SMART CITY JAVA BASED WEB APPLICATION

A Project

Submitted in partial fulfillment of the requirements for

the award of the Degree of

BACHELOR OF COMPUTER APPLICATION

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2022

DECLARATION CERTIFICATE

This is to certify that the work presented in the thesis entitled **"SMART CITY JAVA BASED WEB APPLICATION"** in partial fulfillment of the requirement for the award of degree of **Bachelor of Computer Application** of Institute of Engineering & Management is an authentic work carried out under my supervision and guidance.

To the best of my knowledge the content of this thesis does not form a basis for the award of any previous Degree to anyone else.

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CERTIFICATE OF APPROVAL

The foregoing thesis entitled **"SMART CITY JAVA BASED WEB APPLICATION"** is hereby approved as a creditable study of non-research topic and has been presented in satisfactory manner to warrant its acceptance as prerequisite to the degree for which it has been submitted.

It is understood that by this approval, the undersigned do not necessarily endorse any conclusion drawn or opinion expressed therein, but approve the thesis for the purpose for which it is submitted.

(Internal Examiner) **(External Examiner)**

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Contents

Abstract

Our project comprises of only one module, the module is a part of our minor project and it is a web page on Smart city. In this module the user can log in, register and then can access the information provided about the city (only Kolkata). It is a web-based software application built to store all the essential details of a city.

Students, businessmen, tourists, workers, job seekers, anyone can use the application for their guidance throughout the city anytime anywhere just by creating an account.

Chapter 1

1.1 Introduction

The purpose of the smart cities mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially technology that leads to smart outcomes. Smart cities are equipped and connected with high technically and purposefully developed smart phones for responsive monitoring and controlling. These can also help to collect the data to manage traffic and transportation systems, to indicate accidents, to reduce crime rates, water supply networks, waste management, local news, and many other information systems and community services.

For example, in our daily life we are seeing smart meters which can be used for measuring electricity, gas, and water usage with great accuracy. This will help to reduce costs and resource consumption. And also, smart traffic sensors and GPS gear can report road conditions, while it can also help accurately for pinpointing the location of buses, trains, flights and emergency vehicles. As we know that in urban areas the population and everything was increasing day to day, so it became difficult to locate places for new citizens. So, the main intension and purpose of these smart city web application is to help them and find their destination, information about institutions, offices and tourist places. The smart city is defined the ability to integrate multiple technological solutions in one secure fashion to manage the city's assets—the city's assets include, but not limited to, local departments information systems, city news, tourist places, Institutions, schools, libraries, transportations, hospitals, power plants, law enforcement, and other community services. The goal of building a smart city is to improve the quality of life by using technology to improve the efficiency of services. This smart city technology is helping the city officials to interact with the community and the city infrastructure. This technology can help to know what is happening in the city, how the city is evolving, and how to enable a better quality of life.

A smart city uses information and communication technologies (ICT) to enhance quality, performance and interactivity of urban services, to reduce costs and resource consumption and to improve contact between citizens and government. Sectors that have been developing smart city technology include government services, transport and traffic management, energy, health care,

water, innovative urban agriculture and waste management. Smart city applications are developed with the goal of improving the management of urban flows and allowing for real time responses to challenges.

Chapter 2

2.1 Scope of the project

The Smart City project is a web-based software application built to store all the essential details of a city. Cities and urban areas witness a massive wave of people coming from every corner in search of jobs, education, and even a better lifestyle. In the initial days after the move, people don't know the main facilities, attractions, and services offered in the city. The smart city project seeks to address that by creating an integrated platform to store essential and related information to guide the newcomers in a city.

Anyone, like students, businessmen, tourists, workers, job seekers, anyone can use the application for their guidance throughout the city anytime anywhere just by creating an account.

