# UNIVERSITY ADMIT ELIGIBILITY PREDICTOR

**PROJECT REPORT**

***Submitted by***

LOGESHKUMAR R (19EUCS074)

MANJUNATHAN V (19EUCS080)

MOHANA SOWDESH R (19EUCS091)

NAVEEN ANEND S (19EUCS098)

***In partial fulfilment for the award of the degree***

***of***

**BACHELOR OF ENGINEERING**

in

**COMPUTER SCIENCE AND ENGINEERING**

**SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY**

**COIMBATORE**

(An Autonomous Institution)


(Approved by AICTE and Affiliated to Anna University, Chennai) ACCREDITED BY NAAC WITH "A" GRADE

**NOVEMBER 2022**

**SRI KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY**

(An Autonomous Institution)

(Approved by AICTE and Affiliated to Anna University, Chennai)

ACCREDITED BY NAAC WITH "A" GRADE

**NOVEMBER 2022**

# BONAFIDE CERTIFICATE

Certified that this project report **"UNIVERSITY ADMIT ELIGIBILITY PREDICTOR**" is the bonafied work of **"Logeshkumar R (19EUCS074), Manjunathan (19EUCS080), Mohana Sowdesh R (19EUCS091), Naveen Anend (19EUCS098)"** who carried out the project work under my supervision.

SIGNATURE

**Dr. K. SASI KALA RANI**

**HEAD OF THE DEPARTMENT**

SIGNATURE

**Ms. K. M. MAJIDHA FATHIMA**

**SUPERVISOR,**

**ASSISTANT PROFESSOR**

**Department of Computer Science and Engineering**

**Sri Krishna College of Engineering and Technology**

**Kuniamuthur, Coimbatore**

This project report is submitted for the autonomous project viva-voice examination held on .....

**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

## ACKNOWLEDGEMENT

We express our sincere thanks to the management and **Dr. J. JANET M.E., Ph.D.,** Principal, Sri Krishna College of Engineering and Technology, Coimbatore for providing us the facilities to carry out this mini project work.

We are thankful to **Dr. K. SASI KALA RANI M.E., Ph.D.,** Professor and Head of Department of Computer Science and Engineering, for her continuous evaluation and comments given during the course of the mini project work.

We express our deep sense of gratitude to our supervisor **Ms. K. M. MAJIDHA FATHIMA M.E., (Ph.D.)**, Assistant Professor, Department of Computer Science and Engineering for her valuable advice, guidance and support during the course of our mini project work.

We would also like to thank our mini project coordinator **Dr. Mohan Kumar M.E., Ph.D.,** Professor, Department of Computer Science and Engineering for helping us in completing our mini project work.

We express our heartfelt sense of gratitude and thanks to our beloved parents, family and friends who have helped during the mini project course.

# CHAPTER 1

# INTRODUCTION

## 1.1 PROJECT OVERVIEW

The project is implemented using a Machine-Learning model that predicts whether the user is eligible for an admission in the selected rated universities with provided details such as marks and others. The algorithm works in such a way that when the user provides the details such as (GRE Score, TOEFL Score, University Rating, SOP, LOR, CGPA, Research) the percentage of chance of admit is displayed. The user is provided with a UI (Web based application) in which the user can enter the details mentioned above for prediction. The main advantage of this is that the user can avoid long process of having to check the eligibility of a university admission by himself and make use of this application to predict the eligibility / chance of admit.

## 1.2 PURPOSE

University and College research being one part of the university application process is itself an arduous and lengthy task. This issue being a big problem for students have not been solved till now. There are recognized sites which filters the best universities and colleges based on the location, tuition fees, major and degree but none of them have use machine learning algorithm to solve the issue.

Hence, we have done this research project to solve that issue to some extent with the use of data mining techniques.

# CHAPTER 2
# LITERATURE SURVEY

## 2.1 EXISTING PROBLEM

Previous research done in this area used Naive Bayes algorithm which will evaluate the success probability of student application into a respective university but the main drawback is they didn't consider all the factors which will contribute in the student admission process like TOEFL/IELTS, SOP, LOR and under graduate score. Bayesian Networks Algorithm have been used to create a decision support network for evaluating the application submitted by foreign students of the university. This model was developed to forecast the progress of prospective students by comparing the score of students currently studying at university. The model thus predicted whether the aspiring student should be admitted to university on the basis of various scores of students. Since the comparisons are made only with students who got admission into the universities but not with students who got their admission rejected so this method will not be that much accurate.

## 2.2 REFERENCES

**[1]** Graduate Admission Prediction Using Machine Learning by Sara Aljasmi, Department of Computer Science, University of Sharjah

## 2.3 PROBLEM STATEMENT DEFINITION

Every year thousands of college graduates apply for the master and PhD programs in US universities from all around the world. Applying to US universities is not an easy task, it involves many steps and procedures to follow. Choosing the right universities or colleges is definitely an another hurdle students have to face. Many students apply for the universities in which they have little chance of acceptance. This leads students of poor economic backgrounds to frustration and anxiety as they only lose surplus amount of money just for applying to those universities. This is because overall university application cost is not affordable for students with low economic backgrounds. US universities application cost for top level universities range from $70 to $90. In the same way total cost to send GRE scores to any individual University is $27 and cost of sending TOEFL score to any individual university is $19. These stats show students have to throw away lots of hard works and hard-earned money for nothing if they got rejected in universities they have applied for.

What if there is a system that could guide students and recommend best universities list and predict their admission chance in those universities according to their profile and scores. So, the idea behind ‘University Recommendation and Admission Prediction System’ is the context mentioned above.

