SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA, INDORE

INTERNSHIP REPORT 2021-22

A report submitted in partial fulfillment of the requirements for the Award of Degree of

BACHELOR OF TECHNOLOGY

in

Computer Science Engineering **by**
Mr. Kartik Moyade

18100BTBDAI02890
Under the Supervision of

Industry Mentor	**University Mentor**
Mr. Nikhil Rana	**Dr. Gaurav Makwana**
Subject Matter Expert – Artificial Intelligence	**Assistant Professor**
Allsoft Solutions and	**Computer Science &**
Services Pvt. Ltd. (Mohali)	**Engineering**
Punjab	**SVIIT**

(Duration: 15ᵗʰ January 2022 to 30ᵗʰ April 2022)

Department of Computer Science Engineering
Shri Vaishnav Institute of Information Technology
Indore-Ujjain Road, Indore (MP)-India- 453111

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA,

SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

2021-22
DECLARATION

I hereby declare that work, which is being presented in the Internship Report as the partial fulfillment for the award of degree of **Bachelor of Technology** in **Computer Science Engineering** in the **Department of Computer Science Engineering** at **Shri Vaishnav Institute of Information Technology** of Shri Vaishnav Vidyapeeth Vishwavidyalaya Indore, is an authentic record of my work carried out under the Mentorship of **Dr. Gaurav Makwana, Assistant Professor Department of Computer Science Engineering**. The matter embodied in this internship report has not been submitted for the award of any other degree.

Enrollment Number: 18100BTBDAI02890   Student Signature

Date: 04/05/2022

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA,

SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY

2021-22

INTERNSHIP APPROVAL SHEET

This is to certify that **Mr. Kartik Moyade**enrollment number **18100BTBDAI02890**has successfully completed his industrial internship starting from **15th January to 30th April 2022** and has submitted the final report. His work has been found satisfactory and it is recommended to accept it as a partial fulfillment for the award of degree of **Bachelor of Technology, Computer Science Engineering** of the **Department of Computer Science Engineering** at **Shri Vaishnav Institute of Information Technology** of **Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore.**

Internal Examiner   **External Examiner**

Date: Date:
                                                                                 .

CERTIFICATE OF COMPLETION OF INTERNSHIP

FIG-1 Internship Completion Certificate

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA
SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

CERTIFICATE

This is to certify that **Mr. Kartik Moyade***(18100BTBDAI02890)* has successfully completed his industrial internship, starting from 15th January to 30th April 2022 and has submitted the final report. He has successfully completed this Internship under the Mentorship of **Dr. Gaurav Makwana, Assistant Professor Department of Computer Science Engineering** as a partial fulfillment of the degree of **Bachelor of Technology** in **Computer Science Engineering** of the **Department of Computer Science Engineering** at **Shri Vaishnav Institute of Information Technology of Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore** during the semester **Jan – June 2022.**

Internal Mentor: Dr. Gaurav Makwana

HOD/Director: Dr. Anand Rajawat

SHRI VAISHNAV VIDYAPEETH VISHWAVIDYALAYA
SHRI VAISHNAV INSTITUTE OF INFORMATION TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

Acknowledgement

First, I would like to thank **Dr. Upinder Dhar**, Hon'ble Vice Chancellor of the University for giving me an opportunity to do the internship with the external organization.

Secondly, I would like to extend my sincere gratitude towards the Director **Mr. Rohit Nanda of Allsoft Solutions and Services Private Limited** for giving me an opportunity at their esteemed organization.

I also would like to thank all the people that worked along with me at **Allsoft solutions and services Pvt. Ltd.** With their patience and openness, they created an enjoyable working environment. It is indeed with a great sense of pleasure and immense sense of gratitude, that I acknowledge the help of these individuals

I am highly indebted to **Director and HoD Dr. Anand Rajawat** for the facilities and continuous support provided by them to accomplish this internship.

I would also like to thank my faculty mentors **Dr. Gaurav Makwana & Mr. Nikhil Rana** for their constructive criticism throughout my internship. I would like to thank them for their support and advice to complete internship in above said organization. I am extremely great full to my department's staff members and friends who helped me in successful completion of this internship.

Kartik Moyade

18100BTBDAI02890

CSE-BDAI-IBM

1. Executive Summary

eLearning, also referred to as Web-based training, is available anywhere, anytime. It is selfpaced interactive instruction, presented over the Internet to browser-equipped learners. eLearning courses span the spectrum from desktop applications to technical certification meeting the needs of today's life-long learners. The eLearning solution is empowering, engaging, effective and economical. It is the answer to today's training challenges. eLearning is easy and engaging. It is available to everyone at any time - all you need is a standard browser like Internet Explorer or Netscape Navigator. You do not have to install programmes, there are no CDs, it is all done over the Internet and the courses are interactive. You learn by doing, not by just watching a computer screen. Simulations and questions about key concepts and facts will keep you engaged in the course.

Purpose of E-learning Management System is to automate the existing manual system by the help of computerized equipments and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation of the same. The required software and hardware are easily available and easy to work with. E-learning Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping.

Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

Due to the explosive growth of the Internet and increasing demand for multimedia information on the Web, streaming video over the Internet has received tremendous attention from academia and industry. Transmission of real-time video typically has bandwidth, delay, and loss requirements. However, the current best-effort Internet does not offer any quality of service guarantees to streaming video. Furthermore, for video multicast, it is difficult to achieve both efficiency and flexibility. Thus, Internet streaming video poses many challenges. In this article we cover six key areas of streaming video. Specifically, we cover video compression, application-layer control, continuous media distribution services, streaming servers, media synchronization mechanisms, and protocols for streaming media. For each area, we address the particular issues and review major approaches and mechanisms. We also discuss the tradeoffs of the approaches and point out future research directions.

2. List of Figures and List of Tables

TABLE OF CONTENT

CHAPTER 1

A Brief Introduction of the Organization's Business Sector

Allsoft Solutions and Services Pvt Ltd, IBM Business Partner was started in 2000 having headquarters in the USA, with the establishment of three branches in India. Allsoft has been committed to providing the highest quality and needs-based services to its clients, both locally and internationally. We offer IT consulting, Industrial Training Program in various technologies, Web Development and Cloud services as well. We believe in "Making of the era with professionals" in this highly competitive workplace.

Our policy towards introducing new, on demand and emerging technology makes us competitive in the market as our goals are to provide the best possible value and to lead in our markets through service and innovation. Being one of the IBM trusted and certified business partner, we offer training in IBM technologies to provide students an exposure to the IBM tools also.

