in four aspects including platform evaluation, general functional evaluation, scenario evaluation and non-functional evaluation. The prototype implemented includes basic functionalities of city guides such as showing the map, locating points of interest (POIs). Beside, the project has inspected how to combine present technologies like Google Map and the phone application into the prototype. The app comforts a new native in a city by showing information of all the nearby sites that can be used for public access. Sites include Hospital Services, Police Station, Main Attraction Of City, Famous Restaurants. As well, the project has investigated non-functional aspects including extendibility, tolerability, and usability. Overall, the project presents a comprehensive unrealized city guide on the new mobile Android platform.

Keywords: Artifact, Android platform, Extendibility, Ecosystem, Vulnerabilities.

I. INTRODUCTION

City Guide is an essential whenever we are visiting a particular city. It gives us valuable information about the city and saves time. The project title is 'A COMPLETE CITY GUIDE USING DATABASE', a web-based platform used to store the details of particular city and helps all the users who have just visits our website and registered in the site, they can search for a prominent places in the city without taking any help from personal guide. The website contains the complete information about a particular city like places to be visited, site maps, route maps, Business environment, Job portal, information about organizations that provide transport, Hospitality and total history of the city. This website can be used by any person who has general knowledge about the internet. All the users will be first considered as anonymous users later if he needs any service then he will be treated as registered user.

1.1 Scope of the Project

It can be accessed by an unlimited number of users. Each user will be assigned a different set of permissions for each module of the system. The user can have access to all the information in the site with limited services and provide extra services to registered users. Track all the transaction details of the customer. Confirmation of end user identity and will verify which users are authorized to receive Support. Maintain history of each customer and their related Maintain history of each customer and their related information.

II. LITERATURE REVIEW

TITLE 1: Survey on Mobile User's Data Privacy Threats and Defence Mechanisms

Author: Jalaluddin Khana , Haider Abbasa,b*, Jalal Al-Muhtadi

Year: 2020 Publication : International conference on system modelling & advance in research

Concept

Nowadays, mobile devices have become an integral part of our daily life. These have proven to be an advantageous scientific invention that fills personal and business needs in a very efficient manner. In this era, the availability of mobile services has significantly increased because of the rich variety of mobile devices and essential applications provided by mobile device manufacturers. At the same time, numerous mobile security issues and data privacy threats are challenging both manufacturers and users.

Problem Identification

Therefore, mobile devices are an ideal target for various security issues and data privacy threats in a mobile ecosystem. In this paper, we provide a brief survey of the security challenges, threats, and vulnerabilities of a mobile ecosystem. Furthermore, we discussed some key points required to ensure mobile security and defend against data privacy threats.

Knowledge Gained

Mobile Security; Malware; Data Privacy; Threats and Vulnerabilities

Work Done

The emphasis of the discussion is, strong protection and the restriction of malicious activity at the application developer end, application stores end, and operating system and mobile device manufactures end by preventing the user from using non-recommended applications (which may be malicious) and considering biometric features for the authentication of real users in the mobile devices. Also briefly discussing the defence mechanisms that are considered to be a relatively better approach for securing personal and business related data or information in the mobile devices.

GAP

Mobile device applications offer a level of convenience that the world never before considered. At any location (home, office, hotel, playground, road, parking, museum, travelling in different countries, or anyplace in the world), any mobile user can use applications to fulfil their daily needs, including communicating, buying, searching, making payments, selling, entertainment, and finding general information. This extreme level of comfort has brought with it an extreme number of security risks.

TITLE 2: THE SMART CITY INFRASTRUCTURE DEVELOPMENT & MONITORING

Author: Mahmoud AL-HADER, Ahmad RODZI

Year:2014 Publication : International conference on system modelling & advance in research

Concept

The smart city infrastructure is the introductory step for establishing the overall smart city framework and architecture. Very few smart cities are recently established across the world. Some examples are: Dubai, Malta, Kochi (India), Singapore. The scope of these cities is mainly limited to construct a technology park converting the industrial real estate to state of the art information technology using the evolution in the telecom and IP networks including insignificant asset management automation system.

Problem Identification

The development background is to create an operational platform that would manage the power consumption and operational resources in order to reduce the overall running operational cost.

Knowledge Gained

Smart Infrastructure, GIS, Smart City, Geopsatial application, Infrastructure Development, Infrastructure Monitoring.

Work Done

This paper will debate the smart infrastructure development framework and the surveying positional accuracy of locating the assets as a base of the smart city development architecture integrated with all the facilities and systems

related to the smart city framework. The paper will discuss also the main advantages of the proposed architecture including the quantifiable and non-quantifiable benefits.

Gap

In order to provide a high level advisory services on emerging the smart state issues and trends. The potential in the master real estate developers are the scale of the projects and the huge man power that they are utilizing in their real estate development projects. Accordingly they are building several cities across the world. Due to these wide range real estate development activities, a detailed study of the existing systems with all associated database engines and business platforms are need to be tackled.

TITLE 3: Smart healthcare: making medical care more intelligent

Author: ShuoTian, WenboYang, Jehane Michael Le Grange Peng Wang Wei Huang Zhewei Ye.