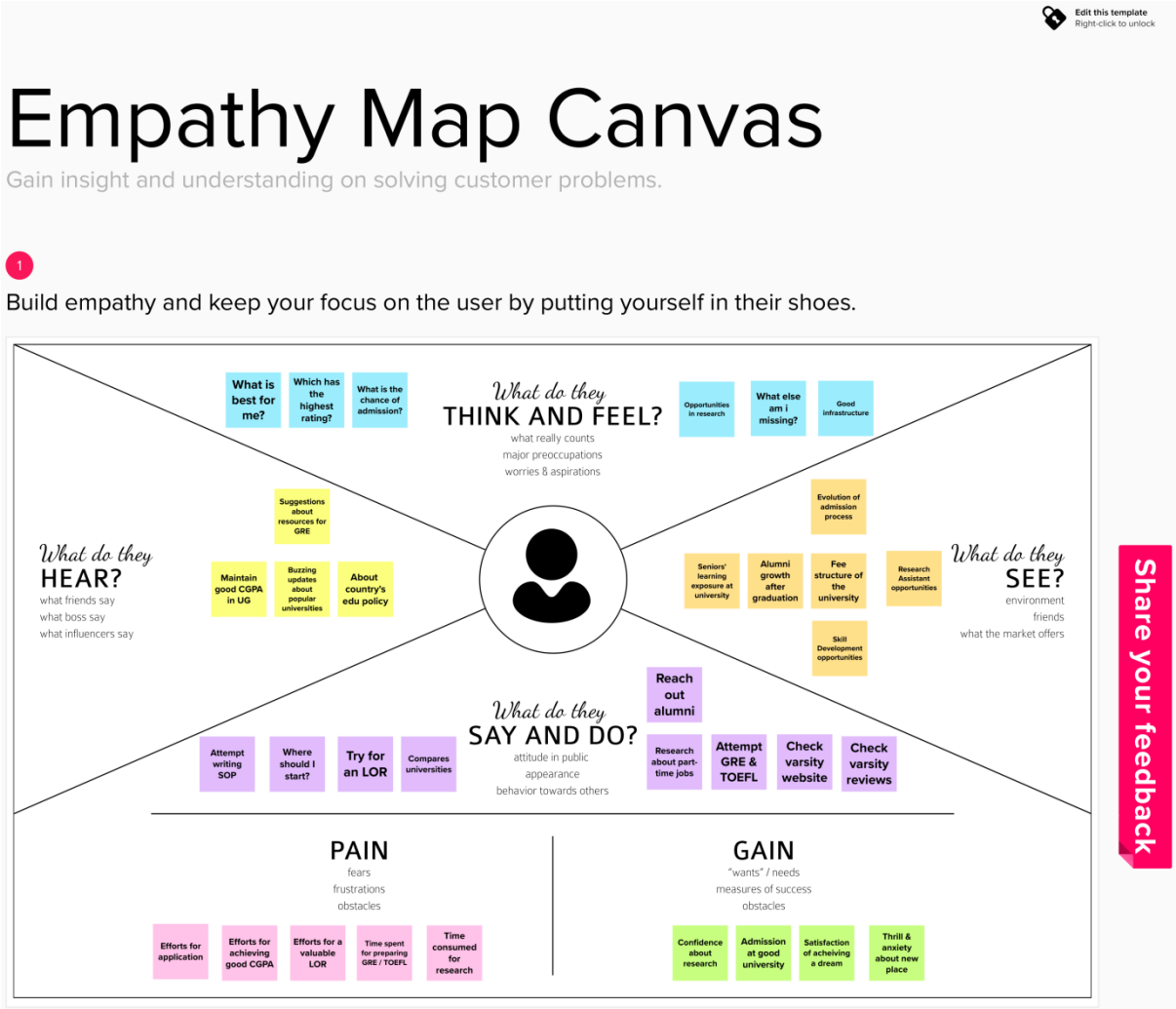
# CHAPTER 3

# IDEATION & PROPOSED SOLUTION

## 3.1 EMPATHY MAP CANVAS

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

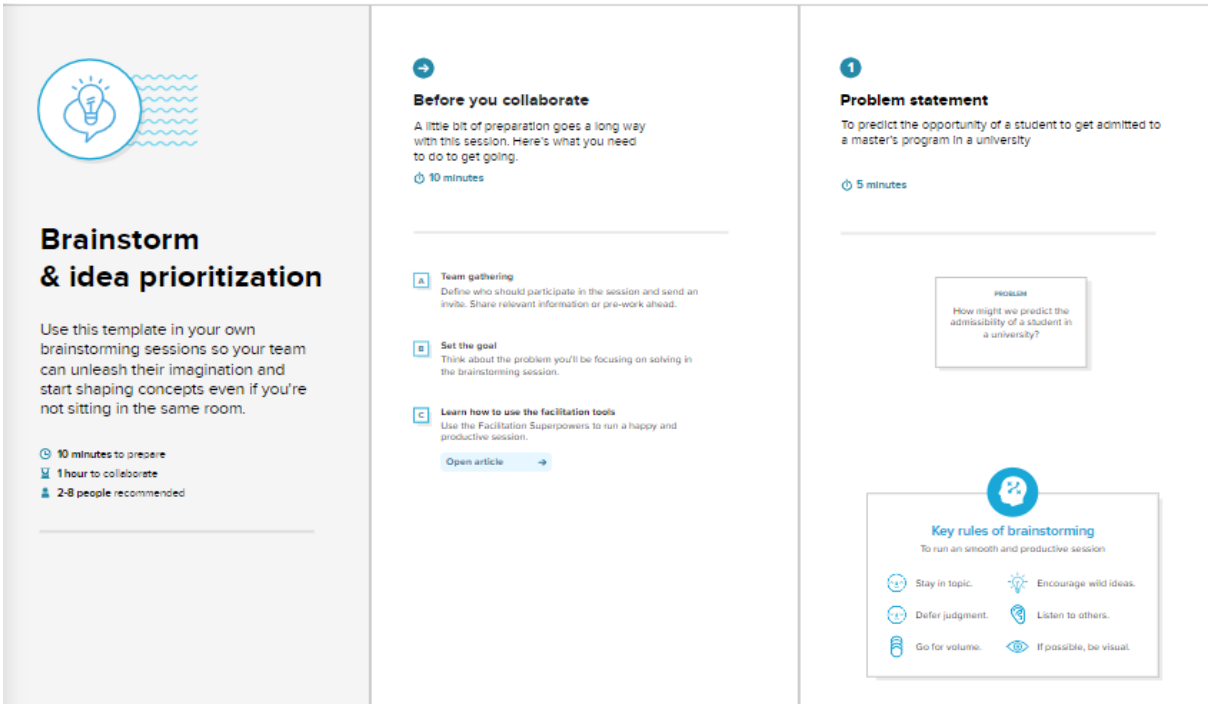
- It is a useful tool to helps teams better understand their users.
- Creating an effective solution requires understanding the true problem and the person who is experiencing it.
- This exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.



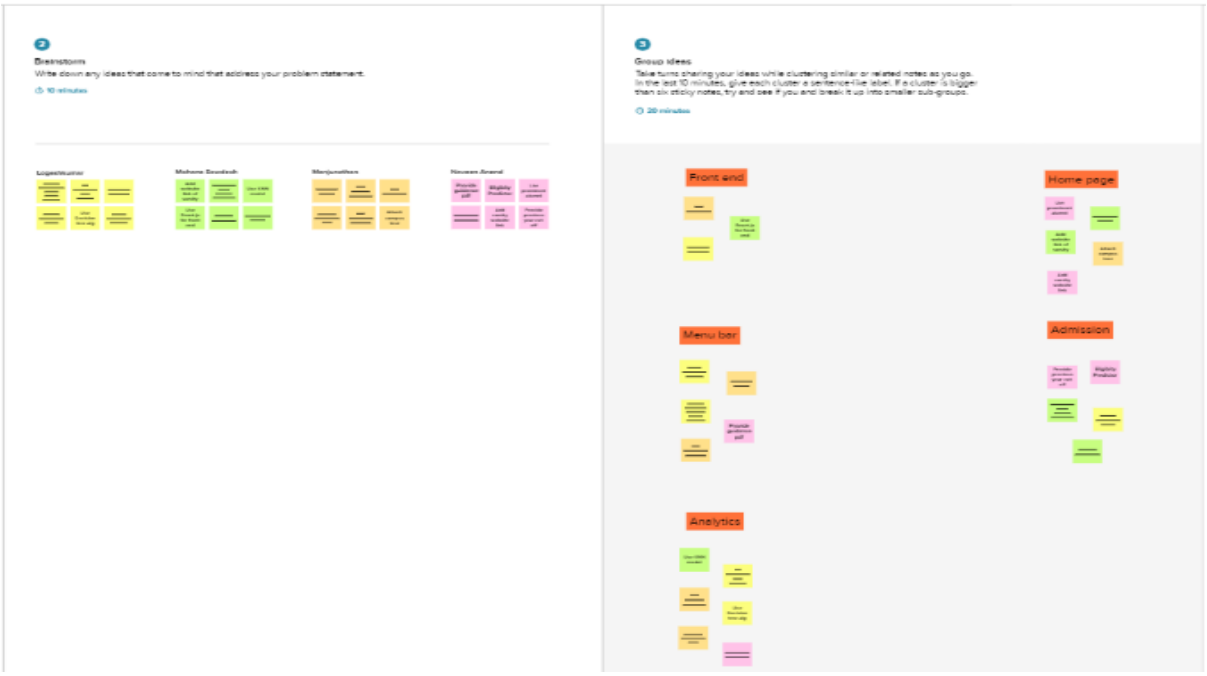
## 3.2 IDEATION & BRAINSTORMING

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

**Step-1: Team Gathering, Collaboration and Select the Problem Statement**



## Step-2: Brainstorm, Idea Listing and Grouping



**Step-3: Idea Prioritization**


## 3.3 PROPOSED SOLUTION

| S.No. | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | To predict the probability of a student to get admitted in a master's program in a university |
| 2. | Idea / Solution description | Our project will help UG graduates in short-listing universities for their masters with their CGPA, GRE, TOEFL scores. The predicted output will give them a fair idea about their admission chances in a particular university. This analysis will also help students who are currently preparing or will be preparing to get a better idea. It will students to know more about university in terms of research opportunities, admission process, courses offered and prominent alumni of the university. |

| | | |
|---|---|---|
| 3. | Novelty / Uniqueness | The website lists various amenities present at the university, guides to travel to the city where university is situated, scholarship opportunities, GRE/TOEFL prep guide and financial assistance |
| 4. | Social Impact / Customer Satisfaction | This solution will reduce panic among students and their anxiety of getting admitted in their dream institution |
| 5. | Business Model (Revenue Model) | University shall fund the website in order to maintain it. In addition, revenue can be generated by advertising GRE/TOEFL coaching centres/sites |
| 6. | Scalability of the Solution | A future update shall have chat space comprising aspirants, faculty, current students and alumni. It can be scaled for universities all around the world. |

## 3.4 PROBLEM SOLUTION FIT

The Problem-Solution Fit simply means that we have found a problem with our customer and that the solution we have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

**Purpose:**

- Solve complex problems in a way that fits the state of your customers.
- Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- Sharpen your communication and marketing strategy with the right triggers and messaging.
- Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- Understand the existing situation in order to improve it for your target group.