CHAPTER 2

Overview of the Organization

2.1 Brief History:

Allsoft Solutions and Services Pvt Ltd, IBM Business Partner was started in 2000 having headquarters in the USA, with the establishment of three branches in India. Allsoft has been committed to providing the highest quality and needs-based services to its clients, both locally and internationally. We offer IT consulting, Industrial Training Program in various technologies, Web

Development and Cloud services as well. We believe in "Making of the era with professionals" in this highly competitive workplace.

Our policy towards introducing new, on demand and emerging technology makes us competitive in the market as our goals are to provide the best possible value and to lead in our markets through service and innovation. Being one of the IBM trusted and certified business partner, we offer training in IBM technologies to provide students an exposure to the IBM tools also.

Fig- 2.1 Company Logo

2.2 Business Size:

Tie-ups: Allsoft Solutions and Services Pvt. Ltd. is in tie-up with 1100 Companies globally.
Placements Done: The Company has provided placements to 35000 professionals.
Trained Students: Company has trained over 135900 students so far. Courses: The Company has overall 80 Courses to provide.

2.3 Product lines:

Looking for an internship? Here, we are to help you out we have introduced an internship program that gives you a chance to enhance your objective learning and integrates your

knowledge with the theory learned in the classroom. Our internship program has been a well- formed channel for generating a great pipeline for our team. We are generating the perspective of professionalism in our interns as we mold them from student status to professional status by introducing them to the live projects of cooperative world. So, boost your skills and get a chance to experience a formal process within a company for the first time and start your journey with us.

2.4 Online Training:

We value your time so we offer online live sessions for different courses. As e-learning having benefits particularly effective for learners as they can revisit the courses as much as they want at any time. The ultimate technical goal for the instructor is to make the technology transparent during the whole session with this the learner concentration will increase Our instructor focuses on the various learning options to stimulate trainee participation by having interaction like – small group discussions, polling activities, and one-on-one query exchange.

2.5 Placement Assistance:

We are creating work experience opportunities for our trainees by providing them avenue to the corporate world. Our Placement cell helping our students to acquire the best possible employability and entrepreneurship skills. According to that, we maintain various well- designed training sessions by our professionals, to equip the students with various skills like Interview techniques, Group Discussion skills, Personality Development skills etc. It also increases their knowledge of the industry, which will help them in making better decisions about their future career choices. This organized way clearly reflects in a number of placements of our students in sectors of the corporate world.

2.6 Competitors:

Internshala: We are a technology company on a mission to equip students with relevant skills & practical exposure through internships and online trainings. Imagine a world full of freedom and possibilities. A world where you can discover your passion and turn it into your career. A world where your practical skills matter more than your university degree. A world where you do not have to wait till 21 to taste your first work experience (and get a rude shock that it is nothing like you had imagine it to be). A world where you graduate fully assured, fully confident, and fully prepared to stake claim on your place in the world.

Verzeo: Verzeo is an upskilling e-learning platform headquartered in Bengaluru, India. It uses machine learning and artificial intelligence to assist students in gaining technological knowledge and skills required for employment.

Twenty19: Twenty19 is a website for students to connect to companies and get real-world experience in order to live out their dreams. With a stated goal of "enable[ing]

every student to be in a position to choose and pursue their dream career", the founders of the company certainly chose a lofty target.

2.7 Brief summary of all the departments:

Looking for an internship? Here, we are to help you out we have introduced an internship program that gives you a chance to enhance your objective learning and integrates your knowledge with the theory learned in the classroom. Our internship program has been a well- formed channel for generating a great pipeline for our team. We are generating the perspective of professionalism in our interns as we mold them from student status to professional status by introducing them to the live projects of cooperative world. So, boost your skills and get a chance to experience a formal process within a company for the first time and start your journey with us.

CHAPTER 3

Plan of Internship Program

3.1 A brief introduction of the branch or department where you performed your internship

We completed our Internship in the Training and placement assistance department of Allsoft solutions and services Pvt. Ltd. Allsoft's training and placement assistance department is focused on giving training and assistance to the professionals about how things works in an IT industry and to make them compatible with current high competition scenario. Also, they cover wide range of technologies that are in use in the current IT world.

3.2 The starting and ending dates of Internship:

The Internship duration of Allsoft Solutions and Services Pvt. Lttd. Was about 14 weeks long, It started from 15th January 2022 and ended its course on 30th April 2022.

3.3 The names of the departments in which you obtained training and the duration of your training in these departments:

We completed our Internship in the Training and placement assistance department of Allsoft solutions and services Pvt. Ltd. Allsoft's training and placement assistance department is focused on giving training and assistance to the professionals about how things works in an IT industry and to make them compatible with current high competition scenario. Also, they cover wide range of technologies that are in use in the current IT world.

Time period of the internship in this departments was about 14 weeks.

CHAPTER 4

Training Program

4.1 Duties and Responsibilities Performed:

The internship at Allsoft Solutions and services Pvt. Ltd. for duration of 3 months was very helpful in improvising my technical skills and communication. This internship has improved me as a person, it taught me how an organization performs its daily tasks and how each employee plays a vital role in growth and working of organization. I was also the leader of my team and the industry mentor treated me as an employee of this organization for 3 months during my internship. As an intern I was trusted with some tasks by my mentor which I had to complete and report him on a daily or weekly basis. When I walked into this organization, I was nervous but the people there made me feel like at home and in no time, I was a part of their family. At the first day I was introduced to the people I would be working with and was told about my responsibilities during 3 months in the organization.

During the first two week of the internship we discussed about the current trending technologies in the IT world and how we can implement those technologies in our project. We discussed about the topic of the project with our mentor and she suggested us some of the projects on which we can work upon.

We have decided the technological domain of our project as Machine Learning and Artificial Intelligence as it is the current trend in the IT world. After all these we were finally able to decide our project title that is Edustream – recommendation video streaming app (ML/AI).

Then we discussed about the tools and the technologies which will be used in the development of the project which are stated below:

4.1.1 Tools Used:

1. **Jupyter Notebook:** JupyterLab is a web-based interactive development environment for Jupyter notebooks, code, and data. JupyterLab is flexible: configure and arrange the user interface to support a wide range of workflows in data science, scientific computing, and machine learning. JupyterLab is extensible and modular: write plugins that add new components and integrate with existing ones.

2. **Visual Studio Code:** Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with builtin support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity).