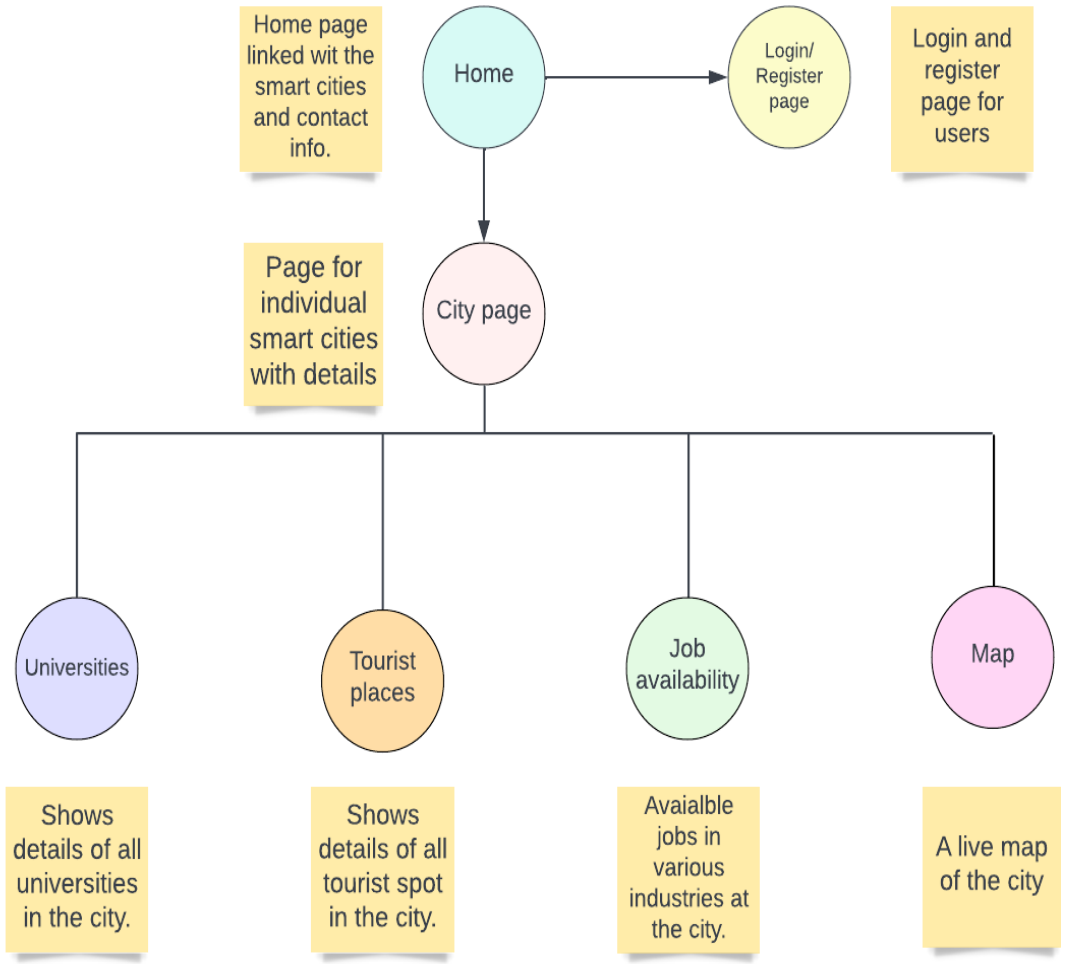
In this application, users need to sign up by entering input details and then can access all the required details of the city. It contains various modules like admin, tourism, business, and student wherein users can switch to the module as per the requirement.

2.2 User wise Functionalities

- Each city contains details about the city with a live map.
- Universities in the city.
- Tourist places, landmarks and accommodation.
- Career opportunities for job seekers in various industries.