Year: 2019 **Publication :** International conference on system modelling & advance in research

Concept

With the development of information technology, the concept of smart healthcare has gradually come to the fore. Smart healthcare uses a new generation of information technologies, such as the internet of things (IoT), big data, cloud computing, and artificial intelligence, to transform the traditional medical system in an all-round way, making healthcare more efficient, more convenient, and more personalized.

Problem Identification

Smart healthcare uses a new generation of information technologies, such as the internet of things (IoT), big data, cloud computing, and artificial intelligence, to transform the traditional medical system in an all-round way, making healthcare more efficient, more convenient, and more personalized.

Knowledge Gained

Smart healthcare, Informatization, Health management, Surgery, Clinical decision, Smart equipment, Personalization, Hospital management, Internet of things

Work Done

We first list the key technologies that support smart healthcare and introduce the current status of smart healthcare in several important fields. Then we expound the existing problems with smart healthcare and try to propose solutions to them. Finally, we look ahead and evaluate the future prospects of smart healthcare.

Gap

And smart healthcare incorporating a new generation of information technology has emerged. Smart healthcare is not just a simple technological advancement, but also an all-round, multi-level change.

TITLE 4: Smart healthcare: making medical care more intelligent

Author: ShuoTian, WenboYang, Jehane Michael Le, Grange Peng Wang Wei Huang Zhewei Ye.

Year: 2019

Publication : International conference on system modelling & advance in research

Concept

With the development of information technology, the concept of smart healthcare has gradually come to the fore. Smart healthcare uses a new generation of information technologies, such as the internet of things (IoT), big data, cloud computing, and artificial intelligence, to transform the traditional medical system in an all-round way, making healthcare more efficient, more convenient, and more personalized.

Problem Identification

Smart healthcare uses a new generation of information technologies, such as the internet of things (IoT), big data, cloud computing, and artificial intelligence, to transform the traditional medical system in an all-round way, making healthcare more efficient, more convenient, and more personalized.

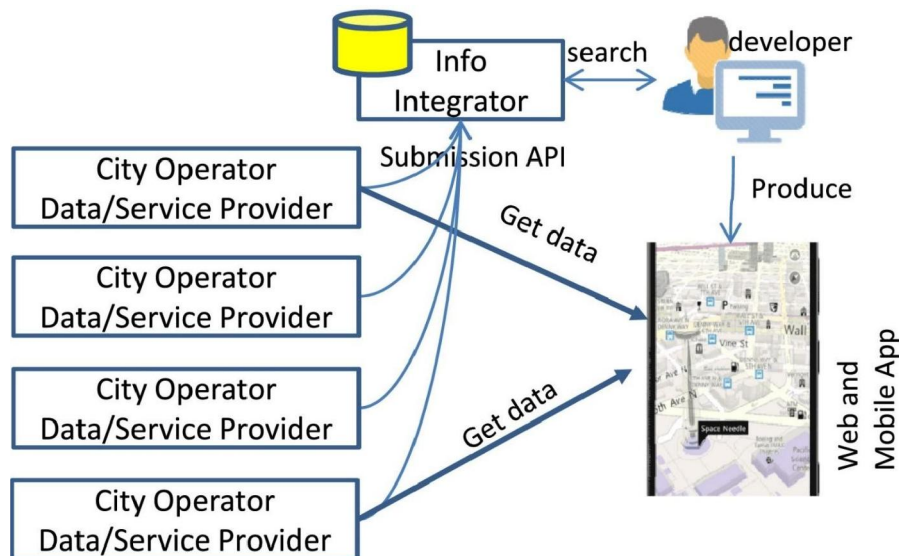
Work Done

We first list the key technologies that support smart healthcare and introduce the current status of smart healthcare in several important fields. Then we expound the existing problems with smart healthcare and try to propose solutions to them. Finally, we look ahead and evaluate the future prospects of smart healthcare.

Gap

And smart healthcare incorporating a new generation of information technology has emerged. Smart healthcare is not just a simple technological advancement, but also an all-round, multi-level change.

III. SYSTEM ARCHITECTURE



3.1 Module Description

- Smart City Guide
- Find destination location
- Tourism And City Guide
- Main information about smart cities

3.2 Smart City Guide

Smart city is defined by IBM as the use of information and communication technology to sense, analyse and integrate the key information of core systems in running cities. At the same time, smart city can make the information about main attraction of the city, hospital services, emergency contact numbers, famous restaurants of that city.

3.3 Find Destination Location

This Project in Java provides info regarding the various aspects of city such as tourism, institutes, industry, geographical maps, ATM locations, etc. The implementation of this project solves most of the problems a new visitor faces while coming to a new city.

3.4 Tourism and City Guide

It provides detailed information about the area, the famous places of those areas, restaurant, hotels, shopping mall etc. and all the related details of these places. This provides the user a very easy way to visit any place.

3.5 Main Information about Smart Cities

This will definitely help the users for the purpose of saving their valuable time which can't be got back which is also economically viable. This system provides a registration form for all who want to get the services. This can be categorized based on the type of users. They can search for prominent places in the city without taking any help from a personal guide.

IV. OUTPUT SCREENSHOTS