3. **Anaconda Navigator:** Anaconda Navigator is a desktop graphical user interface (GUI) included in Anaconda® distribution that allows you to launch applications and easily manage conda packages, environments, and channels without using command-line commands. Navigator can search for packages on Anaconda.org or in a local Anaconda Repository.

4.1.2 Technologies:

1. **Artificial Intelligence:** The field of AI refers to developing computer systems that use big sets of data to perform "intelligent" tasks: think visual perception, understanding natural language, reasoning and decision making. Machine learning is one way of building such systems based on providing the computer with examples of what it should do, and let it figure out (learn) how to do it.

   AI entered the scene of computer science in the early 1950s when computers started learning checkers strategies and speaking English.

2. **Machine Learning:** Machine learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

3. **Python:** Python is an interpreted high-level general-purpose programming language. Python's design philosophy emphasizes code readability with its notable use of significant indentation.

4. **HTML:** The Hyper Text Markup Language, or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by

technologies such as Cascading Style Sheets and scripting languages such as JavaScript. **bult in in sreamlit.**

5. **JavaScript:** JavaScript (JS) is a lightweight, interpreted, or just-in-time compiled programming language with first-class functions. **bult in in sreamlit.**

6. **Web RTC**: Web RTC (Web Real-Time Communication) is a technology that enables Web applications and sites to capture and optionally stream audio and/or video media, as well as to exchange arbitrary data between browsers without requiring an intermediary. **bult in in sreamlit.**

7. **Streamlit (Python):** a library for easy implimentaion of data science and data analytics project cearte a HTML based dynamic platform to run project.

In the last months we have learnt how to make our own dataset. Then we used a Sklearn model to do the recommendation system. Then we implement the model on out front end application.

In the last week of Internship, we have combined all the different parts of the Project into a single unit, so that the overall Functionality of the Project can be achieved.

4.2 Implementation Phase

- Firstly, we tried to clean dataset and transformed into proper format which is helpful in our project using NumPy.

- Transformed, prepared, and cleaned the data and recreated the dataset using NumPy.

- Transformed the data set schema using pandas for the prediction process.

- Scripted the machine learning codes for the prediction process.

- We used Cosine Similarty and conut vectorizer and implemented it using "scikit-learn" .

- Trained the datasets and started their testing for good similarty score.

- Tested accuracy of our prediction model.

- Implimented the recommendation system with streamlit for UI

4.3 Testing Phase:

Unit Testing

It focuses on the smallest unit of software design. In this, we test an individual unit or group of interrelated units.

Integration Testing

The objective is to take unit tested components and build a program structure that has been dictated by design. Integration testing is testing in which a group of components is combined to produce output.

Regression Testing

Every time a new module is added leads to changes in the program. This type of testing makes sure that the whole component works properly even after adding components to the complete program.

4.4 Project Description

- In this project, we learned to build a Recommendation System using machine algorithm.
- We used Cosine Similarty and conut vectorizer for Recommendation the future trends in for video and pdf.
- It includes all feature like video player and pdf viewer
- It includes search tab to search through a keyword

