MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

Final Year Internship Report

On

Web development Using React JS

Submitted By:

Sachin Thakur

0901CS181087

Faculty Mentor:

Prof. Arun Kumar

Assistant Professor

Computer Science and 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)

Web development Using React JS

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:

Sachin Thakur

0901CS181087

Internship Faculty Mentor:

Prof. Arun Kumar

Assistant Professor

Computer Science and Engineering

Submitted to:

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE
GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

Internship Certificate Received

from

Indvibe Infotech Pvt Ltd, Indore

IndVibe Infotech Pvt Ltd

Iso 9001:2015 certified company

Internship Letter

IndVibe InfoTech Pvt Ltd– January-July 2022 Academic Session

Dear Sachin Thakur   Date 24-05-2022

Congratulations!

We are glad to welcome you to the growing student community at IndVibe InfoTech Pvt Ltd. –A Software Development Company that has trained over 35+ Thousand students in the IT Sector and in many job oriented fields.

Based on your performance during IndVibe InfoTech Pvt Ltd Process -you have been successfully Completed the internship in React Js from 24-01-2022 to 24-05-2022.

IndVibe InfoTech Pvt Ltd, with its world class infrastructure and expert Development team, would offer you an unparalleled learning environment that would enhance your skills and knowledge for a great career start.

We expect that, you as a student/Trainee, during your tenure at IndVibe InfoTech Pvt Ltd, would abide by the rules, norms and obligations of IndVibe InfoTech Pvt Ltd and contribute to build a positive and lasting impression about yourself.

Wishing you a great future in the IT Industry and looking forward to seeing you at IndVibe InfoTech Pvt Ltd.

Warm Regards

Center Head
IndVibe InfoTech Pvt Ltd

302 B, 3rd Floor Rajat Complex,18 Kibey Compound Near Madhumilan Square, Indore
indvibeinfotech@gmail.com
Mob. : 9098884202, 9926651477, 9993988368

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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

CERTIFICATE

This is certified that **Sachin Thakur (0901CS181087)** has submitted the Internship report titled **"Web development with ReactJs"** of the work she has done under the mentorship of **Asst. prof. Arun Kumar**, 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.
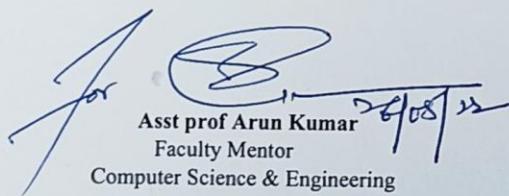
Asst prof Arun Kumar
Faculty Mentor
Computer Science & Engineering

Dr. Manish Dixit
Professor & Head
Computer Science & Engineering
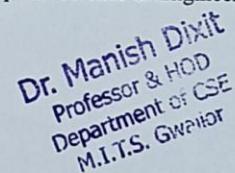
Dr. Manish Dixit
Professor & HOD
Department of CSE
M.I.T.S. Gwalior

4

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 **Asst. Prof Arun Kumar**, 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.
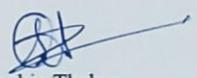
Sachin Thakur
0901CS181087
IV Year
Computer Science & Engineering

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

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. Arun Kumar** 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 **Asst.Prof Arun Kumar**, 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.
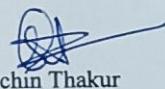
Sachin Thakur
0901CS181087
IV Year
Computer Science & Engineering

ABSTRACT

This project report describes our work for the Web development in React JS . As we see need of single page application while searching over the internet. This single page application will provide better user experience and along with this it provide security.

This application uses React JS component oriented UI creation paradigm. All components are written in JSX and ES6 style and are combined to get a single build for production purpose using Webpack.

For UI creation HTML5 and CSS3 are used. Grid, the new feature of CSS3 is used for layout creation purpose.

This is a responsive web application for viewing in both Mobile and Desktop.

About the Organization:

This Internship is a Training on web development in React JS By **Indvibe infotech Private Limited, Indore** using React and Bootstrap as Frameworks.

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

Abbreviation	Description
API	Application Programming Interface
CMS	Content Management System
CSS	Cascading Style Sheets
DOM	Document Object Model
ES6	ECMA-262 6th edition
HTML	Hyper Text Markup Language
JS	JavaScript
JSON	JavaScript Object Notation
UI	User interface
UX	User experience
XML	Extensible Markup Language

Chapter 1

Introduction

1.1 Objective

As the title suggest this is a training on web development to learn to build single page application with ease.