Define CS, fit into CC

### 1. CUSTOMER SEGMENT(S) CS

Who is your customer?
i.e. working parents of 0-5 y.o. kids

1. UG graduate students
2. Parents of UG graduate students
3. Currently UG pursuing students

### 6. CUSTOMER CONSTRAINTS CC

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

Students don't try exploring because of the lack of network and guidance

### 5. AVAILABLE SOLUTIONS AS

Which solutions are available to the customers when they face the problem
or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

1. Travel to the university to get information
2. Paid career coach
3. Paid educators

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

### 2. JOBS-TO-BE-DONE / PROBLEMS J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Predict the chance of admission of a UG student in a university through GPA, SAT, GRE/TOEFL scores

### 9. PROBLEM ROOT CAUSE RC

What is the real reason that this problem exists?
What is the back story behind the need to do this job?
i.e. customers have to do it because of the change in regulations.

Students have to pursue higher education for
1. A better job with great salary
2. Research

### 7. BEHAVIOUR BE

What does your customer do to address the problem and get the job done?
i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

1. Speak to people regarding admission process at abroad
2. Search websites, blogs regarding the university
3. Reach out to alumni of the desired university

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

### 3. TRIGGERS TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

The seniors, cousins of students are the main motivation for students to fly abroad for higher education. Job opportunities with fancy salary are yet another trigger.

### 4. EMOTIONS: BEFORE / AFTER EM

How do customers feel when they face a problem or a job and afterwards?
i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

Before using the tool, students will be anxious. After the tool usage, students will be either excited of moving to new arena or motivated to score high

### 10. YOUR SOLUTION SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

Our solution will help UG graduates in short-listing universities for their masters with their CGPA, GRE, TOEFL scores. The predicted output will give them a fair idea about their admission chances in a particular university. This analysis will also help students who are currently preparing or will be preparing to get a better idea. . It will students to know more about university in terms of research opportunities, admission process, courses offered and prominent alumni of the university.

### 8. CHANNELS of BEHAVIOUR CH

**8.1 ONLINE**
What kind of actions do customers take online? Extract online channels from #7

**8.2 OFFLINE**
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

**Online**

1. Talk with friends, relatives,alumni
2. Read blogs

**Offline**

1. Reach out a career coach
2. Search for books relating to university

Identify strong TR & EM

# CHAPTER 4

# REQUIREMENT ANALYSIS

## 4.1 FUNCTIONAL REQUIREMENT

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task) |
|---|---|---|
| FR-1 | Calculate admission predictability | Enter GPA, TOEFL, GRE scores |
| FR-2 | Check information about university | Check previous year cut-off |
| FR-3 | Check information about prominent alumni | Access the community channel containing professors, current students and alumni |
| FR-4 | Watch campus tour | Check guide for visa application and other procedures |
| FR-5 | Check financial assistance tab | Check scholarship eligibility and application procedure |

## 4.2 NON-FUNCTIONAL REQUIREMENT

Following are the non-functional requirements of the proposed solution.

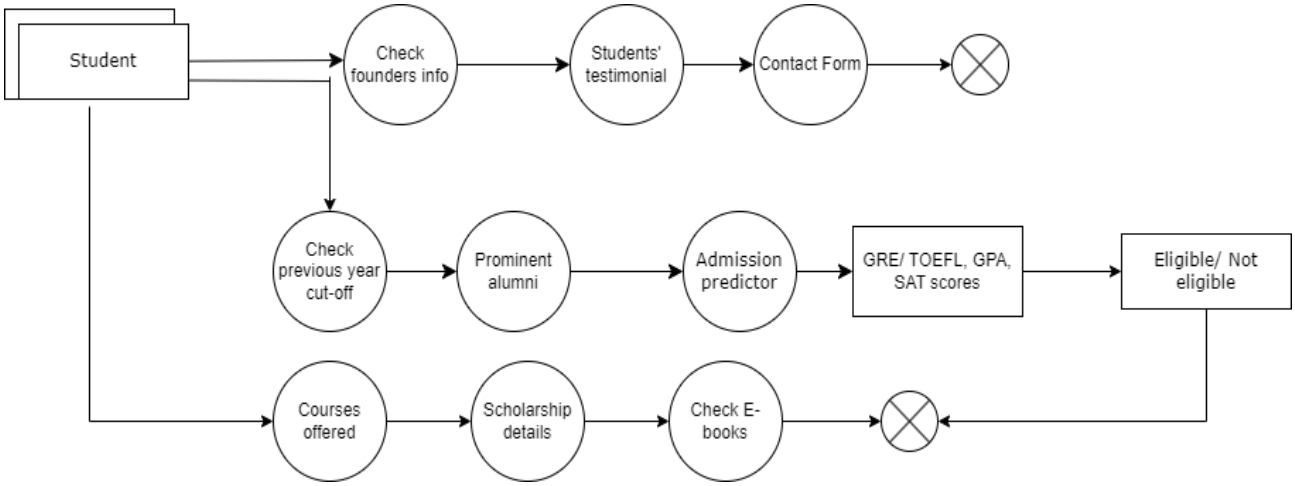
| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | **Usability** | The UI/UX enhances the user experience. The entire journey of the customer throughout the application will be hustle free making it a smooth experience for the user. |
| NFR-2 | **Security** | It is safe to use this application since no user data is stored |
| NFR-3 | **Reliability** | The system will give accurate and reliable results 98 percent of the times. |
| NFR-4 | **Performance** | The landing page supporting 1000 users per hour must provide 6 second or less response time in a Chrome desktop browser, including the rendering of text and images and over an LTE connection |
| NFR-5 | **Availability** | The admission predictor will be available to users 99.98 percent of the time every month. |
| NFR-6 | **Scalability** | The system must be scalable enough to support 1,000,000 visits at the same time while maintaining optimal performance. |

# CHAPTER 5

# PROJECT DESIGN

## 5.1 DATA FLOW DIAGRAM

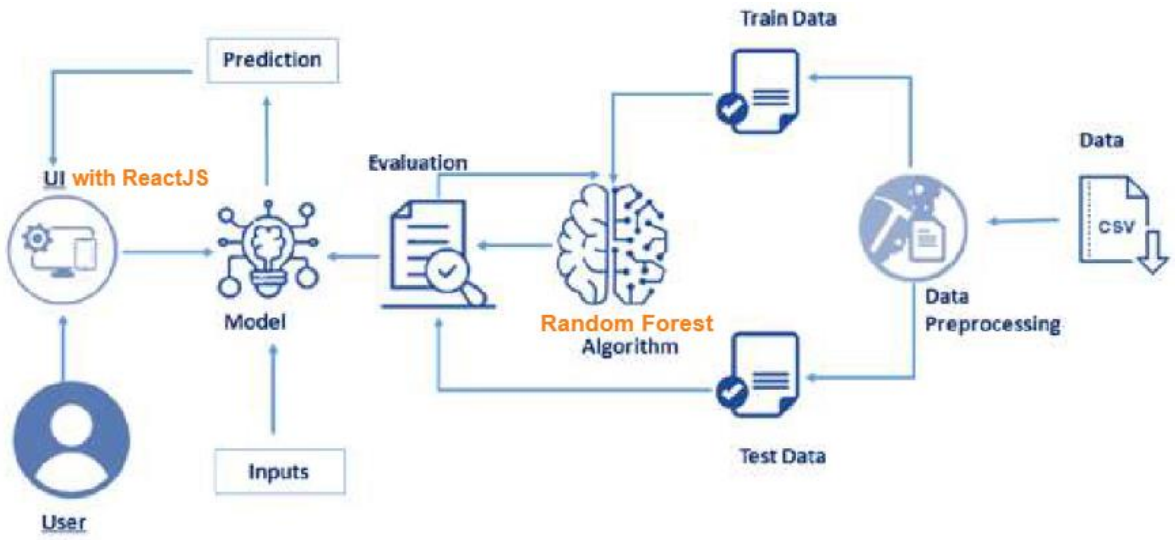
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.




## 5.2 SOLUTION & TECHNICAL ARCHITECTURE

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.




The UI will be developed with React JS. The model will be built using Random forest algorithm for good accuracy.

## 5.3 USER STORIES

Use the below template to list all the user stories for the product.