4.5 Screenshots
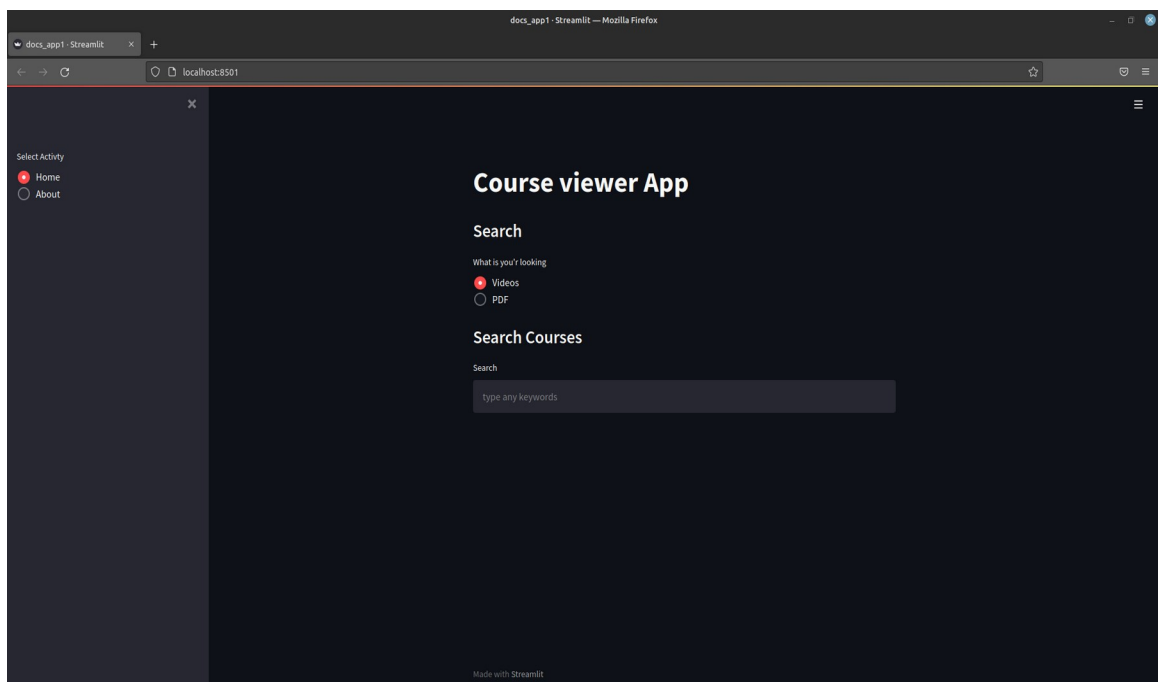
Fig 4.1: main   window
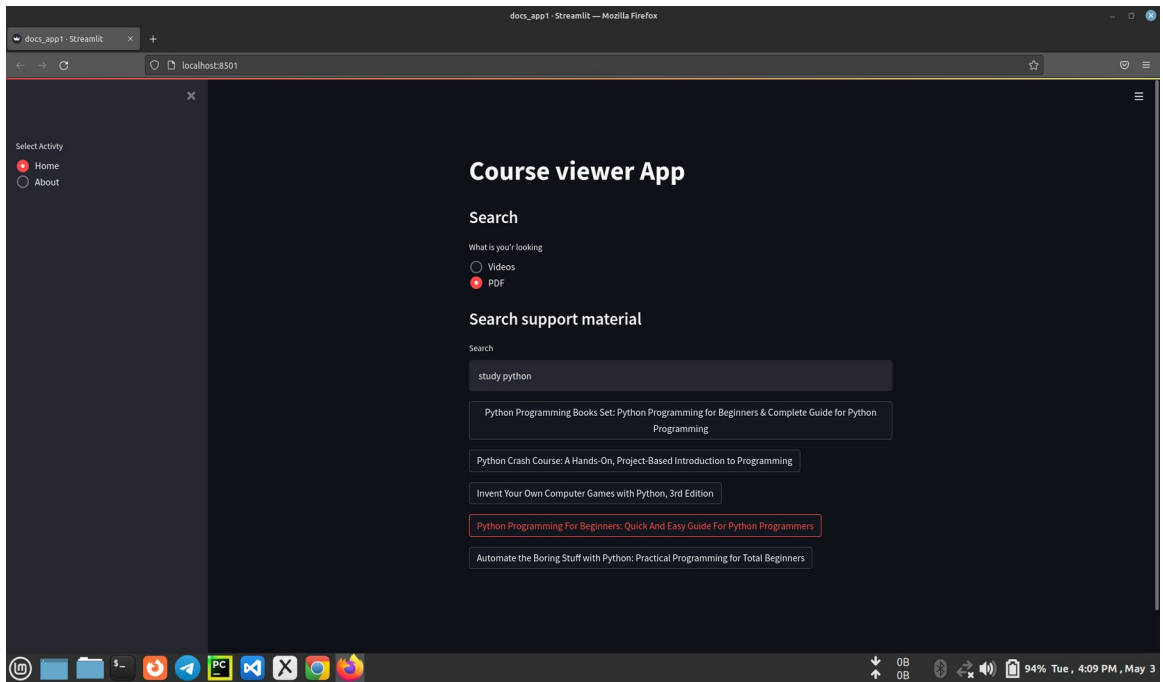
Fig 4.2:   search for PDF
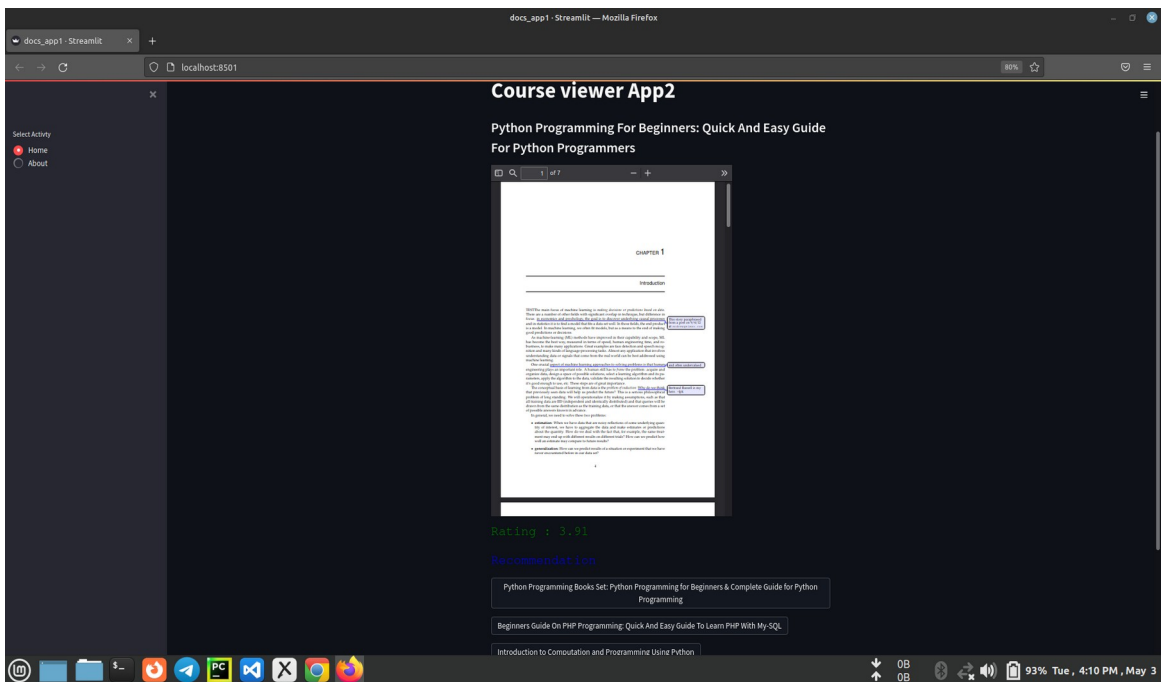
Fig 4.3: pdf recommendation
