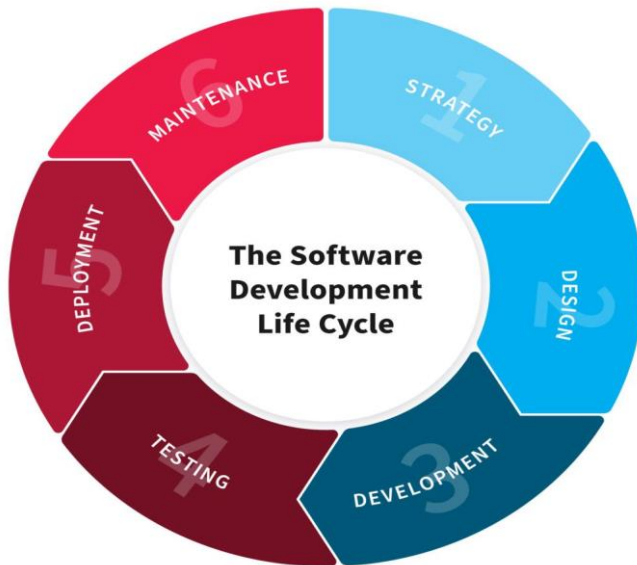


## FORMAT TO REPORT YOUR ADVANCED JAVA PROGRAMMING PROJECTS



**NAME:** MUTUYIMANA Ella

**REG NO:** 221013280

**CLASS NO:** 66

**PROJECT NAME:** SMART CITY GUIDE

### 1. PLANNING

*"In this Section, Students, have to define the system (your projects) goals and objectives and the problems the future system needs to solve."*

#### Introduction

my project is **SMART CITY GUIDE** which is web based software system built to store all essential details of a city like available hospital, schools, markets, banks, etc. Cities and urban areas witness a massive wave of people coming from every corner in search of jobs, education, and even a better lifestyle.

### **Goal and objectives**

The goal of smart city guide is to seek address that by creating an integrated platform to store essential and related information to guide newcomers in a city. As is a web-based product used to store the details of particular city and helps all the users who just visits our system

### **Problem system needs to solve**

the person who are visiting a particular city need to gather information from the person who is staying in the city or take the help of the guide in the city. Gather of all these information you need to visit the city. This possesses a lot of time and pre-planning. In order to get each piece of information we need to go for help desk.

## **2. Design**

*“In this Section, students needs to elaborate how the system will work, focusing on software design and how it works with the technical and functional requirements of the system. Depicts also how your team defined how users will interact with the software.”*

### **2.1 Users of the System**

- Tourists, students ,Businessmen
- Admin
- Industrialists, Entrepreneur, Organizations academicians etc.

- Jobseeker

## 2.2. Specific Requirements

### Functional and Non Functional Requirements

#### Functional Requirements:

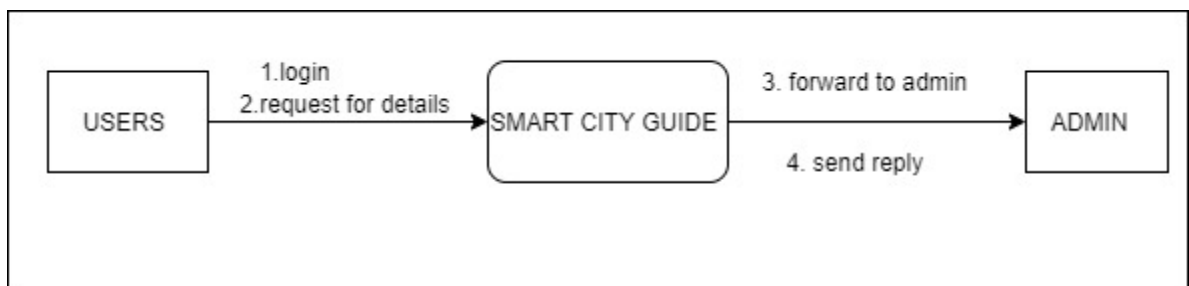
- Complete overview of the Businesses in the city.
- Secure registration of all users
- Complete Search of the entire city for easy access.
- Local language support at user-interface and database-level.
- Facilitate communication between user, experts and general public through comment