Chapter 3

3.1 Design Diagrams



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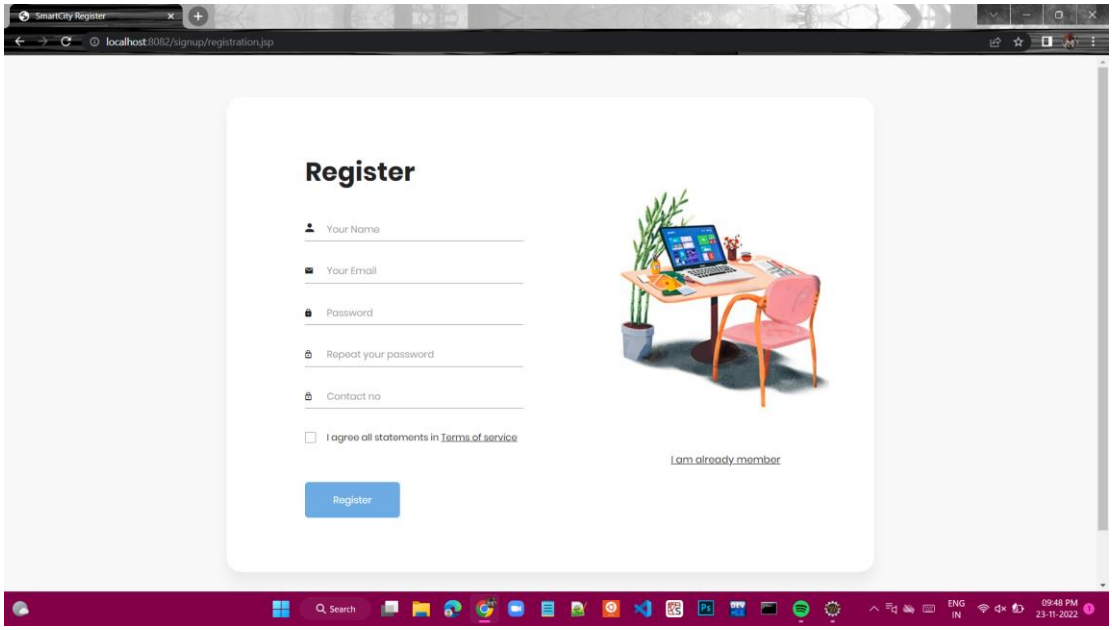
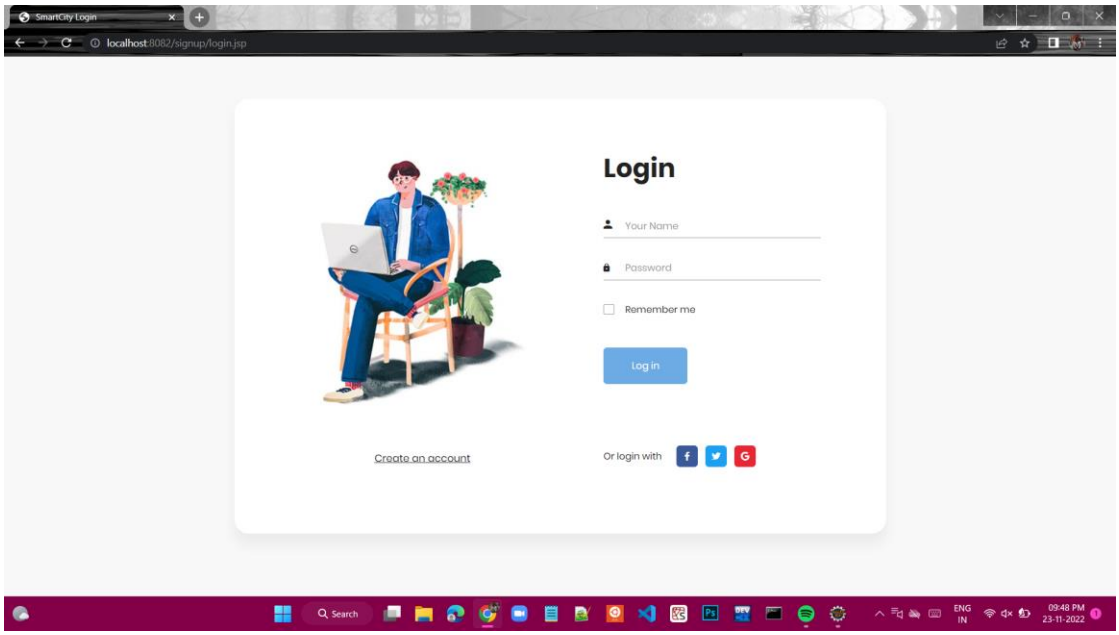
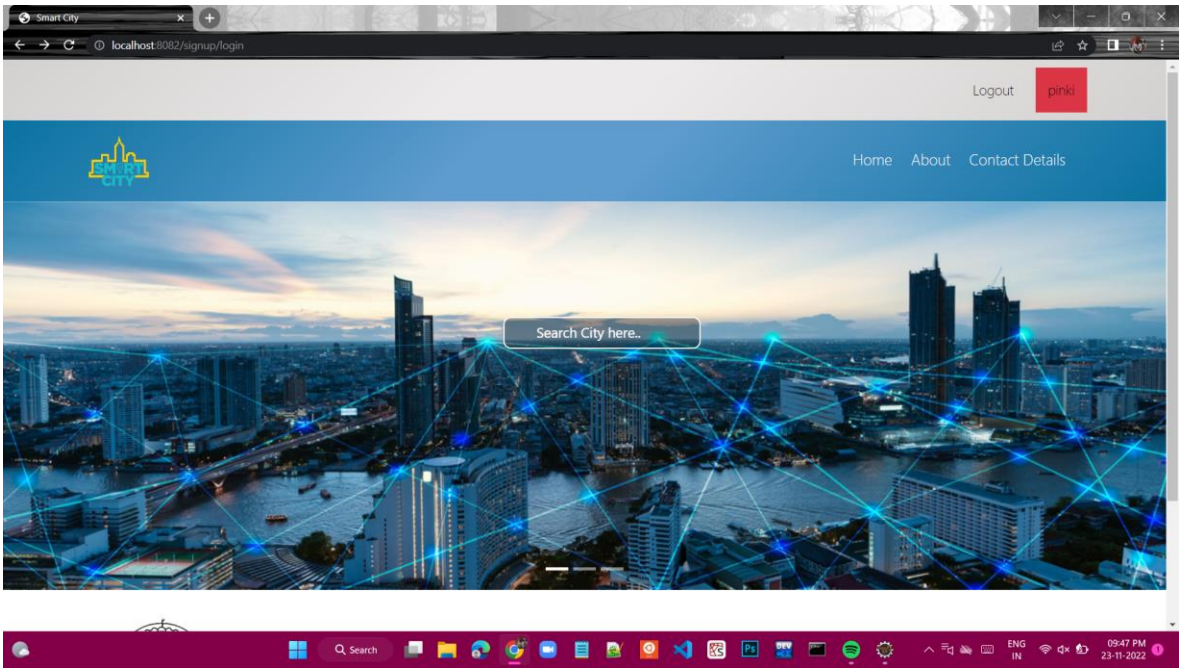