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Release |
|---|---|---|---|---|
| Customer | Landing page | USN-1 | As a user, I can view the details about the university | Sprint-1 |
| | | USN-2 | As a user, I can view the latest news about the university | Sprint-1 |
| | | USN-3 | As a user, I can fill the contact form for queries | Sprint-2 |
| | | USN-4 | As a user, I can see the social media profiles of the university | Sprint-1 |
| | | USN-5 | As a user, I can see testimonials of students who graduated from the university | Sprint-1 |
| | Admissions | USN-6 | As a user, I can see the previous year cut-off marks | Sprint-2 |
| | | USN-7 | As a user, I can read about proud alumni of the university | Sprint-2 |
| | | USN-8 | As a user, I can predict my eligibility for admission at the university | Sprint-2 |
| | Courses offered | USN-9 | As a user, I can see the courses offered by the university for PG students | Sprint-3 |
| | Events | USN-10 | As a user, I can check various | Sprint-3 |

| User Type | Functional Requirement (Epic) | User Story Number | User Story / Task | Release |
|---|---|---|---|---|
| | | | technical events about to happen in the university | |
| | E-books | USN-11 | As a user, I can download and read e-books relating to visa formalities | Sprint-3 |
| | Scholarship | USN-12 | As a user, I shall find resources regarding scholarship availability | Sprint-4 |
| | Test prep materials | USN-13 | As a user, I can download and read GRE, TOEFL test preparation materials | Sprint-4 |
| Administrator | Landing page | USN-14 | As an administrator, I shall update the news about the university | Sprint-4 |
| | Events | USN-15 | As an administrator, I can update the list of activities to be hosted | Sprint-4 |

# CHAPTER 6

# PROJECT PLANNING & SCHEDULING

## 6.1 SPRINT PLANNING & ESTIMATION

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story points | Team Members |
|---|---|---|---|---|---|
| Sprint-1 | Landing page | USN-1 | As a user, I can view the details about the university | 8 | Manjunathan, Mohana Sowdesh |
| Sprint-1 | | USN-2 | As a user, I can view the latest news about the university | 2 | Logeshkumar, Naveen Anend |
| Sprint-2 | | USN-3 | As a user, I can fill the contact form for queries | 2 | Mohana Sowdesh, Logeshkumar |
| Sprint-1 | | USN-4 | As a user, I can see the social media profiles of the university | 5 | Manjunathan, Mohana Sowdesh |
| Sprint-1 | | USN-5 | As a user, I can see testimonials of students who graduated from the university | 5 | Logeshkumar, Naveen Anend |
| Sprint-2 | Admissions | USN-6 | As a user, I can see the previous year cut-off marks | 8 | Mohana Sowdesh, Logeshkumar |
| Sprint-2 | | USN-7 | As a user, I can read about proud alumni of the university | 5 | Manjunathan, Mohana Sowdesh |
| Sprint-2 | | USN-8 | As a user, I can predict my eligibility for admission at the university | 5 | Naveen Anend, Logeshkumar |
| Sprint-3 | Courses | USN-9 | As a user, I can see the courses offered by the university for PG | 5 | Logeshkumar, Naveen Anend |

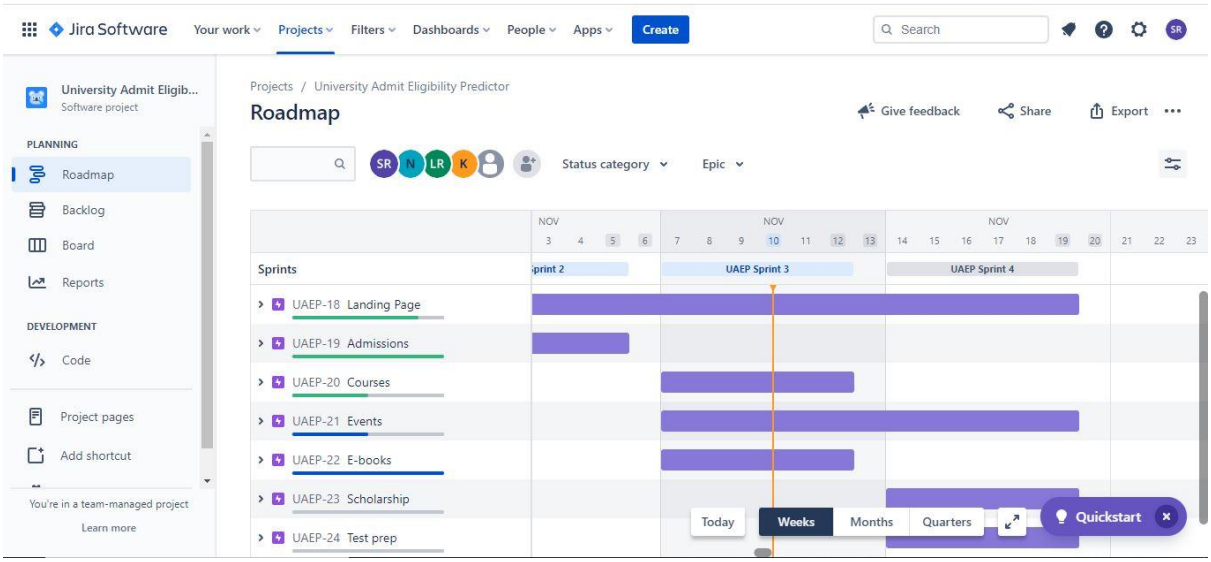
| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story points | Team Members |
|---|---|---|---|---|---|
| | | | students | | |
| Sprint-3 | | USN-10 | As a user, I can see the research facilities at the university | 5 | Logeshkumar, Mohana Sowdesh |
| Sprint-3 | Events | USN-11 | As a user, I can check various technical events about to happen in the university | 5 | Naveen Anend, Mohana Sowdesh |
| Sprint-3 | E-books | USN-12 | As a user, I can download and read e-books relating to visa formalities | 5 | Naveen Anend, Manjunathan |
| Sprint-4 | Scholarship | USN-13 | As a user, I shall find resources regarding scholarship availability | 8 | Mohana Sowdesh, Logeshkumar |
| Sprint-4 | Test prep | USN-14 | As a user, I can download and read GRE, TOEFL test preparation materials | 5 | Manjunathan, MohanaSowdesh |
| Sprint-4 | Landing page | USN-15 | As an administrator, I shall update the news about the university | 5 | Logeshkumar, Manjunathan |
| Sprint-4 | Events | USN-16 | As an administrator, I can update the list of activities to be hosted | 2 | Logeshkumar, Naveen Anend |

## 6.2 SPRINT DELIVERY SCHEDULE

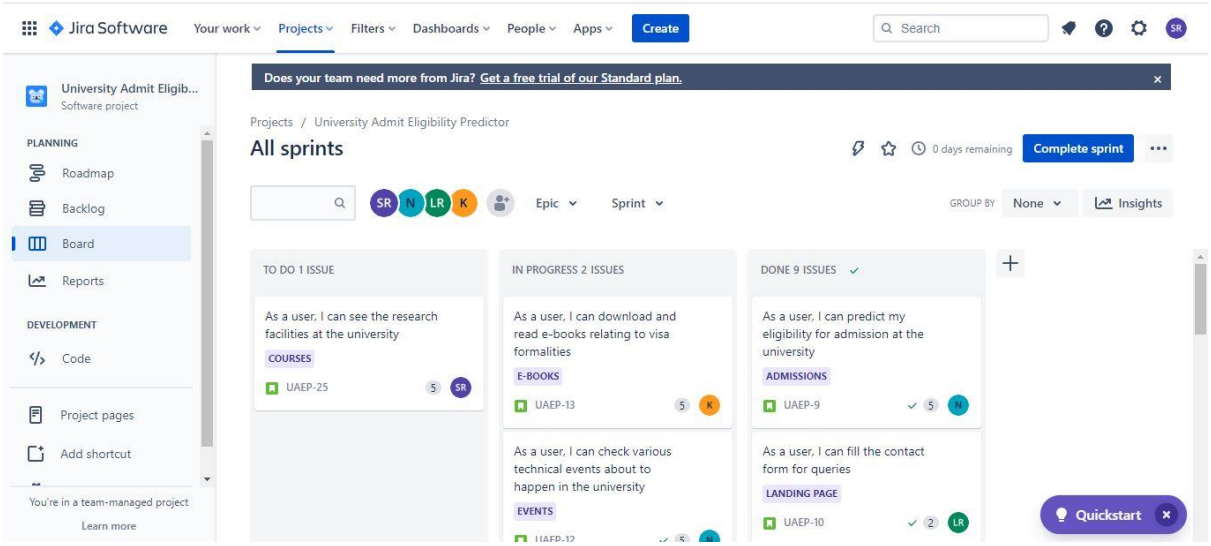
| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) |
|---|---|---|---|---|
| Sprint-1 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 |