#### Non-Functional Requirements:

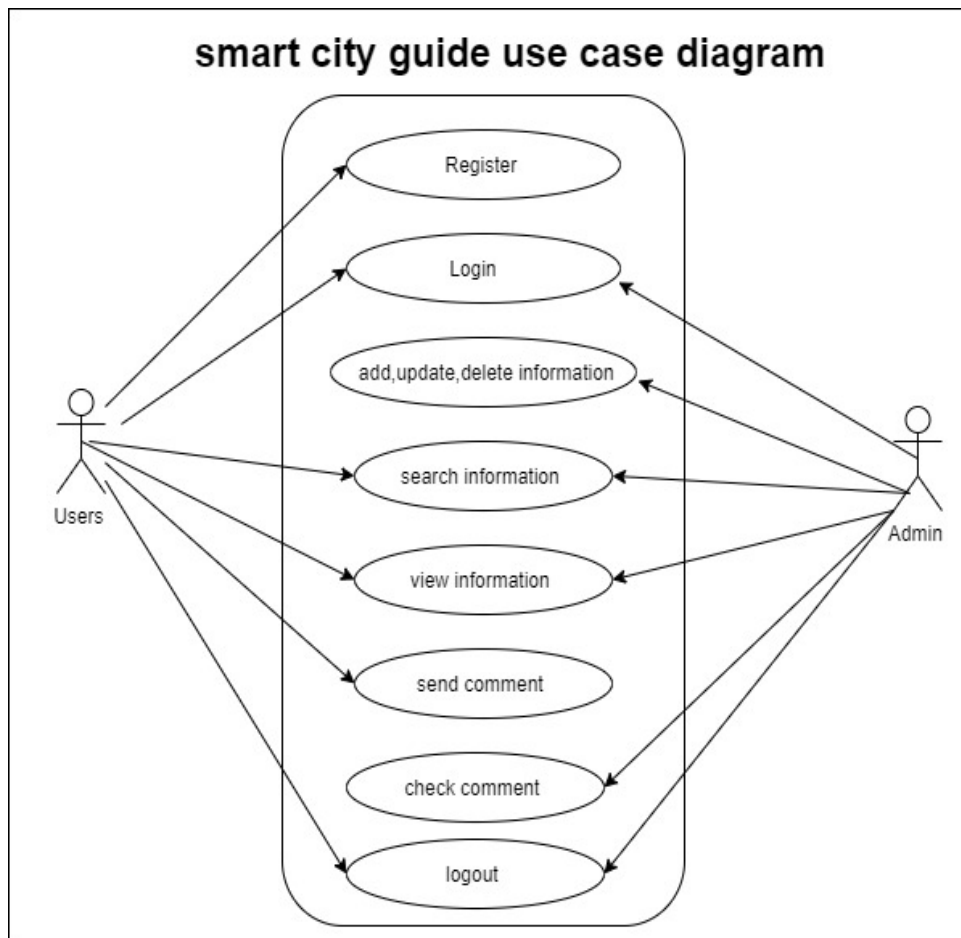
- 24\*7 availability
- Better component design to get better performance at peak time
- Flexible service based architecture will be highly desirable for future extension.

## 2.3 DESIGN

### 2.3.1 DFD LEVEL 0



### 2.3.2 USE CASE DIAGRAM



## 3. DEVELOPMENT

*“In this Section, Students need to elaborate how they build the entire system( Front end- back end technologies), chosen libraries, platforms, storage and databases, adopted technologies, etc...”*

- We developed the system backend and frontend parts using java programming language as well as NetBeans IDE and xampp for database.

- For frontend parts, we used swing controls generated from NetBeans to create forms, buttons, labels as well as user interface as whole.
- We used MySQL as database management system to hold backend data.
- We create interactions between user interface components such as forms and buttons using java programming language syntaxes.
- We used com.mysql.jdbc\_5.1.5.jar as library handling MYSQL connection with the system and also absolute layout.jar.

## 4. TESTING

*“In this Section, Students to show the way this stage was conducted. Ensuring that everything works as expected. Which defects and bugs you found, and how did you fixed them to ensure that the product meets the original specifications.”*

Test case Program: Registration

Sl. No	Test Case Name	Input	Expected Output	Actual Output	Valid/Invalid
1	Email id value	ellamutu.mail.com	Mail id should be in the format of ellamutu@gmail.com	Id mail entered is invalid	Invalid
	Email id value	ellamutu@gmail.com	Mail id is in the form of ellamutu@gmail.com	Valid mail id	valid
2	First name& last name	<ul style="list-style-type: none"> <li>• M</li> <li>• Ira87</li> </ul>	Name should be greater than 2 alphabet and also name should not contain number	Names entered is invalid	Invalid
	First name& last name	<ul style="list-style-type: none"> <li>• Mutuyimana</li> <li>• Ella</li> </ul>	Name should be greater than 2 alphabet and also name should not contain number	Valid name	Valid
3	userId and password	Ornella has registered as student	Student home page should be opened	If went tourist home page invalid	Invalid
		Ornella has registered as student	Student Home page must be displayed	If went to student home pages	Valid

## 5. DEPLOYMENT

*In this Section, Students have to describe how, installation, testing, deployment, and performance monitoring were conducted in their own respective laptop or desktop.*

- I Installed MYSQL as database management system using XAMPP software.
- I Downloaded and configured com.mysql.jdbc\_5.1.5.jar as library handling MYSQL connection.
- Use portable storage device to transfer project from development computer to the user who want to explore application.
- I tested my city guide by entering wrong data to see if it won't work and by entering right data to see if it will work well.
- After testing it I Run project file and start using the system