Home page-


Smart City
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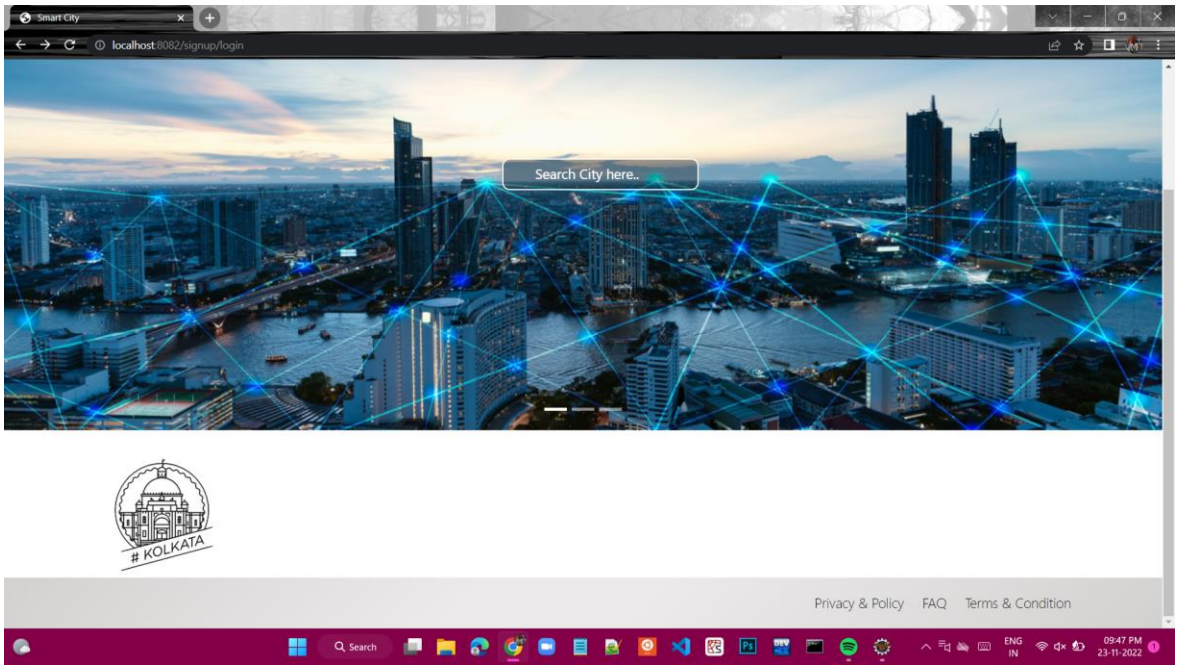
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KOLKATA
Privacy & Policy
FAQ
Terms & Condition
Search
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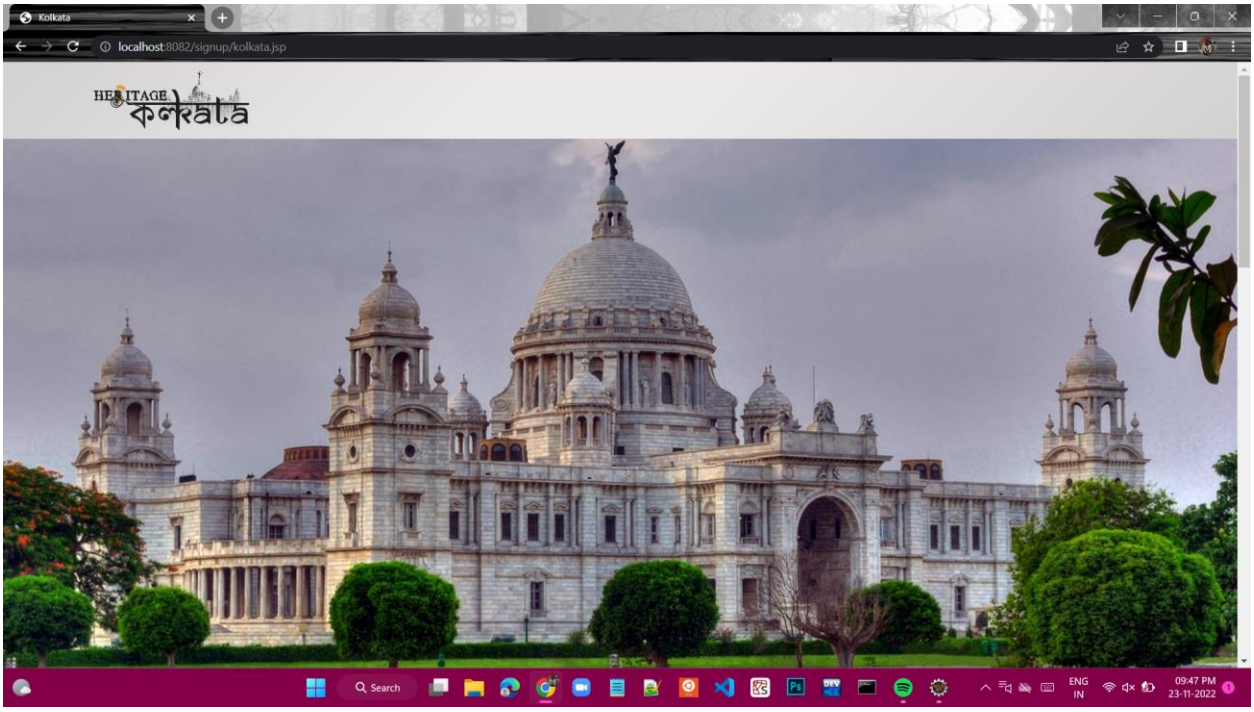
City page-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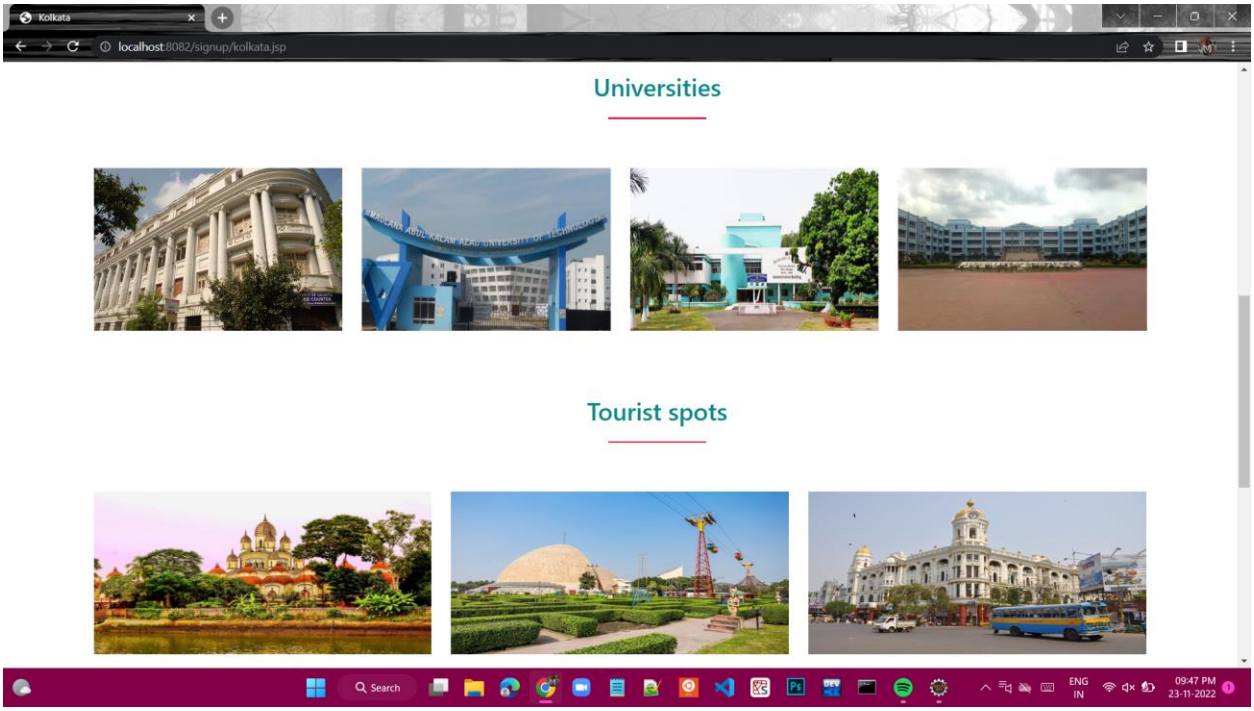