## 6.3 REPORTS FROM JIRA

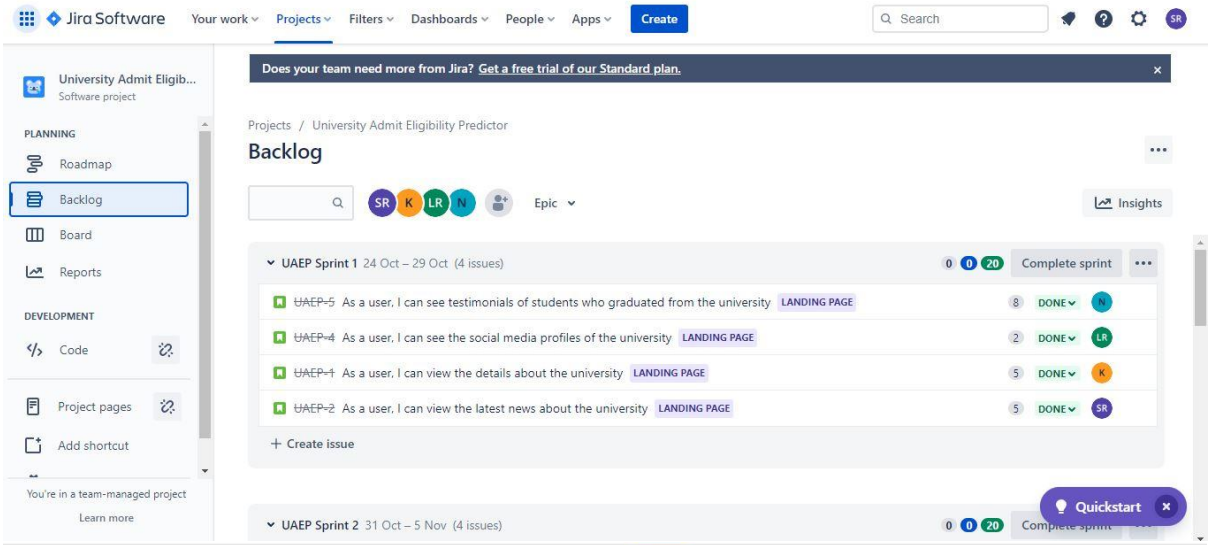
### Roadmap

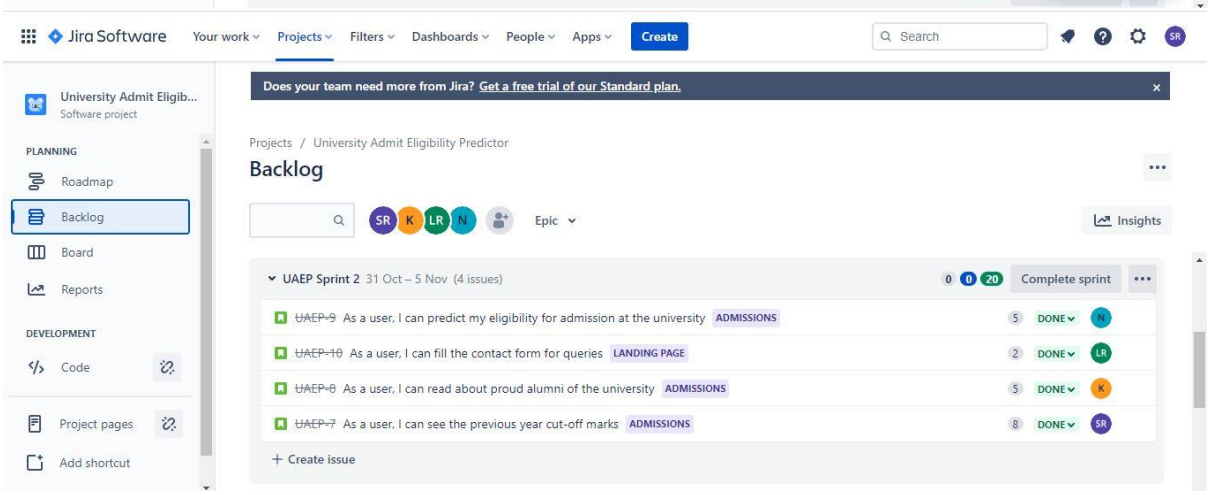


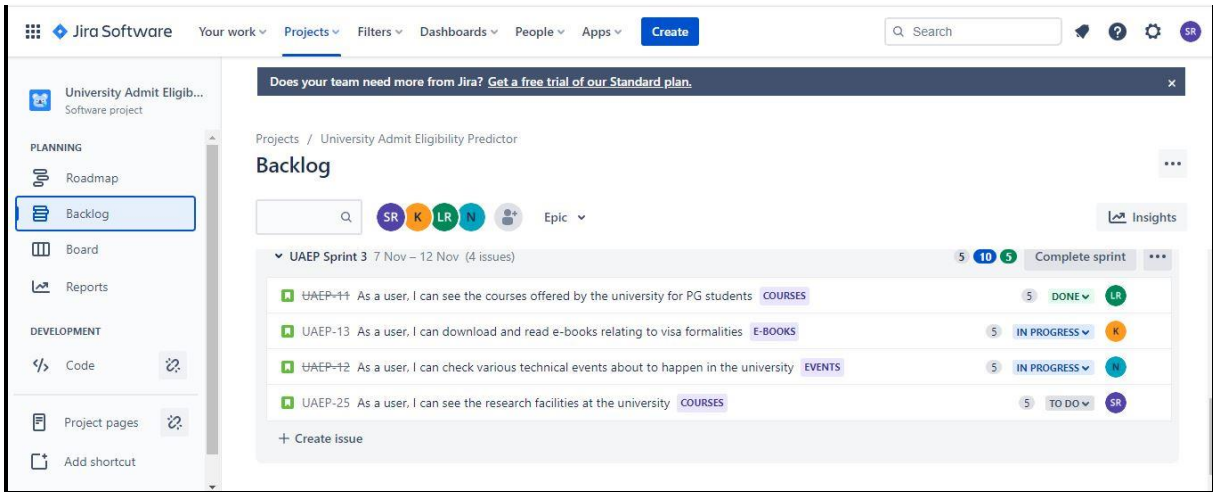
# Scrum board

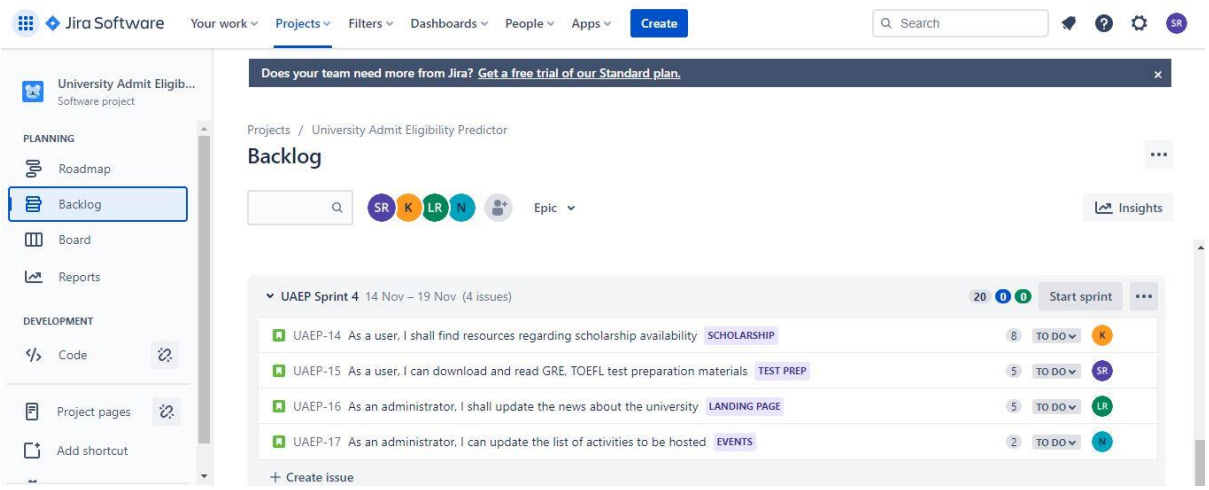



# Backlogs

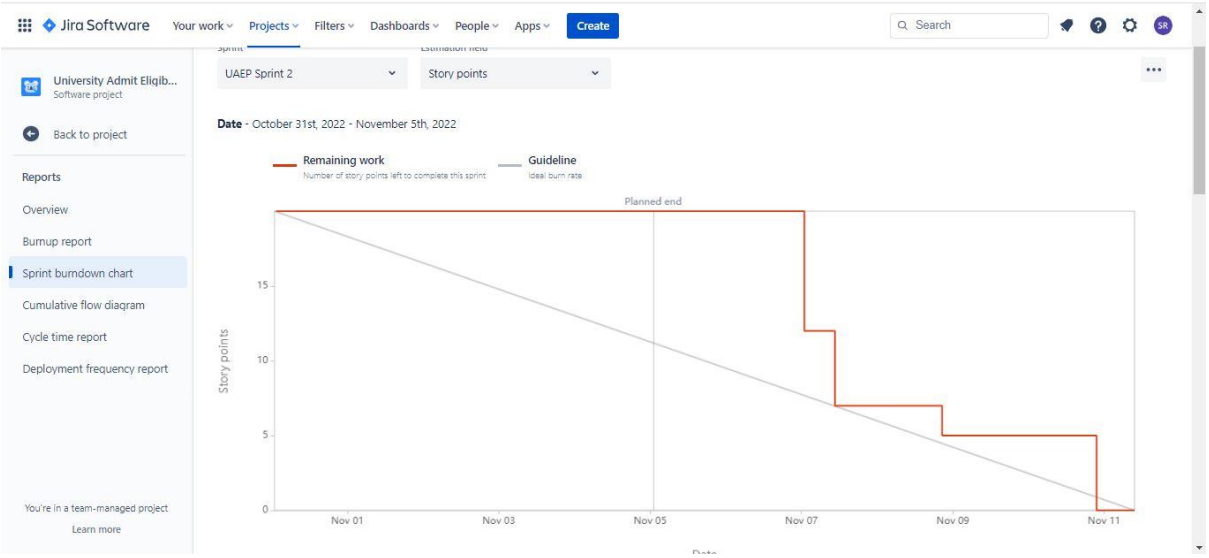




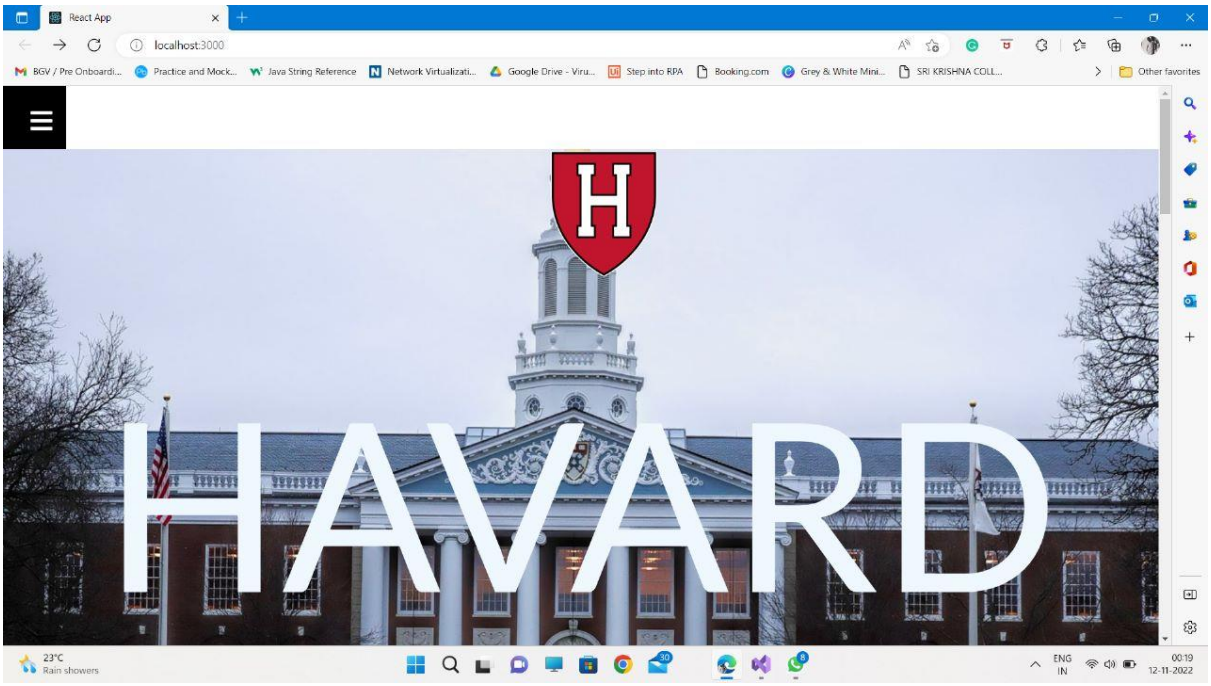

# Burndown chart

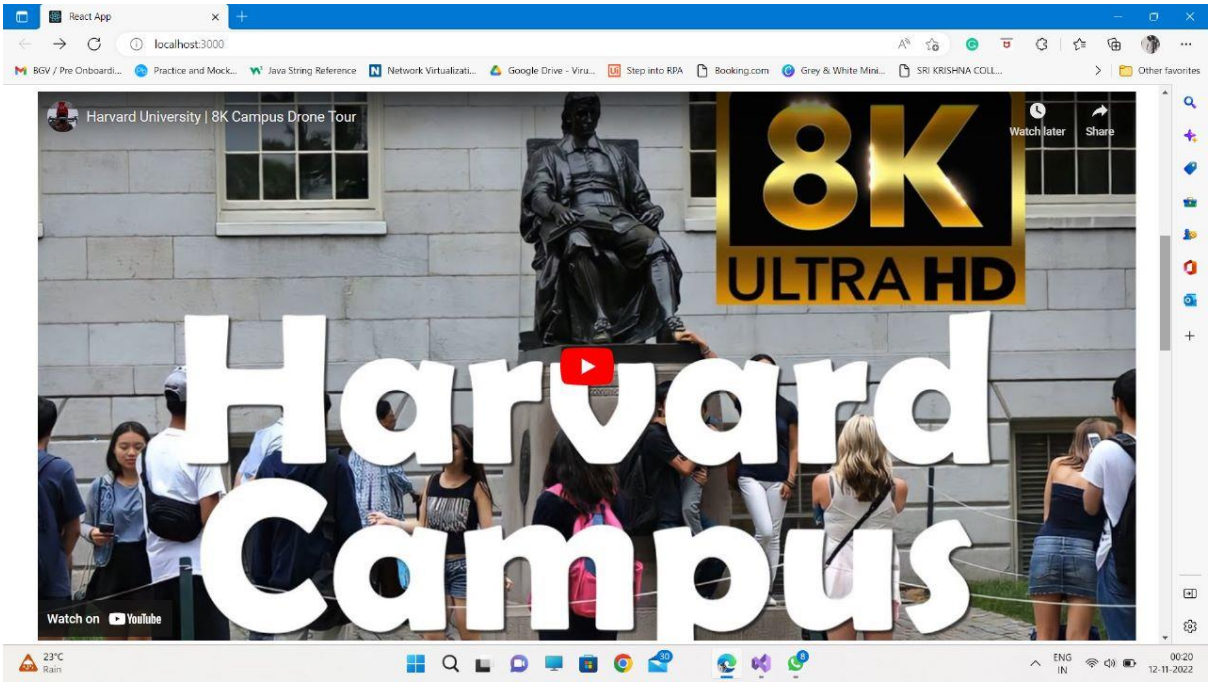