The objective of reactjs is to provide better user experience and ease while surfing over the internet.

1.2 Scope

Scope of the project is very vast. Already many companies are working on this technology and adopting it ,like Facebook , Netflix etc.

1.3 Problems in existing system

The existing system is well and good also, but as we know that we have to wait while going in another functionality in the same web page .

Chapter 2

Importance of React JS

There are many framework for building a website such angular .But angular is Java Script framework based on typescript while React is JavaScript framework based on JSX.

React JS is basically a JavaScript library built and maintained by Facebook. According to the creator of React JS, React is an efficient, declarative, and flexible open-source JavaScript library for building simple, fast, and scalable frontends of web applications.

Ever since its launch, it has taken the front-end development space by storm.

React JS is based on Single page application which provide Quick Loading time and Seamless user experience.

Chapter 3

Technology Learned

3.1 HTML

Hyper Text Markup Language, the standard language for describing the structure of web pages.Html is used for body of websites. HTML elements are the building blocks of web pages and are represented by tags. These tags label pieces of content.
It has various properties and attributes such form ,for and many tags are also available to provide a require body for any site.

3.2 CSS

Cascading Style Sheets, is a stylesheet language used to describe the presentation of a document written in HTML or XML.
It has various properties include from basic to advance UI. CSS describes how elements should be displayed on the web UI.
It includes position ,color ,transition ,hover and many more such properties.

3.3 JavaScript

JavaScript is an interpreted programming language with object-oriented capabilities. Along with HTML and CSS, JavaScript is one of the three core technologies in web development with HTML describing the content.

JavaScript is able to run on all modern browsers without any additional plugins or compilers and is used in the majority of modern websites.

JavaScript provide dynamic and interactive web content for applications and browsers.

 In conclusion, "JavaScript is a full-featured programming language, as complex as any and more complex than some".

3.4   React JS

React JS , also known as React or React.js, is an open-source JavaScript library for building user interfaces. It is used for handling view layer in single page applications and mobile applications development. It is maintained by Facebook, Instagram and a community of developers and corporations. React strives to provide speed, simplicity and scalability.

- It is basically used for Single page application to provide Quick Loading Time and Seamless User Experience.

React.js properties includes the following

- React.js is declarative

- React.js is simple

- React.js is component based

- React.js is fast

- React.js is easy to learn

Important Funtionality in ReactJs are:

- Basic JSX
- Components and Props
- State and Life Cycle
- Handling Events
- Hooks

Chapter 4

System Requirement

4.1 React JS

Now, the main question arises in front of us is why one should use React. There are so many open-source platforms for making the front-end web application development easier, like Angular. Let us take a quick look on the benefits of React over other competitive technologies or frameworks. With the front-end world-changing on a daily basis, it's hard to devote time to learning a new framework – especially when that framework could ultimately become a dead end.

4.1.1   Simplicity

React JS is just simpler to grasp right away. The component-based approach, well-defined lifecycle. React uses a special syntax called JSX which allows you to mix HTML with JavaScript. This is not a requirement; Developer can still write in plain JavaScript but JSX is much easier to use.

4.1.2 Easy to learn

Anyone with a basic previous knowledge in programming can easily understand React while Angular and Ember are referred to as 'Domain-specific Language', implying that it is difficult to learn them. To react, you just need basic knowledge of CSS and HTML.

4.1.3 Performance

React does not offer any concept of a built-in container for dependency. You can use Require JS, Ecma Script 6 modules which we can use via Babel, React JS-di to inject dependencies automatically.

Chapter 5

IMPLEMENTATION

5.1 Description

A daily conservation chat application using React JS, it is a JavaScript library. In this chat application all components are written in JSX.