HERITAGE কলকাতা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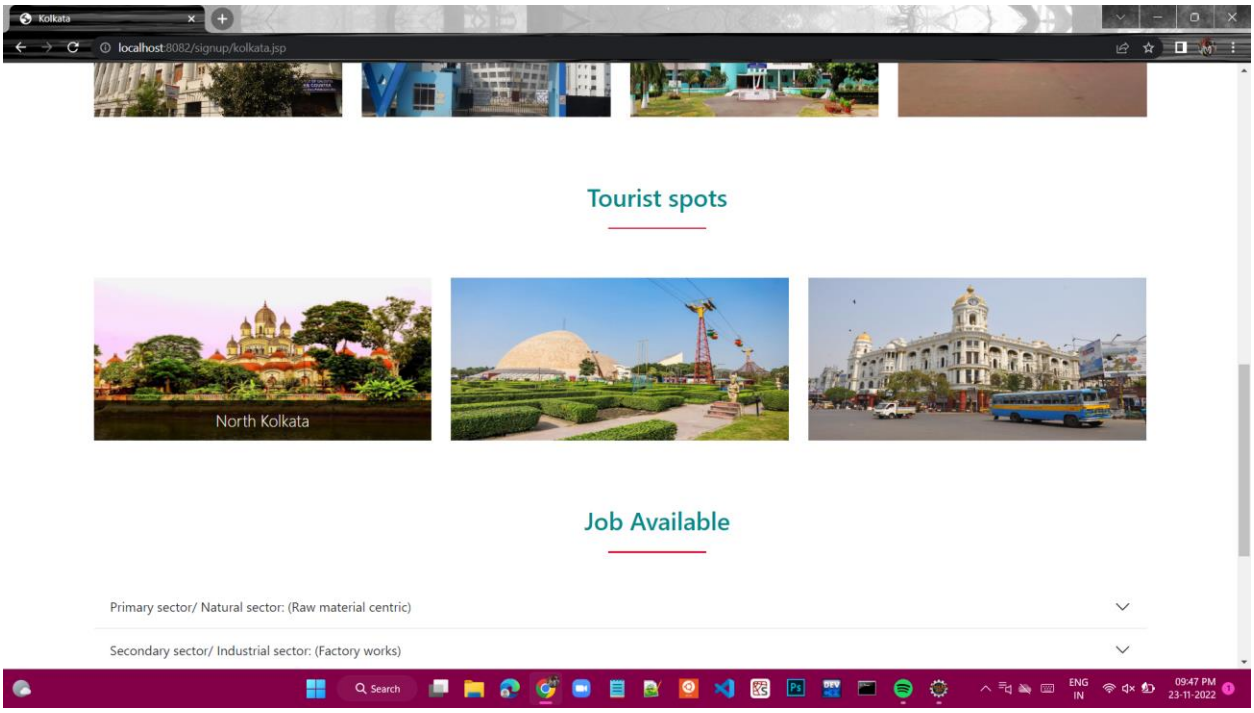
Universities
Tourist spots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Tourist spots
North Kolkata
Job Available
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Secondary sector/ Industrial sector: (Factory works)
Search
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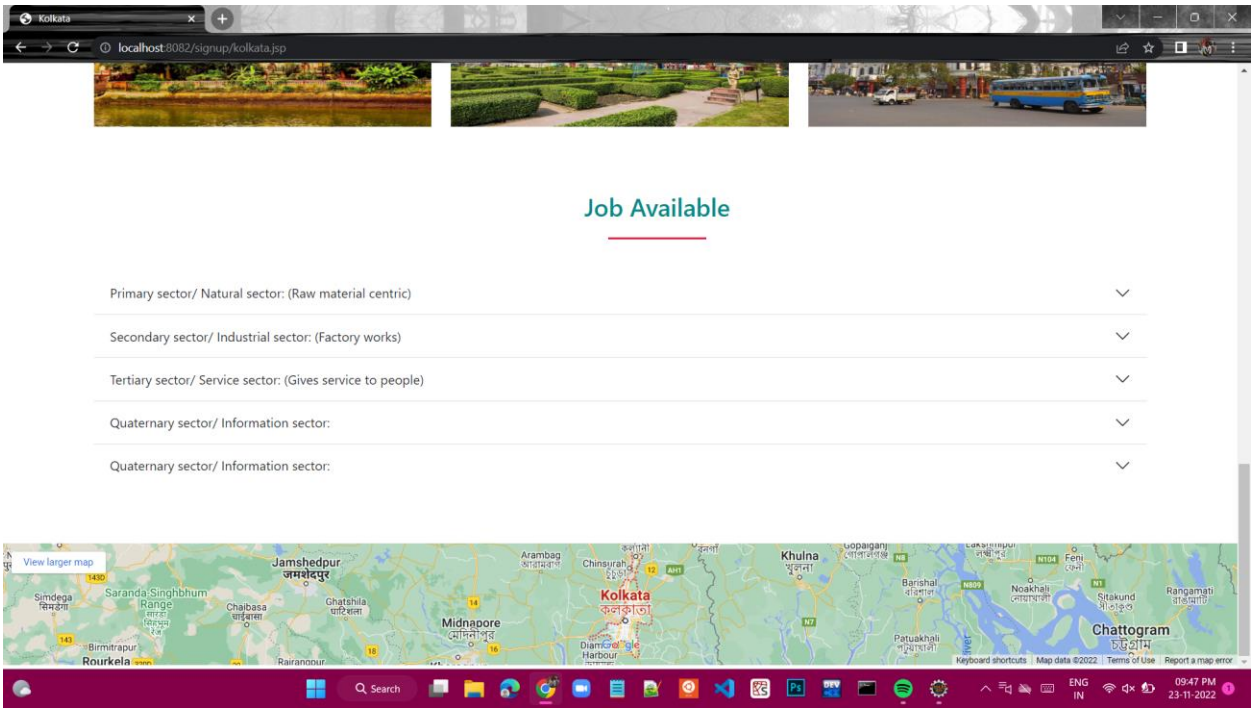
Kolkata
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Job Available
Primary sector/ Natural sector: (Raw material centric)
Secondary sector/ Industrial sector: (Factory works)
Tertiary sector/ Service sector: (Gives service to people)
Quaternary sector/ Information sector:
Quaternary sector/ Information sector:
View larger map
Jamshedpur
Kolkata
Midnapore
Khulna
Chattogram
Search
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23-11-2022