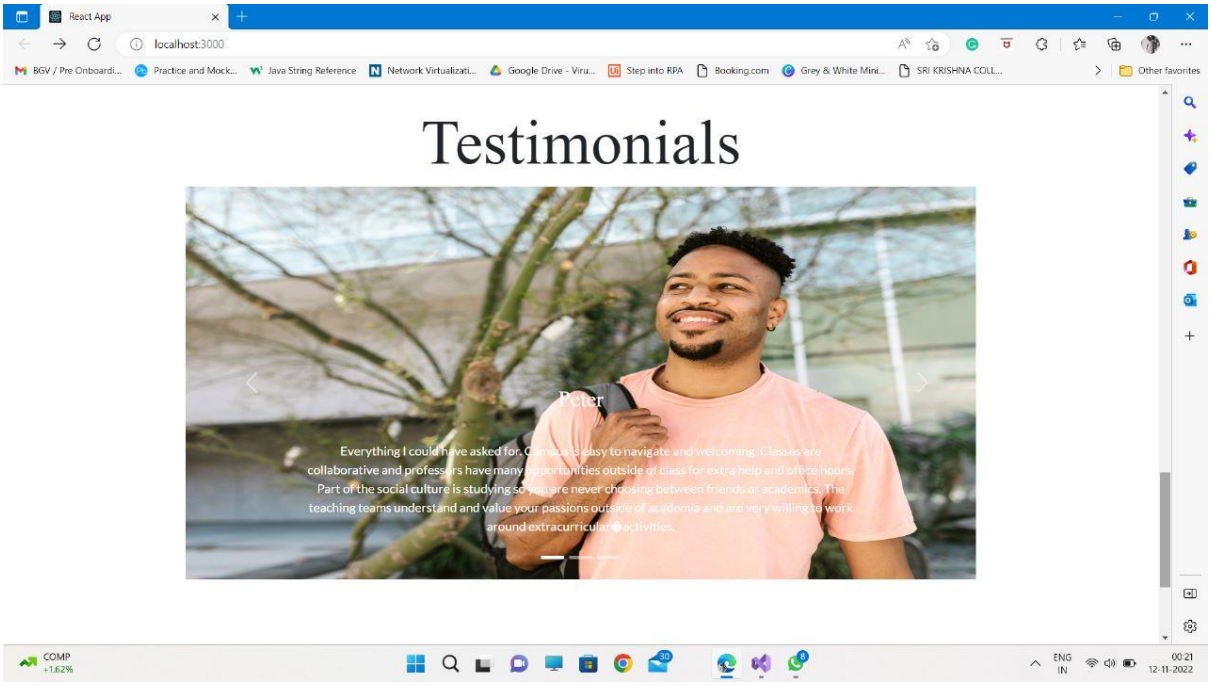
# CHAPTER 7

# CODING & SOLUTIONING

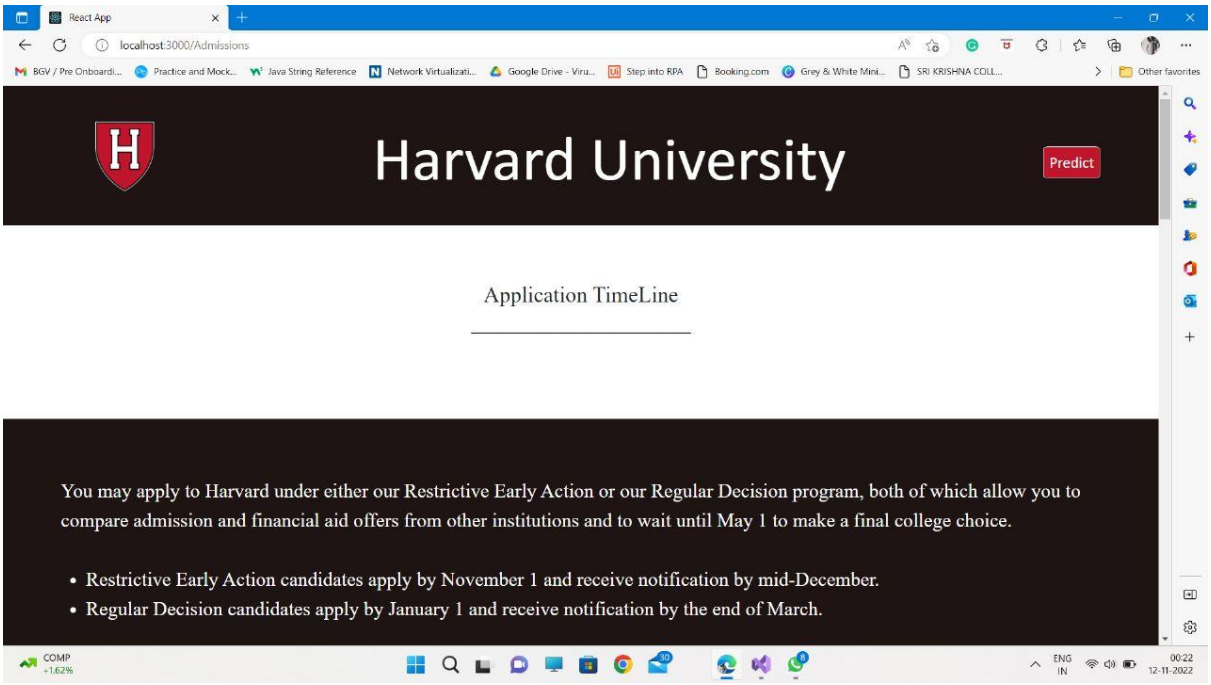
## 7.1 LANDING PAGE

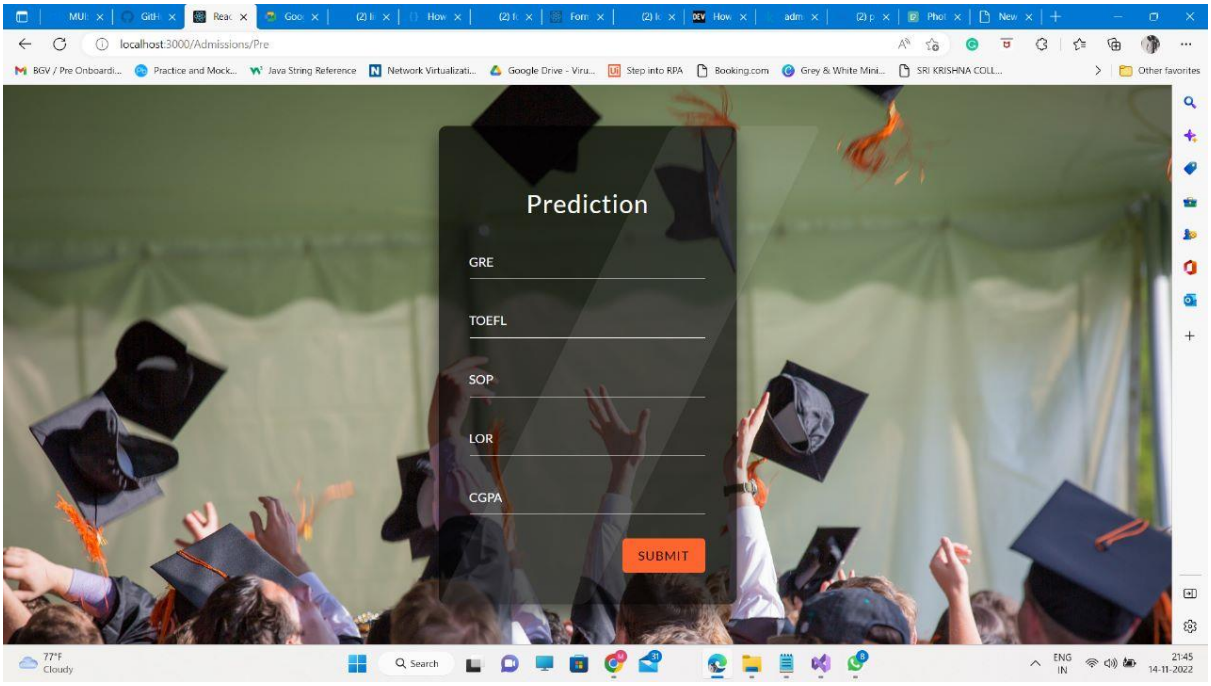


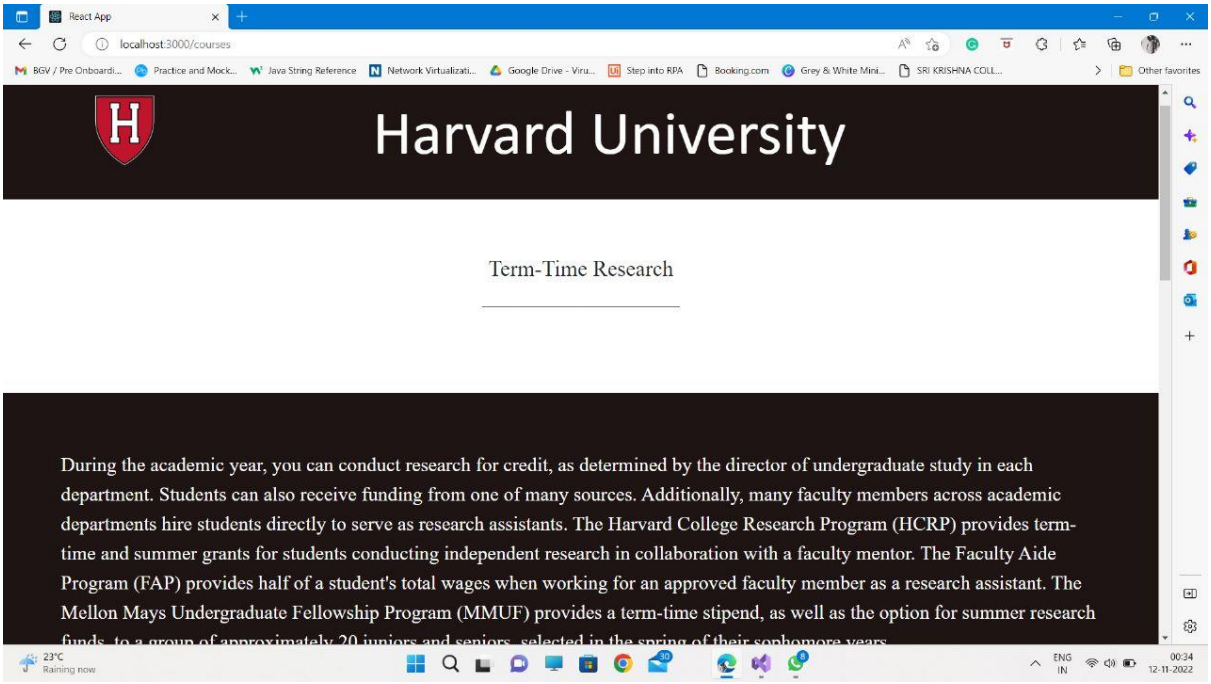





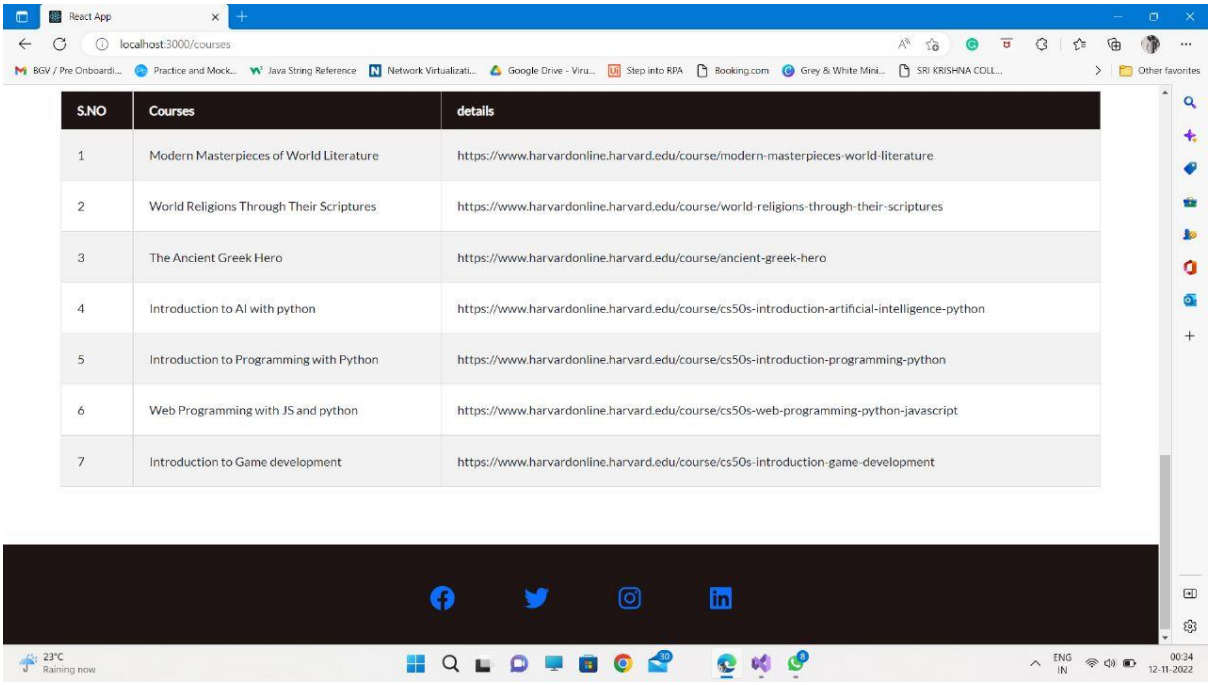

## 7.2 ADMISSIONS




localhost:3000/Admissions/Pre
Prediction
GRE
TOEFL
SOP
LOR
CGPA
SUBMIT