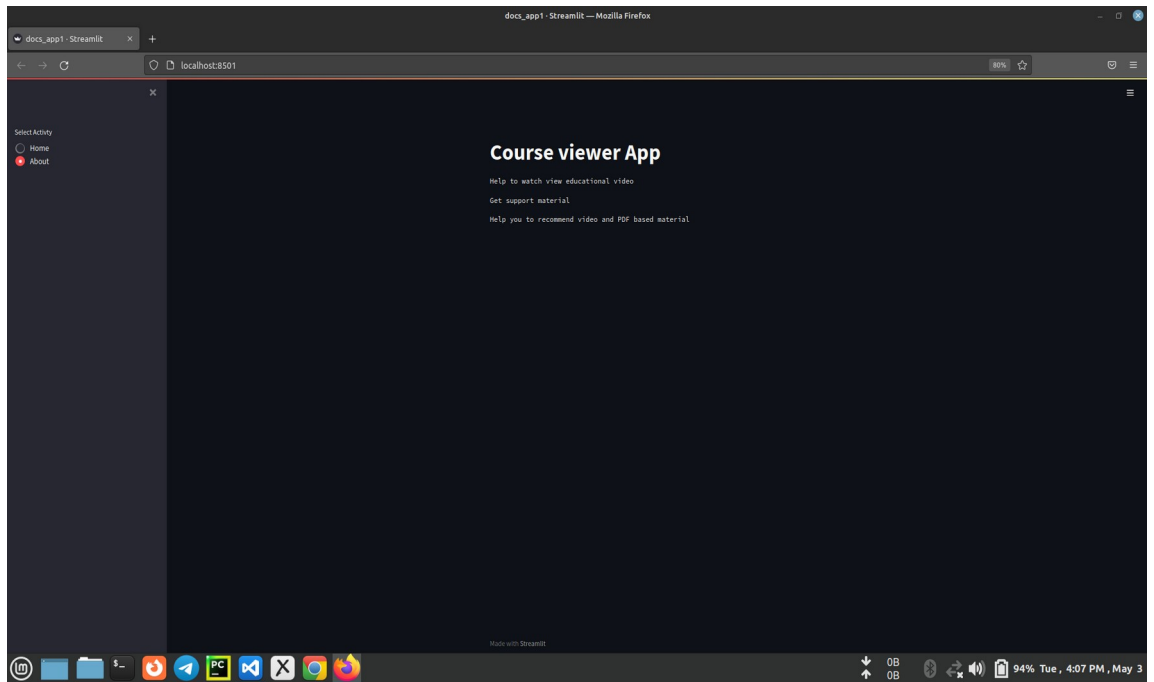
Fig 4.4: about page
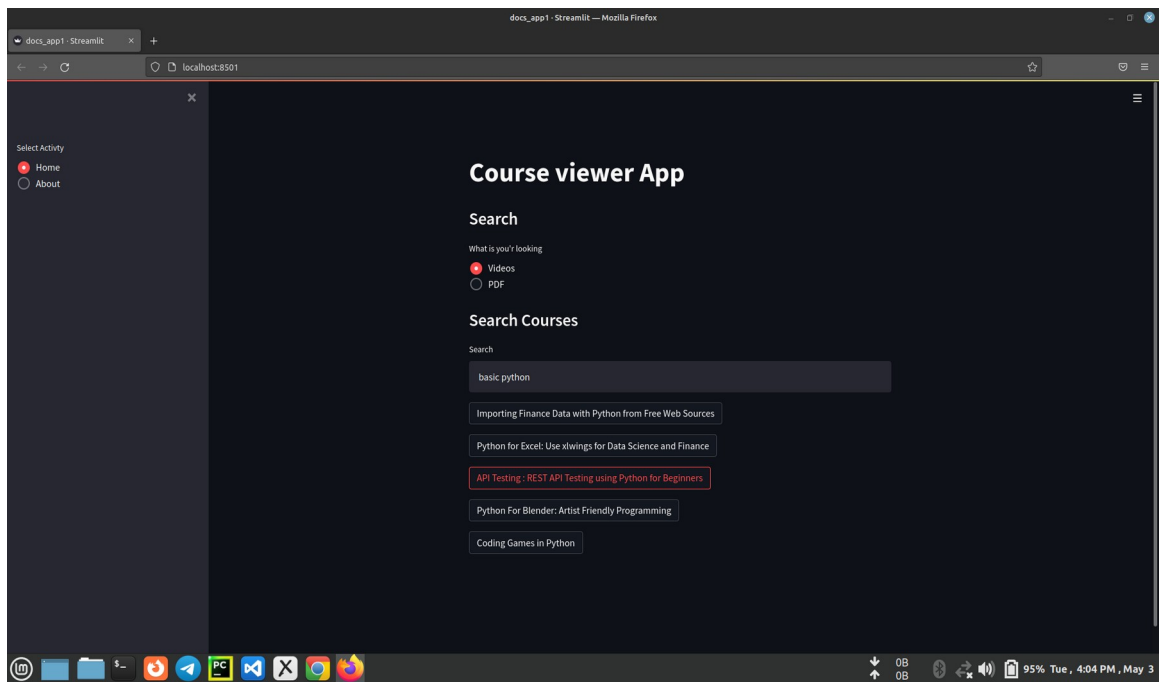
Fig 4.5: video page search
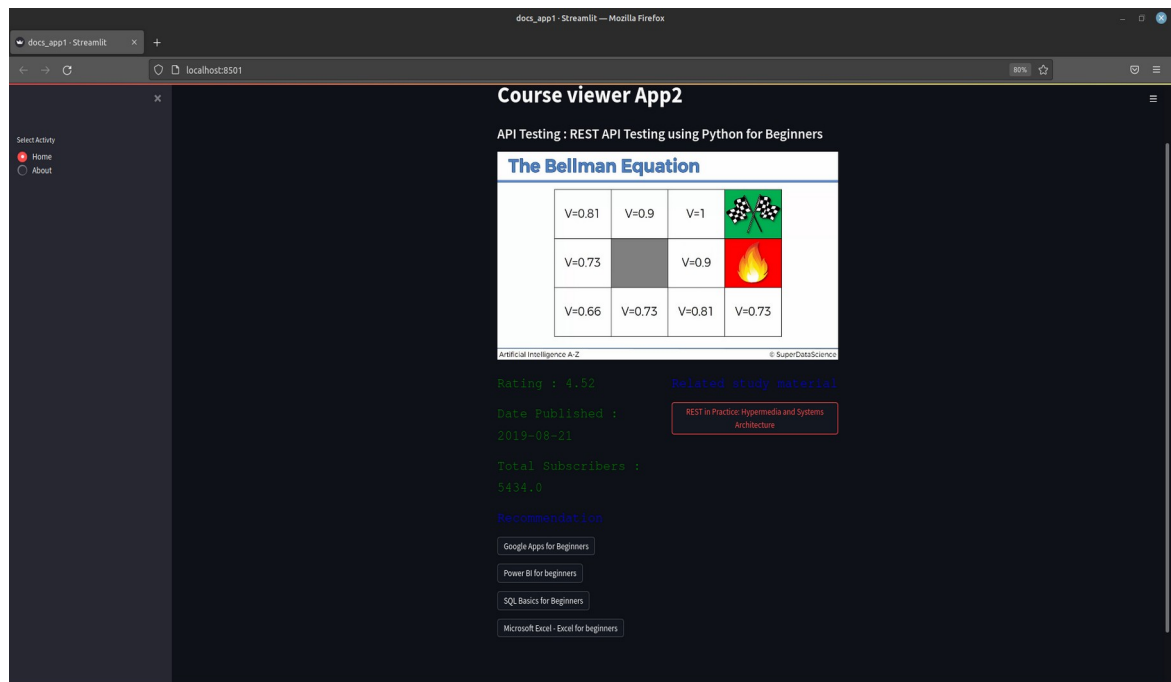
Fig 4.6: video page recommendation

