

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)



Final Year Internship Report

on

InfyRide - Online Cab Booking System

Submitted By:

Pragya Shakya

0901CS181067

Faculty Mentor:

Dr. R.K. Gupta

Assistant Professor

Computer Science Engineering

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE

GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)



InfyRide - Online Cab Booking System

A final year internship report submitted in partial fulfilment of the requirement for the degree

of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

Submitted by:

Pragya Shakya

0901CS181067

Internship Faculty Mentor:

Dr. R.K. Gupta

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Submitted to:

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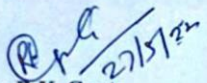
Internship Certificate Received from Infosys Limited.

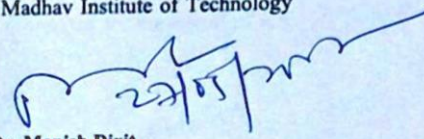


MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
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CERTIFICATE

This is certified that **Pragya Shakya (0901CS181067)** has submitted the Internship report titled "**InfyRide-Online Cab Booking System**" of the work he has done under the mentorship of **Dr. R.k. Gupta**, in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science, Gwalior.


Dr. R.K. Gupta
Faculty Mentor
Assistant Professor
Computer Science and Engineering


Dr. Manish Dixit
Professor and Head,
Computer Science and Engineering
Dr. Manish D.
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MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

DECLARATION

I hereby declare that the work being presented in this Internship report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in CSE at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Dr. R.K. Gupta**, Assistant Professor, Department of CSE.

I declare that I have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.



Pragya Shakya
0901CS181067
IV Year,
Computer Science and
Engineering

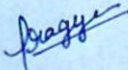
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ACKNOWLEDGEMENT

The full semester internship has proved to be pivotal to my career. I am thankful to my institute, **Madhav Institute of Technology and Science** to allow me to continue my disciplinary/interdisciplinary internship as a curriculum requirement, under the provisions of the Flexible Curriculum Scheme (based on the AICTE Model Curriculum 2018), approved by the Academic Council of the institute. I extend my gratitude to the Director of the institute, **Dr. R. K. Pandit** and Dean Academics, **Dr. Manjaree Pandit** for this.

I would sincerely like to thank my department, **Department of Computer Science and Engineering**, for allowing me to explore this internship. I humbly thank **Dr. Manish Dixit**, Professor and Head, Department of Computer Science and Engineering, for his continued support during the course of this engagement, which eased the process and formalities involved.

I am sincerely thankful to my faculty mentors. I am grateful to the guidance of **Dr. R.K. Gupta**, Assistant Professor, Department of Computer Science and Engineering, for his continued support and close mentoring throughout the internship. I am also very thankful to the faculty and staff of the department.


Pragya Shakya
0901CS181067
IV Year,
Computer Science and
Engineering

ABSTRACT

An Internship Report for Final Year Evaluation

About the Organisation:

Infosys is a global leader in next-generation digital services and consulting. Infosys enable clients in more than 50 countries to navigate their digital transformation. With over three decades of experience in managing the systems and workings of global enterprises, Infosys expertly steer our clients through their digital journey. Infosys do it by enabling the enterprise with an AI-powered core that helps prioritize the execution of change.

Internship:

In the duration of my Internship, I have developed a web application named Infy Ride Plus.

Infy Ride Plus: Infy Ride plus helps to connect with other like-minded professionals who are travelling on the same route and same time. InfyRide helps commuters to start sharing the ride instead of travelling alone. Innovative technology to discover, connect, route match, coordinate and cost-share in a seamless manner. Infy Ride Plus automates end to end process of carpooling & bike pooling and makes pooling safe, comfortable and free for the infy commuters.

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LIST OF ABBREVIATIONS

Abbreviation	Description
AEM	Adobe Experience Manager
SQL	Structured Query Language
DB	Database
HTML	Hyper Text Markup Language
CSS	Cascading Style Sheets
JS	JavaScript
IRP	Infy Ride Plus
VM	Virtual Machine

Chapter 1: Internship Overview

1.1 Introduction:

I am appointed as System engineer intern in Infosys Limited. I have worked as a full stack developer using technologies AEM and Java development to create flexible and responsive web applications. In the duration of Internship, I have developed following web application:

Infy Ride Plus: Infy Ride plus helps to connect with other like-minded professionals who are travelling on the same route and same time. Infy Ride helps commuters to start sharing the ride instead of travelling alone. Innovative technology to discover, connect, route match, coordinate and cost-share in a seamless manner. Infy Ride Plus automates end to end process of carpooling & bike pooling and makes pooling safe, comfortable and free for the infyosys employees.

1.2 Objective:

As the title suggests the objective of this project to to give the better riding facilities to the Infosys employees, reduce the travel cost and to make Infosys campus environment friendly by reducing the number of vehicles.

1.3 Scope:

Scope of the project is very vast. This project will enhance the riding facilities for the Infosys employees and let them know more about their colleagues who are living near them. Also, this project will provide the facility to get and offer ride according to their locations. We can give the option of community so the same kind of people can come in contact and have communication.