Features :

- It is simple chat application
- Easy Login and Logout feature are added
- Error will be shown if the credentials are not correct
- Conversation of a specific rooms will be shown on clicking the corresponding room
-

5.2 Interface Design

There are some Screenshot of pages based on React Js
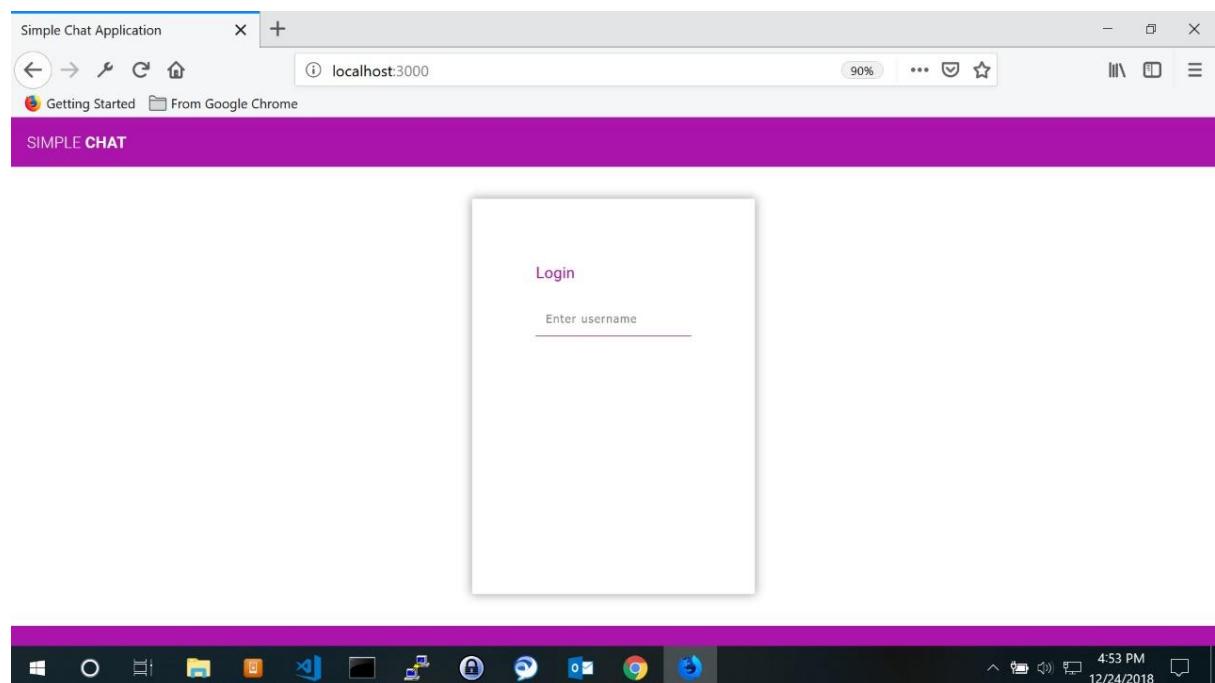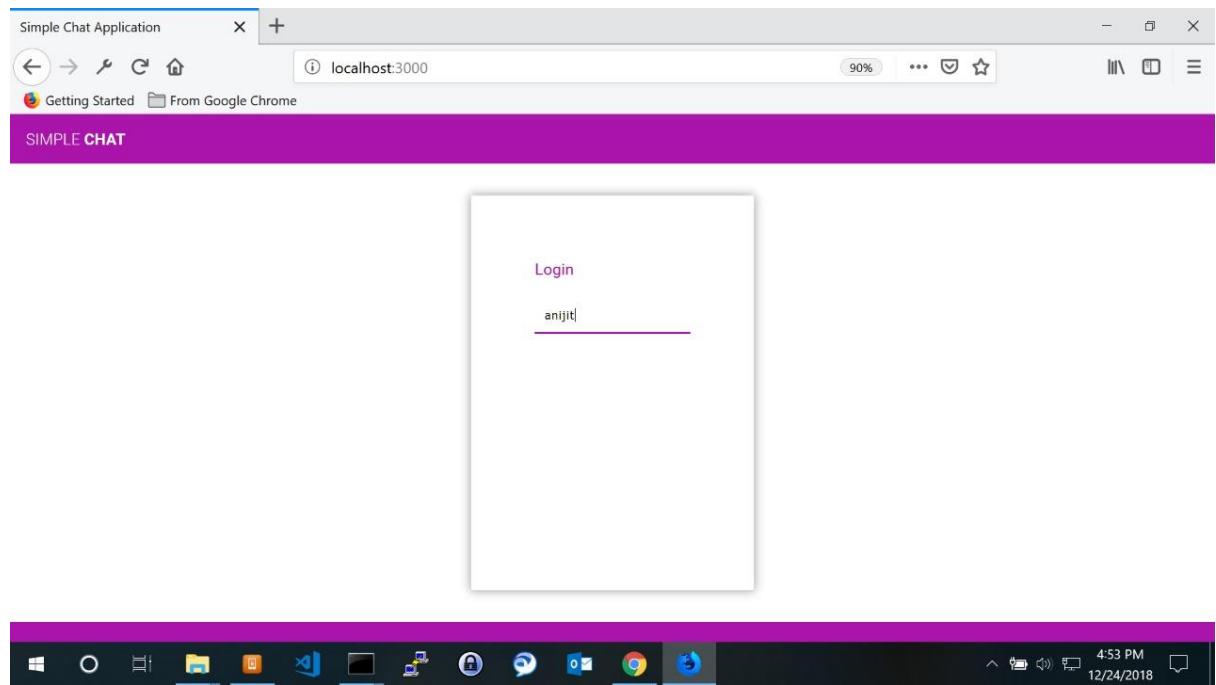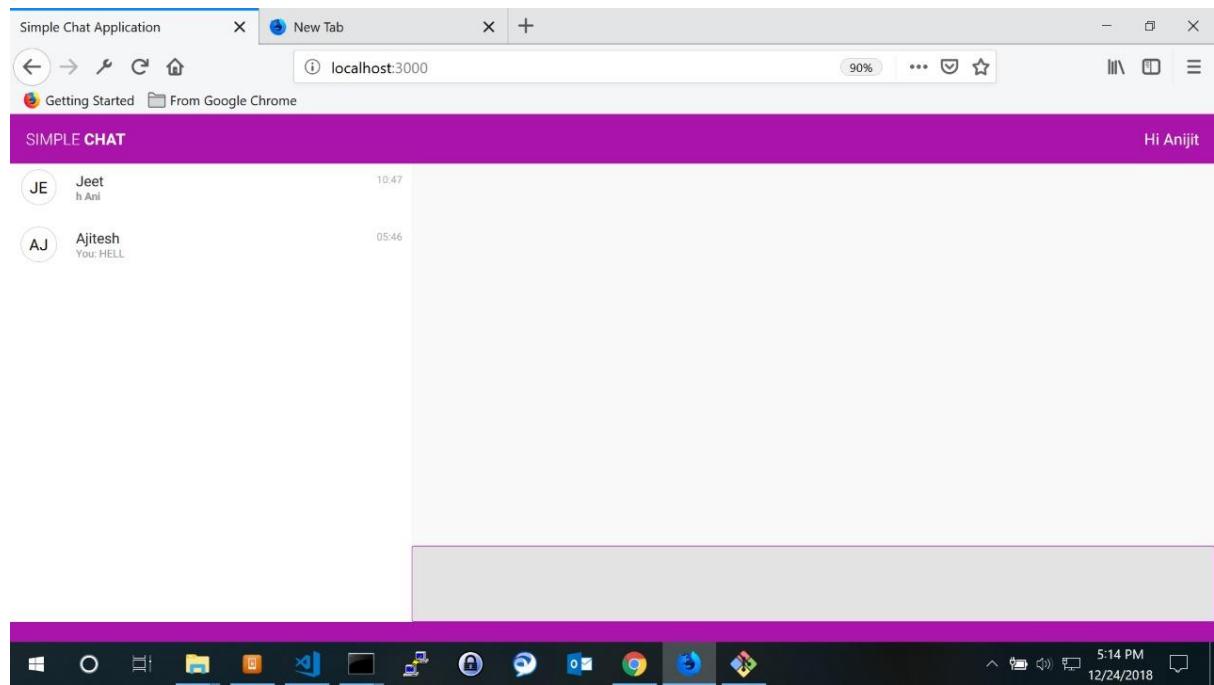
Friday