CHAPTER 5

Learning Experience

5.1 Knowledge acquired:

I have learned about the following skills during the tenure of Internship:
- Learned about some algorithms of Machine Learning and Artificial Intelligence.
- Learned and worked on Python Programming Language.
- Worked and leant sklearn and Jupyter notebook
- Learned the development of web-page using HTML, CSS and JS.
- Worked on Server side technologies and Web RTC.

5.1.2 Analytical knowledge:

Within the internship schedule, Systems were part and parcel of the training. Therefore, I accumulated more knowledge on my prior university knowledge of System Analysis and Design. Often, these systems were from different vendors and as a result, learning was at a larger extent due to the different unique solutions the systems provide. I was in position to understand the activity diagrams, class diagrams, sequence diagrams and use cases.

5.2 Skills learned:

5.2.1 Communication skills:

My "People skills" has greatly improved thanks to this internship training The modes of communication in the training from verbal communications to mail communications have strengthened my communications skills to a better level.

5.2.2 Organizational skills:

Organizational Behavior defines how employees and employers act in organizations. With many organizations having policies that are to be followed, it is worth noting that before these policies come personal attitude and behavior. This training has nurtured my understanding of organizational behavior.

5.2.3 Networking Technical skills:

Networking Technical Skills are necessary but insufficient for succeeding in management. In today's increasingly competitive and demanding workplace, employees can't succeed on their technical skills alone. They also have to have good people skills. This is exactly the positive plus I have acquired -out of the technical training. Via the networking, I have

learnt how to work with understand and motivate other people, both individually and in groups.

5.2.4 Problem solving Conceptual skills:

Problem solving Conceptual skills are vital in solving problems. From day one of the training, to the last day, several training sessions have involved problem solving that require the mental ability to analyze and diagnose, for a solution.

5.2.5 Adaptability Skills:

Not everyone is adaptable from the beginning. In fact, you can refuse to be so even during your internship experiences but the loss is yours. Being adaptive to your surroundings easily is one of the most useful soft skills not only desirable to employers but also important to your self-growth. So, make the most of your internship experiences and learn some adaptability skills while you are there.

5.3 Observed Attitudes and values gained:

5.3.1 Leadership, confidence and responsibility:

While I was an intern, I was responsible for various areas of the business for which I worked. I had guidance and mentors, but I did have to make decisions on my own. Through these experiences, I developed a sense of leadership (especially with regards to speaking for and defending my ideas and decisions, not to mention actually making decisions!), confidence (along with taking ownership of my decisions and their outcomes), and responsibility (my decisions would impact the business). These traits are invaluable when it comes to a career, and an internship is the perfect place to learn and perfect them.

5.3.2 Professional communications:

One of the most valuable skills that I have gained from my internships is the ability to speak with people in a professional setting. Discussions with bosses or coworkers are different from discussions with professors or fellow students, and an internship is the perfect place to observe how people in a professional setting interact. It's also a great opportunity to practice that communication style yourself. This will help you a lot when you start interviewing for jobs, because you will be more confident and will sound more mature and experienced in a business setting.

5.3.3. Networking:

As an intern, I learned how important networking is for my future career. Connecting with people in my desired career path through my internships has led me to solidify my desire to work in editing, and I now have mentors to turn to when I have questions regarding the

field and my work. I am also now more confident when it comes to talking to potential coworkers and employers in my field, because I gained experience in that while an intern.

5.3.4.   Taking criticism:

It can be difficult to be told that you need to improve upon something or that you completed a task incorrectly. As an intern, I learned how to handle criticism with grace (both from watching co workers receive criticism and from receiving criticism myself), which also built my confidence in a professional setting. Since I already had a trial run in the workplace as an intern, I know now that I can handle criticism maturely, and I know how to respond to it professionally and respectfully, which will definitely help me in my career. Teamwork The first thing we need to mention is definitely team work. Your internship experience is unlike your college project where one person did all the work and the grades were shared among the rest. Here, it is more professional and each one in a team needs to work together to finish the task. In an internship, you learn to work as a team without focusing entirely on yourself. You also develop patience in situations when you disagree with another member(s) of the team.

5.3.5. Adaptability Skills:

Not everyone is adaptable from the beginning. In fact, you can refuse to be so even during your internship experiences but the loss is yours. Being adaptive to your surroundings easily is one of the most useful soft skills not only desirable to employers but also important to your self-growth. So, make the most of your internship experiences and learn some adaptability skills while you are there.

5.3.6. Time Management:

Last on our list, but still as important as the others, is time management. Earlier, you could just miss a class because you had some personal commitments. During an internship which is almost the beginning of your work life, you can't mark your absence on a regular basis. Hence, it helps you learn to manage your time better by maintaining a balance between your work and personal life, without harming any of them.

5.4 The most challenging task performed:

For me most challenging part of my internship to work in a team with different personality and handling business user in team I face problem like delay in product due to delay of work of a team member but I overcome it I saw that he was working but he wanted help so I decided to help him and then we both worked on his task and we face success in it and about handling business user sometimes user was not clear about its requirements in this case my mentor helped me in understanding requirement by analyzing scenario and I overcome it.

CHAPTER 6

Strengths, Weaknesses, Opportunities, Threats (SWOT)Analysis

Fig- 6.

6.1 Strength:

6.1.1   Talented and Experienced Staff:

Allsoft Solutions and Services Pvt. Ltd. is equipped with an experienced staff. The strong and emotional attachment is established between the employees and the company. The mentors also fulfill their own responsibility as well as well cooperate with the interns and work in place of subordinates. This shows their skills, competency, and emotional attachment with the company.

6.1.2   Number of clients:

Allsoft Solutions and Services Pvt. Ltd. is an almost 21 years old startup established in USA. During this period, the company works hard with the best services and competent staff. They are working with the maximum number of clients as compared to the other IT companies. This shows the level of trust towards Allsoft Solutions and Services Pvt. Ltd.

6.1.3   Resources:

They have enough resources to meet the demands of the employees working in the organization. Due to this, the employee satisfaction is at its optimum level.

6.2 Weakness:

6.2.1   High Expenses:

The organization bears heavy expenses in their operations as well as in satisfying the needs. They also provide services to the employees related to health, life time insurance which keeps on affecting the organization's performance.

6.2.2 Low Market Share:

The organization is working with a limited number of market share as compared to different IT companies. Due to this the company does not come up with the other companies or organizations in India.

6.3 Opportunity:

6.3.1 New Technology:

The company is working on different technologies such as the Internet of Things(IoT), Artificial Intelligence, Machine Learning, block-chain which keeps on upgrading in technology day by day. Due to the advancement of the technology the company also has a good internet connection which is easy for the employees working in the organization.