1.4 Winternship programme of Infosys:

I have done internship under the winternship cum training programme from Infosys . This internship includes the learning of courses like Data Structures and Algorithms using Java, Introduction to Java, Data Base Management System from Infosys Springboard, an online learning platform of Infosys. After the self-learning, we undergo a training of 8 weeks and then we made a project under the guidance of a project mentor. This internship programme gives me the lessons on Java, Adobe Experience Manager, HTML, CSS, JavaScript, MySQL.

Chapter 2 Problem Statement

Problem statement:

The inspiration came from severe parking crunch we faced at our offices. While at the

same a number of people would wait at the reception to get the company cab home. A

number of employees were also travelling to and fro the same route or destination, but

were hesitant to offer rides. It was then, that the idea struck us, to develop a fully automated way for employees to carpool.

Chapter 3 Languages Used

3.1 Software Implementation Language/Technology:

Front-end

1. **HTML:** Hypertext Mark-up Language (HTML) is the standard mark-up language for creating web pages and web applications. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.
2. **CSS:** Cascading Style Sheet (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and customer interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media.
3. **JavaScript:** JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. Over 97% of websites use JavaScript on the client side for web page behavior, often incorporating third-party libraries
4. **Adobe Experience Manager (AEM):** Adobe Experience Manager is abbreviated as AEM. It is an enterprise content management system that enhances the authoring, management, and delivery of content and digital media. It allows us to create the new digital experiences. It is a Java-based content management system. It is really very helpful to create the websites, in which we can create the components according to our need in Java. All its data is saved in CRXDE Lite (Content Repository Extreme Development Environment).

Back-end

1. Java: It is a platform- independent language which is very useful for the developers so that they can run the same source code on different platforms like Windows, Linux, etc. It is mainly used for the web and app development. It is a multithreaded language and provides automatic memory management. We used java as a backend development programming language for developing java servlet pages

2. Firebase: It is also used for web and app applications. I have used Firebase for OTP authentication.

Database

1. MySQL: MySQL is a Relational Database Management System (RDBMS)..It is an open source and free. It is based on ANSI SQL standards.It is ideal for both small and large applications. It is very fast, reliable, scalable and easy to use. It is used by Facebook , Twitter, YouTube, etc.It is also used by content management system like WordPress , AEM, etc.

Chapter 4 System Analysis

4.1 Information Flow Representation:

4.1.2 UML Use Case Diagram : A use case diagram is a dynamic or behavior diagram in UML. Use case diagrams model the functionality of a system using actors and use cases. Use cases are a set of actions, services, and functions that the system needs to perform. In this context, a "system" is something being developed or operated, such as a web site. The "actors" are people or entities operating under defined roles within the system. Use case diagrams are valuable for visualizing the functional requirements of a system that will translate into design choices and development priorities.

UML Use Case for Infy Ride Plus:

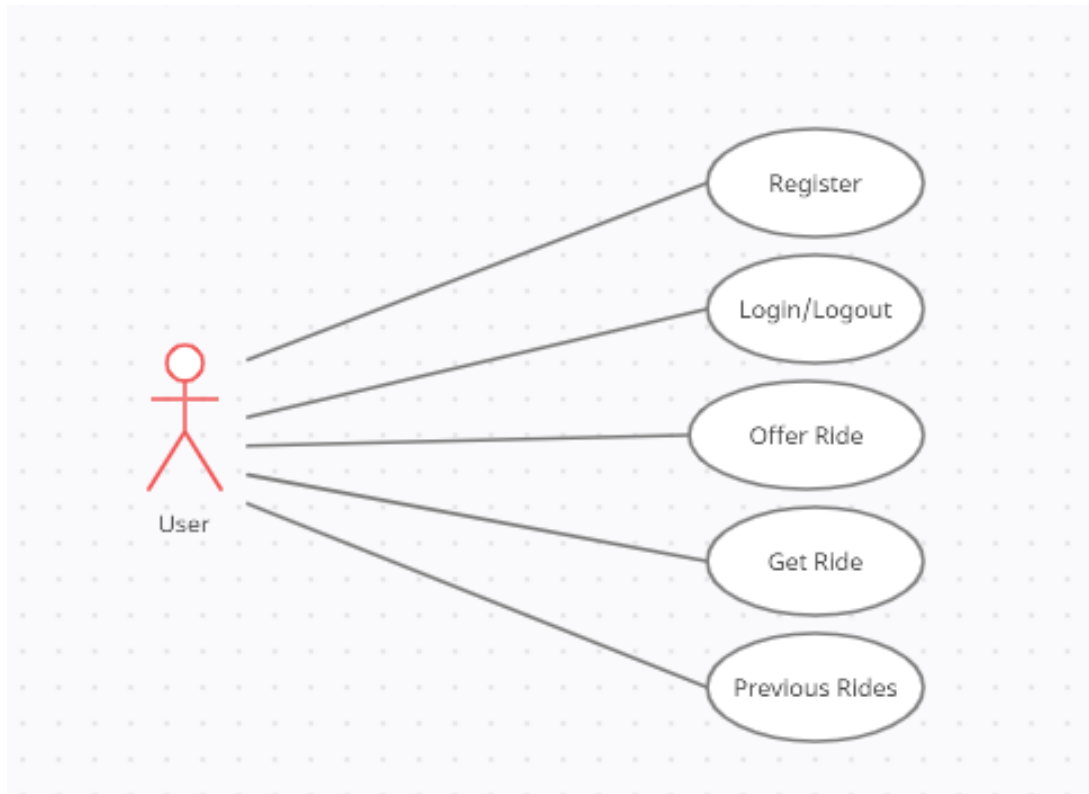


Figure4.1.1

4.1.2 Database Diagram: Database diagrams are used to represent the structure of the database using graphical interface , I have created following database diagram for the project Infy Ride Plus .

Database diagram for Infy Ride Plus

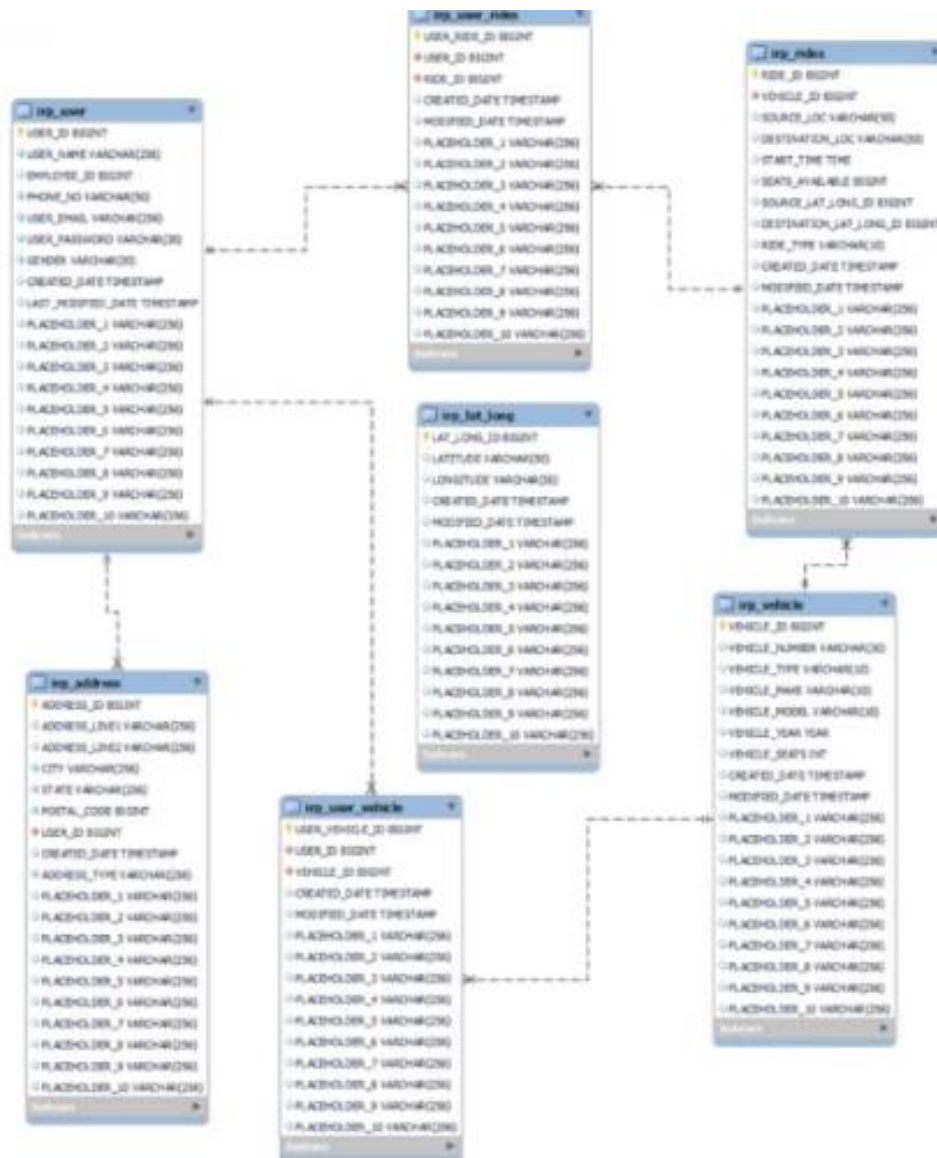
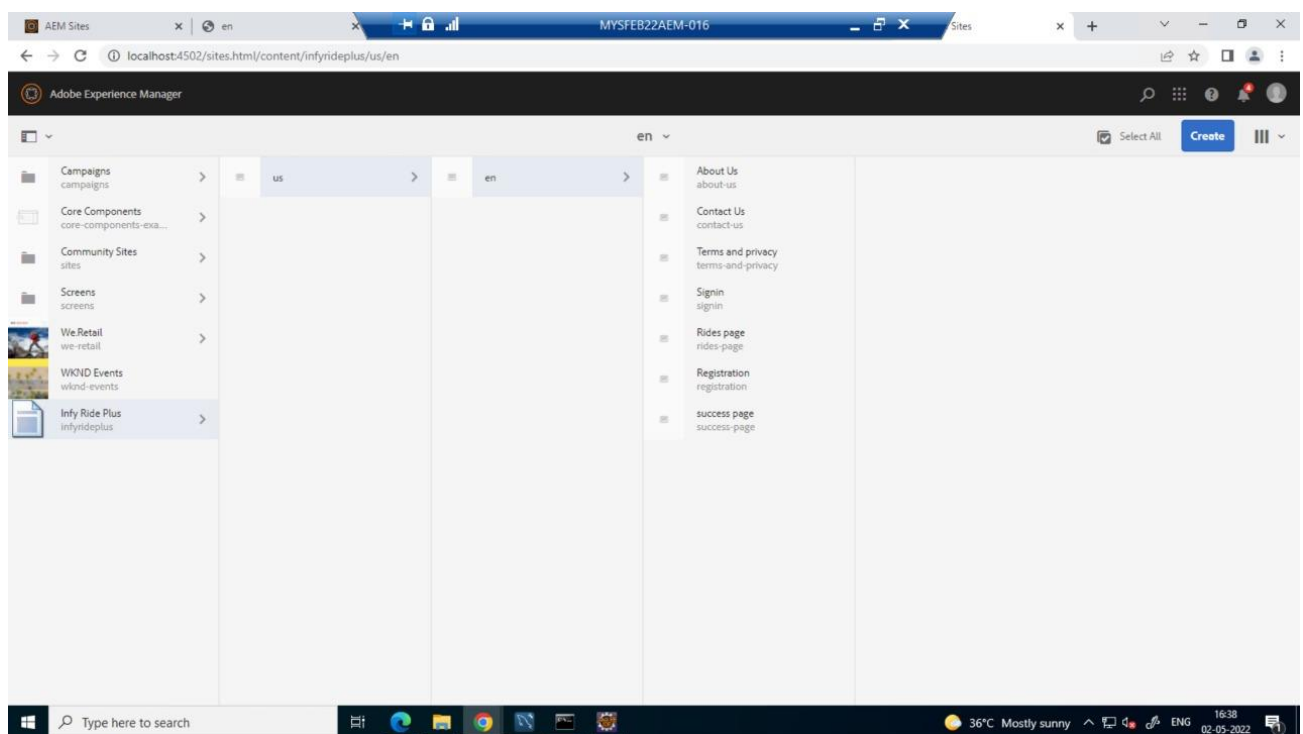