juuuu
Friday

hi new message
Friday

a message o test
Friday

another message to test
Friday

a diff mssage
Friday

another ms
Friday

different position test
Friday

helll
Friday

hi his is anijit
Friday

hell
05:46

HELL
05:46
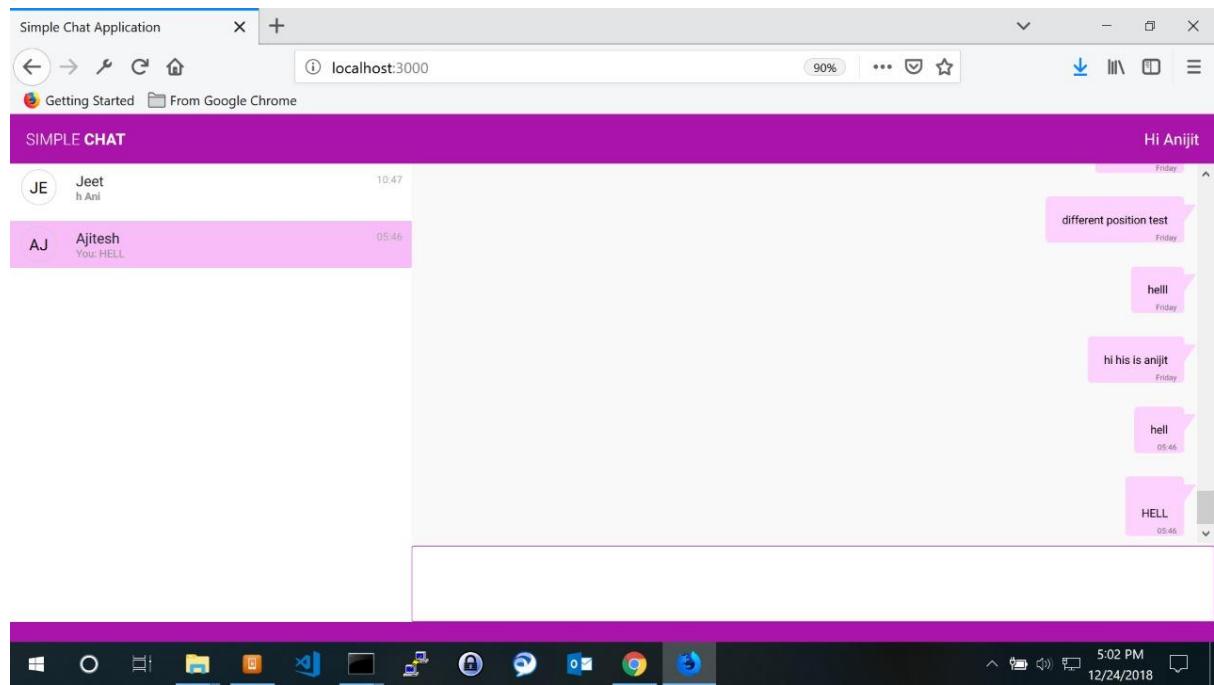
Chapter 6

Conclusion

6.1   Conclusion

React development has emerged as the future of web creation with its extra versatility and ease. We should learn React.React saves you time and money on development because it's component-based. We can break down an interface into reusable components that allow you to build dynamic user interfaces

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Thakur	Department	CS	
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22	

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work				✓	
Behaviour/Discipline/Team work					✓
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic	Easily understanding the concepts . ✓				
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	11/02/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Thakur	Department	CS		
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22		

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work				✓	
Behaviour/Discipline/Team work					✓
Sincerity/Hard work				✓	
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	03/03/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Tahkur	Department	CS
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	17/03/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Tahkur	Department	CS		
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22		
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	30/03/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Tahkur	Department	CS
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work					✓
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	13/04/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Tahkur	Department	CS		
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22		

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	29/04/22	Name of Faculty Mentor	Mr. Arun Kumar	Sign	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Thakur	Department	CS		
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22		
Criterion	**Poor**	**Average**	**Good**	**Very Good**	**Excellent**
Punctuality/Timely completion of assigned work				✓	
Learning capacity/Knowledge up gradation					✓
Performance/Quality of work					✓
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic					
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY ✓GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	03/05/22	**Name of Faculty Mentor**	Mr. Arun Kumar	**Sign**	

FORTNIGHTLY PROGRESS REPORT (FPR) FROM INDUSTRY MENTOR

Name of student	Sachin Thakur	Department	CS		
Industry/Organization	Indvibe Infotech Pvt. Ltd.	Date/Duration	24/01/22 -24/05/22		

Criterion	Poor	Average	Good	Very Good	Excellent
Punctuality/Timely completion of assigned work					✓
Learning capacity/Knowledge up gradation				✓	
Performance/Quality of work					✓
Behaviour/Discipline/Team work				✓	
Sincerity/Hard work					✓
Comment on nature of work done/Area/Topic				✓	
OVERALL GRADE (Any one)	**POOR/AVERAGE/GOOD/VERY GOOD/EXCELLENT**				
Name of Industry Mentor	Mr. Vishal Verma				
Signature of Industry Mentor					

Receiving Date	15/05/22	**Name of Faculty Mentor**	Mr. Arun Kumar	**Sign**	