6.3.2 Employees Demands:

With the increasing technologies day by day in the IT sector employees also come up with the new demands. The employees also want to increase their knowledge of technology. The organization also keeps track of every employee and helps them to learn and advance their knowledge in the increasing technology.

6.4 Threats:

6.4.1 Competition:

As the company is working with a maximum number of clients and this number is increasing very rapidly. Due to this the competition between different IT companies is increasing very rapidly. This increasing number of competition between the IT companies leads the company towards fall down. Therefore, Allsoft Solutions and Services Pvt. Ltd. is taking steps to retain their clients by offering them good services.

6.4.2 Economic Downturn:

The organization also leads to the downfall in terms of economic factors. As there are different headquarters in different cities which make the company from achieving the objectives.

CHAPTER 7

Problem Identification and Solution

7.1 Problem Identification:

Allsoft Solutions and Services Pvt. Ltd. is among the top fastest growing IT companies in India. Allsoft Solutions and Services Pvt. Ltd. has shown a drastic growth in the software industry. And as the company grows and, in a small business, skill and personality tend to be favored over other qualities, but not everyone is going to be the right person for a given company. The company's growing and in order for it to grow further in the future it has to hire the right staff for its team and family. We've seen many times that a single person's negative attitude may change the whole team's optimistic attitude into a pessimistic attitude, so Allsoft Solutions and Services Pvt. Ltd. must be hiring new staff soon. Another problem in the organization was that the number of current employees were less than the project the company is getting as a job. Another problem is How We Pick those employees for the long run to benefit the company and to increase success. And they have to measure their performance on daily basis or in a specific period of time to find the potential of employees so how to do it.

7.2 Consequences of the current problem

Allsoft Solutions and Services Pvt. Ltd. is a renowned IT company which is on its way to be one of the best companies in the IT sector. The company consists of hard workers and smart employees. They get along with each other very well. It's like a home in this organization, but if some of the problems weren't solved, it'd lead to the downgrading of the whole organization. Some problems which every company faces will also be faced by Allsoft Solutions and Services Pvt. Ltd. And its success rate depends on how the company will solve these problems and what actions will it take to overcome these problems. The company is growing at a faster rate and it is getting more jobs every day. The company is well known for developing software products. The company will face major issues if it continues to grow and does not hire new staff. The issues will be far more severe than it looks. The workload on each worker will grow so much that it would tire the worker, which in return will affect other team members, which in return will affect the quality of the product, which ultimately would affect the company's reputation. If this happens then the company will eventually lose its ties with other companies and will lose its clients. If they act to hire new staff, a new problem will arise and that'd be whether the hired staff is beneficial to the company or not. If the hired staff seems incompatible with other team members then it will be a problem.

This kind of behavior will demotivate other team members which a team leader does not want. The consequence of this problem will directly affect the company's growth as well as worker's individual growth.

The problem of testing an individual's performance is further a major problem in all kinds of companies. If the performance of any staff member is lower than expected than the outcome of the product will not be up to the mark. This will affect the company's reputation as a software product developer. Performance testing if done in a wrong way will affect the overall product's quality. Team won't be able to work as a group and the team's performance will downgrade too, leading to downgrading of the quality of product.

7.3 Solutions

The company should take appropriate actions to overcome these kinds of situations. The company has to carefully think and plan the course of action they'll be taking for these problems. To solve the issue of low employee headcount and the increase in workload, the company should hire new experienced staff to divide the workload among maximum workers as much as possible. This will provide the workers a calming and tension free environment to work with.

For hiring new staff, the HR team should be well trained and experienced to interview the staff. The interviewer should be well educated and he should know all the problems among its employees. And should hire new workers which are relevant to work with the organization's culture. Staff hired should be compatible with other employees. If the worker hired isn't compatible, he should be given proper training so as to perform up to the organization's benchmark. Performance testing should be done according to each individual's skillset. Some measures must be considered during performance evaluation of any individual. Individuals with performance above a defined threshold in terms of behavior and skills must be hired. Teams must be formed in such a way that its true potential must be brought out at maximum level.

CHAPTER 8

Conclusion

This internship was a great opportunity for me to understand the working of an organization and its different departments. I learned new skills during this Internship. During my Internship, I really learnt a lot of new skills from my colleagues and gained some working experience with them. I am glad I got to become their intern because they really taught me a lot of cool things. When I got stuck with some problems, they willingly taught me the solution for it. Other than gaining technical knowledge from my working place, I also learned more about teamwork from them. In an actual working environment, working as a team is important for completing a project, so teamwork is important for working. Working is not the same as theoretical knowledge; in an actual working environment we need to have good communication skills to communicate with employees or clients.

This internship opportunity gave me a chance to experience how an organization works to accomplish a project. During my internship I learned some technical skills like Python, Machine Learning, Artificial Intelligence. and I got to learn some of the social skills.

CHAPTER 9

References and Sources Used

1. https://github.com/sklearn (accessed,02-2022)

2. https://www.w3schools.com/ (accessed,02-2022)

3. https://teachablemachine.withgoogle.com/ (accessed,02-2022)

4. https://stackoverflow.com/ (accessed,02-2022)

5. https://kaggel.com/ (accessed,03-2022)

CHAPTER 10

Appendices

10.1 Fortnightly Report

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019   FEB 1,2022

Form I

Fortnightly Report of the Student/Intern

(To be maintained by the student)

FNR No: 1

Enrolment No: 18100BTBDAI02890		Name:KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana Nikhil.ibm17@gmail.com	15 Days	14 Jan 2022	01 Feb 2022
Main points of the fortnight	Edustream - Is an AI video streaming platform for people who can learn different courses with recommendation system.		
	17/01/2022	Discussion about Resource gathering.	
	18/01/2022	Discussed about Front - end of application.	
	19/01/2022	Understand and finalized the data	
	20/01/2022	Discussed approaches for analyzing the data	
	21/01/2022	Analyze the steps for preprocessing of dataset	
	22/01/2022	gathered data sets about recommendation system.	
	24/01/2022	Team discussed about UI.	
	25/01/2022	Learned about ML and DL Concepts	
	27/01/2022	Developing creative UI	
	28/01/2022	Import and normalise Data	
	29/01/2022	Discussed Model Training	
	31/01/2022	Consider all effective parameter	
	01/02/2022	Discussed a suitable Model sturcture	

Intern Signature   External Mentor Signature   Internal Mentor Signature

Fig-10.1.1 FNR-1

2

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019

Feb 03/2022

Form I

Fortnightly Report of the Student/Intern

(To be maintained by the student)