Figure 4.1.2

Chapter 5 System Design

5.1 Architectural Design: The software needs the architectural design to represent the design of software. IEEE defines architectural design as “the process of defining a collection of hardware and software components and their interfaces to establish the framework for the development of a computer system.” The software that is built for computer-based systems can exhibit one of these many architectural styles.

Hierarchy of the project:



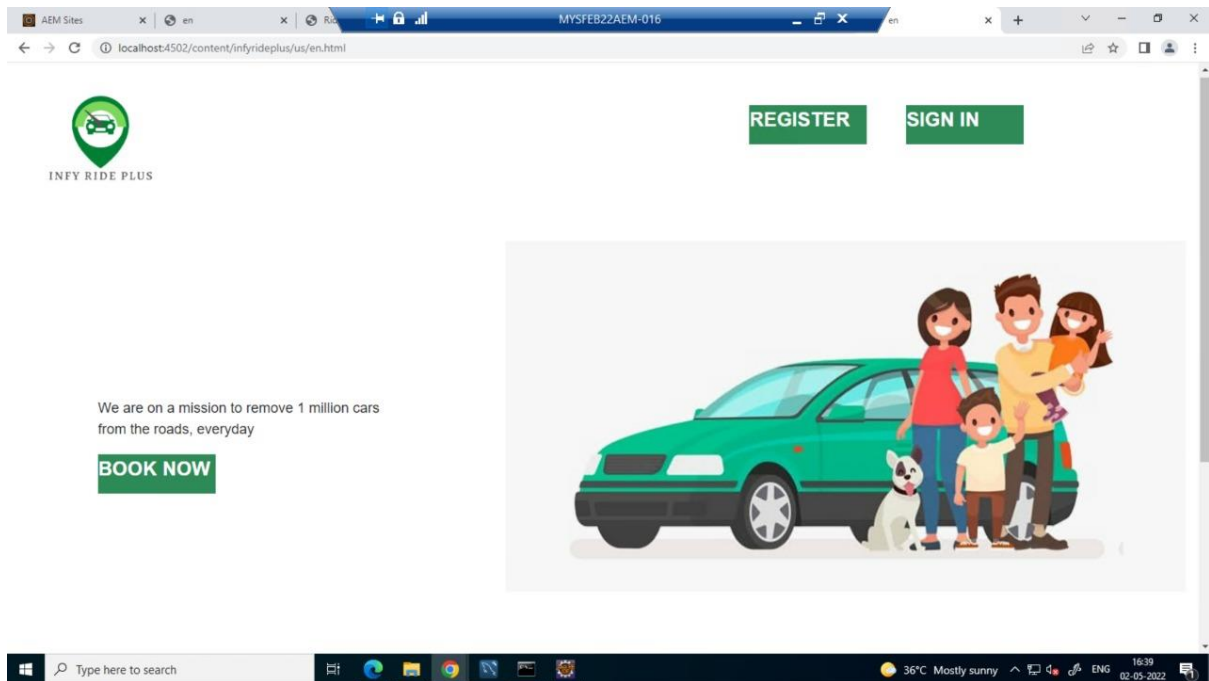
5.2 Modules used:

Main modules of project is:

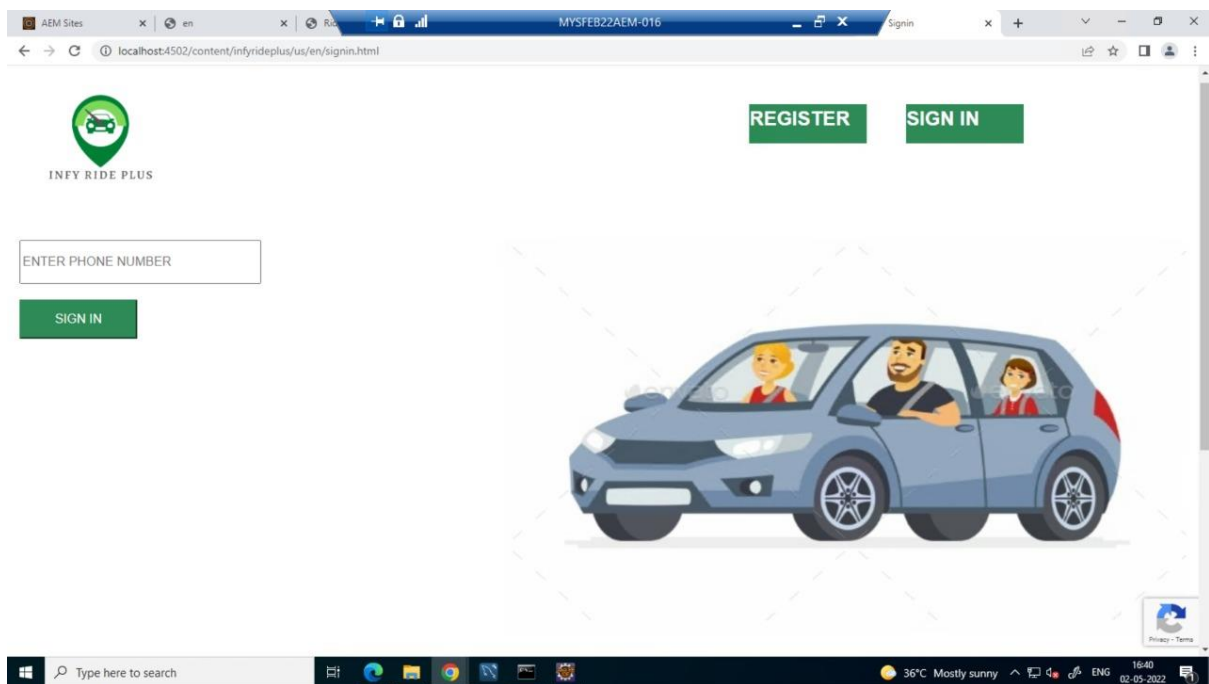
- **Register:** Using this module, user can create their account using their personal details on the web application by generating his/her credentials. It will save all the details of the user in the database.
- **Login:** From this, user can login to website using username and password at any time. It will redirect the user to home page after successful login.
- **Home:** Here, User have to choose a option either he/she can offer a ride or can get a ride.
- **Get Ride:** Using this module, user can book a ride from the list of available rides.
- **Offer Ride:** Using this module, user can offer a ride to a particular location by entering source and destination location.
- **Rides:** Using this, Users can view all his previous and upcoming rides.
- **Navigation:** After a successful booking user can navigate to source location using available Map component.

5.3 Interface Design:

Home page:



Sign in Page:



OTP Authentication Page:

INFY RIDE PLUS

REGISTER SIGN IN

+16505551234

OTP

LOGIN WITH OTP

36°C Mostly sunny 16:40 02-05-2022

Registration Page:

INFY RIDE PLUS

REGISTER SIGN IN

ENTER USERNAME

ENTER EMPLOYEE ID

ENTER EMAIL

ENTER PHONENUMBER

☐ MALE ☐ FEMALE ☐ OTHER

☐ DO YOU HAVE A VEHICLE?