Chapter 4

4.1 Software requirement

- Platform used: VS CODE
- IDE used: Eclipse
- Designing tools used: Photoshop
- DBMS used: My SQL and JDBC

4.2 Hardware Requirement

- Processor: Quad core processor, Minimum 1 GHz or more.
- Graphics card: 2 GB
- Ethernet connection: (LAN) OR a wireless adapter (Wi-Fi).
- Hard Drive: 1 TB or above
- Memory (RAM): 4 GB and above.

Chapter 5

5.1 Result and Discussions

Our project (Smart city web application) consists of a log in register page, home page and pages where the information about the cities are provided.

Home page -

The home page contains

- Log out button
- Name of the user
- City icon

Login page contains -

- A place for providing email address
- A place for proving password

Register page contains -

- A pace for providing name
- A place for providing email address
- A place for providing password
- A place to confirm the given password
- And a place to provide contact info

City page -

A page for each city. Currently Kolkata only. Each city page contains

- A map of the city
- Universities under it
- Tourist places
- Job availability

Each division of the city has a separate page which contains the details of the universities of the city, different tourist spot details, different company and job availability.

Chapter 6

6.1 Conclusion

In conclusion, the main thing of the smart city is to focus on extensive things of governments, businesses, tourist places and institutions on the technological aspects of the smart cities. As this study has several limitations that can provide grounds work for future research. Here we are suggesting that the admin need to conduct interviews with citizens about the topic for better understanding for citizens. Once the topic of smart cities is more commonly discussed by citizens, researchers may wish to take a more direct approach to identify relevant perspectives. These smart-city web-application is very easy to understand and to access. The user needs to register once with the user's name, mobile number, email id and the user should give strong password for protecting the data secure from others. By using the user's email id and password the user can access the page anytime and anywhere. These smart city application gives citizens better and smart life. This technology is helping the people for accessing any information of the city like institutions, hotels, offices, tourist places and any addresses. So, it is easy and smart for accessing. As we know in past if we go any new places we will hire a guide, but now no need of any guide we can go anywhere of the world. For students who are going for higher studies it is helping more and more for location of their universities, for seeking jobs etc.

6.2 Future Work

For future work or our major project –

- we will be providing more cities
- we will be adding details about the transport facilities of the cities
- A search box will be added so that the users can search the required city
- Details of cities will be stored in the database to fetch the informations about the city