FNR No: 2

Enrolment No: 18100BTBDAI02890		Name:KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana **Nikhil.ibm17@gmail.com**	15 Days	03 Feb 2022	18 Feb 2022
Main points of the fortnight	03/02/2022	After discussion we decided to add a new feature in which we provide related study material like Pdf's and links	
	04/02/2022	discussions of structural present of new features	
	05/02/2022	web scrapping for additional meta data	
	07/02/2022	discussing pro for structural hierarchy for data presentation	
	08/02/2022	research for efficient recommendation system architecture	
	09/02/2022	UI interaction implement 1st after addition of new features	
	10/02/2022	Fixed Bugs in the UI code.	
	11/02/2022	Working on functional Code.	
	12/02/2022	working on back end code (recommendation system)	
	14/02/2022	UI animation working code.	
	15/02/2022	Working on functional Code.	
	1 /02/2022	Started training the model	
	17/02/2022	Checked model accuracy and model loss.	
	18/02/2022	working on back end code (recommendation system)	
	19/02/2022	Working on functional Code.	

Intern Signature   External Mentor Signature   Internal Mentor Signature

Fig-10.1.2 FNR-2

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019   Mar 06/2022

Form I

Fortnightly Report of the Student/Intern

(*To be maintained by the student*)

FNR No: 3

Enrolment No: 18100BTBDAI02890		Name: KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana Nikhil.ibm17@gmail.com	15 Days	16 Feb 2022	28 Feb 2022
	16/02/2022	Fixed Bugs in the UI code.	
	17/02/2022	Reviewed some issues and bugs	
	18/02/2022	working on front end code	
	19/02/2022	Working on functional Code.	
	21/02/2022	working on data pipeline	
Main points of the fortnight	22/02/2022	working of architecture of api	
	23/02/2022	working on UI code	
	24/02/2022	working on data manipulation	
	25/02/2022	discussions of useful features for recommendation	
	28/02/2022	working on data pipeline	

Intern Signature   External Mentor Signature   Internal Mer

Fig-10.1.3 FNR-3

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019   Mar 19/2022

Form I

Fortnightly Report of the Student/Intern

(To be maintained by the student)

FNR No: 4

Enrolment No: 18100BTBDAI02890		Name:KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana Nikhil.ibm17@gmail.com	15 Days	01 Mar 2022	15 Mar 2022
Main points of the fortnight	01/03/2022	working on data manipulation	
	02/03/2022	working on data pipeline	
	03/03/2022	data manipulation for good similarities	
	04/03/2022	working on data pipeline	
	05/03/2022	data filtration	
	07/03/2022	working on data manipulation	
	08/03/2022	working on data manipulation	
	09/03/2022	data manipulation for good similarities	
	10/03/2022	Working on functional Code.	
	11/03/2022	Fixed Bugs in the UI code.	
	12/03/2022	Reviewed some issues and bugs	
	14/03/2022	Data manipulation for good similarites	
	15/03/2022	Fixed Bugs in the UI code.	

Intern Signature   External Mentor Signature   Internal Mentor Signature

Fig-10.1.4 FNR-4

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019   Mar 16/2022

Form I

Fortnightly Report of the Student/Intern

(To be maintained by the student)

FNR No: 5

Enrolment No: 18100BTBDAI02890		Name:KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana **Nikhil.ibm17@gmail.com**	15 Days	16 Mar 2022	31 Mar 2022
Main points of the fortnight	16/03/2022	UI animation working code.	
	17/03/2022	Working on functional Code.	
	18/03/2022	Fixed Bugs in the UI code.	
	19/03/2022	Fixed Bugs in the UI code.	
	20/03/2022	UI animation working code.	
	21/03/2022	working on front end code	
	23/03/2022	Reviewed some issues and bugs	
	24/03/2022	working on front end code	
	25/03/2022	Fixed Bugs in the UI code.	
	26/03/2022	Reviewed some issues and bugs	
	27/03/2022	Fixed Bugs in the UI code.	
	28/03/2022	Reviewed some issues and bugs	
	30/03/2022	working on front end code	
	31/03/2022	Fixed Bugs in the UI code.	

Intern Signature   External Mentor Signature   Internal Mer

Fig-10.1.5 FNR-5

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019

April 17/2022

Form I

Fortnightly Report of the Student/Intern

(*To be maintained by the student*)

FNR No: .6

Enrolment No: 18100BTBDAI02890		Name:KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana **Nikhil.ibm17@gmail.com**	15 Days	1 Apr 2022	15 Apr 2022
Main points of the fortnight	01/04/2022	Working on functional Code.	
	02/04/2022	Working on functional Code.	
	04/04/2022	discussions of useful features for recommendation	
	05/04/2022	working on data pipeline	
	06/04/2022	working on data manipulation	
	07/04/2022	working on data pipeline	
	08/04/2022	Fixed Bugs in the UI code.	
	09/04/2022	Fixed Bugs in the UI code.	
	11/04/2022	Reviewed some issues and bugs	
	12/04/2022	working on front end code	
	13/04/2022	data filtration	
	14/04/2022	working on data manipulation	
	15/04/2022	working on data manipulation	

Intern Signature   External Mentor Signature   Internal Mer

Fig-10.1.6 FNR-6

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore
Shri Vaishnav Institute of Information Technology

Notification: SVVV/N-083/2019   May 1/2022

Form I

Fortnightly Report of the Student/Intern

(To be maintained by the student)

FNR No: 7.

Enrolment No: 18100BTBDAI02890		Name: KARTIK MOYADE	
Industry mentor	Period	Date From	Date To
Nikhil Rana **Nikhil.ibm17@gmail.com**	15 Days	16 Apr 2022	30 Apr 2022
Main points of the fortnight	16/04/2022	Working on functional Code.	
	18/04/2022	Working on functional Code.	
	19/04/2022	discussions of useful features for recommendation	
	20/04/2022	working on data pipeline	
	21/04/2022	Working on functional Code.	
	22/04/2022	Working on functional Code.	
	23/04/2022	Fixed Bugs in the UI code.	
	25/04/2022	Fixed Bugs in the UI code.	
	26/04/2022	Reviewed some issues and bugs	
	27/04/2022	working on front end code	
	28/04/2022	Working on functional Code.	
	29/04/2022	Fixed Bugs in the UI code.	
	30/04/2022	Project Completed.	

Intern Signature   External Mentor Signature   Internal Mer

Fig-10.1.7 FNR-7