ENTER VEHICLE MAKE

36°C Mostly sunny 16:41 02-05-2022

Registration

localhost:4502/content/infyrideplus/us/en/registration.html

ENTER USERNAME

ENTER EMPLOYEE ID

ENTER EMAIL

ENTER PHONENUMBER

☐ MALE ☐ FEMALE ☐ OTHER

☐ DO YOU HAVE A VEHICLE?


ENTER VEHICLE MAKE

ENTER VEHICLE MODEL

Select Vehicle Type

REGISTER

One or more fields are required



Windows taskbar: Type here to search, 36°C Mostly sunny, 16:41, 02-05-2022

Get Ride/Offer Ride Page:

Rides page

localhost:4502/content/infyrideplus/us/en/rides-page.html

INFY RIDE PLUS

REGISTER SIGN IN

Get Ride


Enter Pickup location

Enter Destination

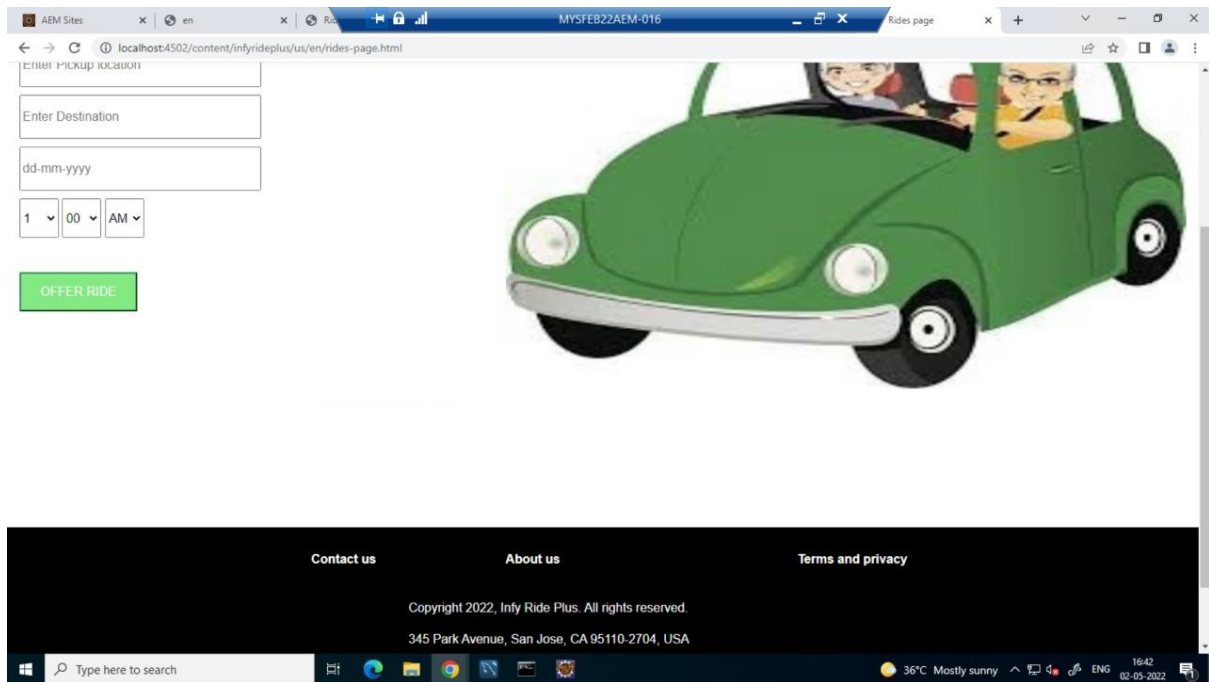
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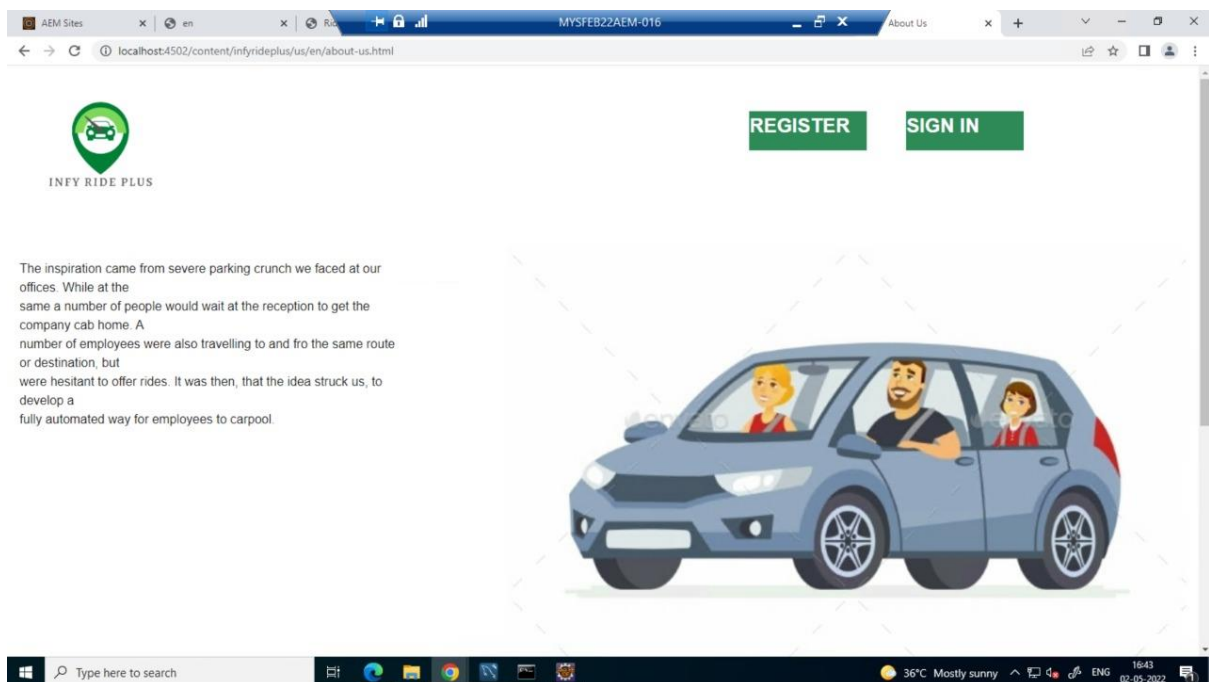
OFFER RIDE



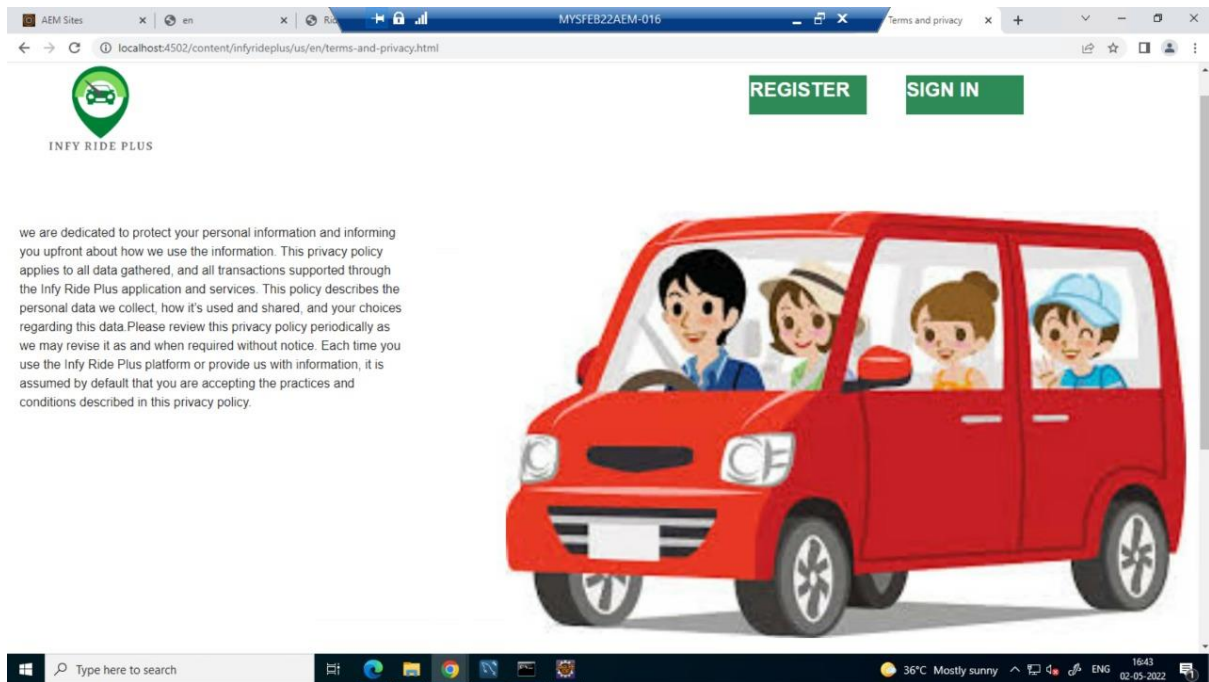
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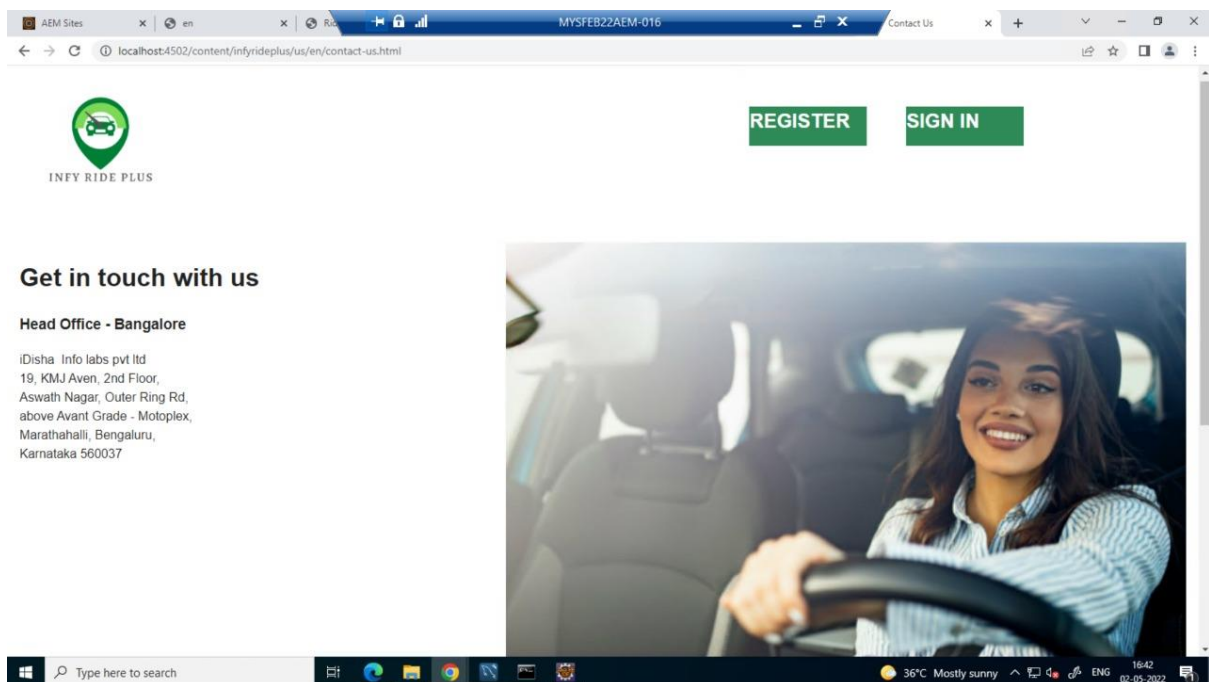
About Us Page:



Terms and Privacy Page:



Contact Us Page:



Chapter 6 Implementation and Testing

6.1 Implementation:

1) Requirements

Recommended System Requirements:

- A good CPU and a GPU with at least 8GB memory.
- At least 8GB of RAM.
- Active internet connection so that the system can access the online resources through links.

Recommended Software Requirements:

- Eclipse IDE
- AEM 6.5
- Apache maven 3.3.9.

2) **Front - end:** The frontend of the project has been developed in AEM itself with the help of Java. The frontend development includes the HTML and CSS which helps in web designing and styling of the web pages and components used on the website. The coding of HTML and CSS is done in Eclipse IDE.

3) **Back - end:** The backend is coded in Java in Eclipse only. The database is designed in MySQL. In the backend, we have created four classes for each functionality- Model class, Service class, Servlet class and DAO class. DAO class is used to connect the UI to the database.

6.2 Testing:

Testing methods used:

1. Unit Testing:

In this testing, we checked the individual modules of the project will be working properly or not. i.e. we tested each and every unit of the application separately in developer's environment. In our project, we have used unit testing. With unit testing, we can test for each and every function individually.

2. Integration Testing:

In integration testing, system consists different modules, where in each module can arise problems during the testing. Integration testing should be developed from the system specification. Firstly, a minimum configuration must be integrated and then tested.

Chapter 7 Conclusion

Infyride Plus is the name of the project which I have created with 5 more co-trainees of this interships. This website is developed for the employees of Infosys Limited. Employees can use this application to travel from one place to another place. During their journey, they can offer the ride to other infoscions also. When they are booking a ride, they get two options- find ride and offer ride.

During this project, I have learnt teamwork, punctuality and how to do all the work with a clear understanding and worked on some technologies like AEM and Java.

7.3 References

- Infosys global application **LEX** for Education and Training purposes

URL: <https://lex.infosysapps.com>

- Infosys global application **SPRING BOARD** for Education and Training purposes

URL: <https://infyspringboard.onwingspan.com/>

Appendices:

Note: As per Infosys Limited, Mysore's privacy policies, Industrial mentor cannot give signature on FPR reports.

FPR-1

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	15-feb-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work			yes		
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work					yes
Behaviour/Discipline/Team work					yes
Sincerity/Hard work				yes	
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	28-feb-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work					yes
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	15-Mar-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work				yes	
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	30-Mar-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work					yes
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	15-Apr-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work				yes	
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	30-Apr-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work					yes
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Pragya Shakya		Department	CSE	
Industry/Organization	Infosys Limited		Date/Duration	15-May-2022	
Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work				yes	
Learning capacity/Knowledge up gradation				yes	
Performance/Quality of work				yes	
Behaviour/Discipline/Team work					yes
Sincerity/Hard work					yes
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Riya Roy				
Signature of Industry Mentor					

Receiving Date		Name of Faculty Mentor	R.K. Gupta	Sign	
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