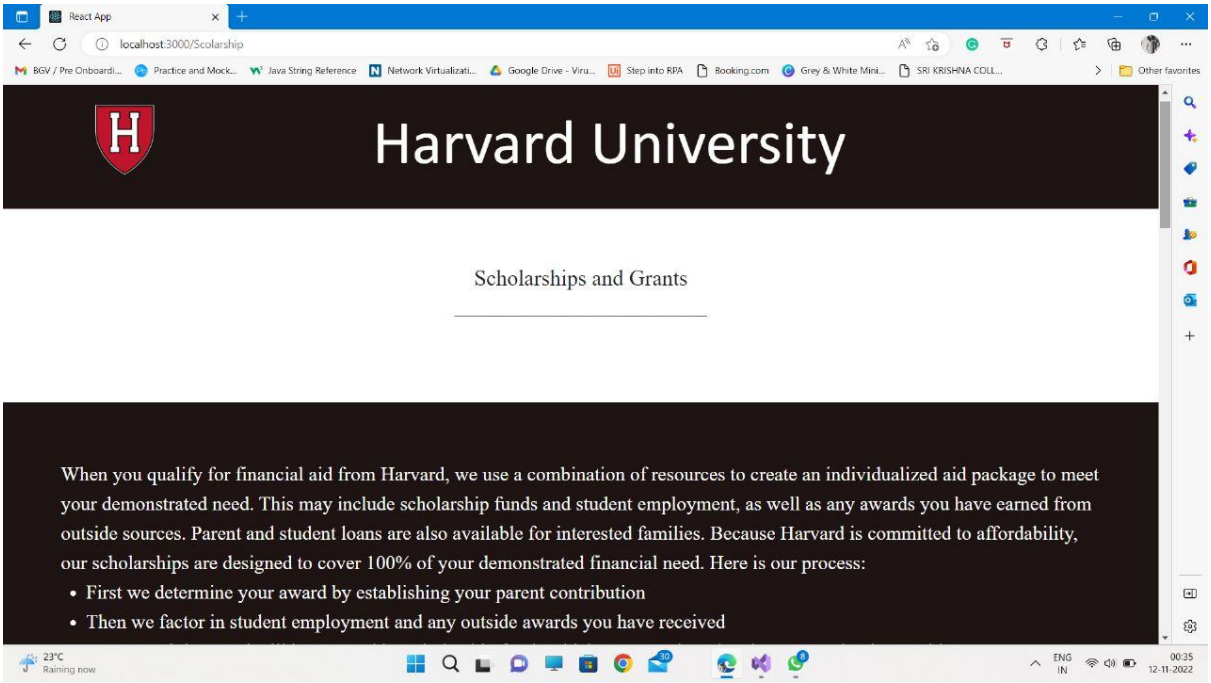

React App
localhost:3000/courses
Harvard University
Term-Time Research
During the academic year, you can conduct research for credit, as determined by the director of undergraduate study in each department. Students can also receive funding from one of many sources. Additionally, many faculty members across academic departments hire students directly to serve as research assistants. The Harvard College Research Program (HCRP) provides term-time and summer grants for students conducting independent research in collaboration with a faculty mentor. The Faculty Aide Program (FAP) provides half of a student's total wages when working for an approved faculty member as a research assistant. The Mellon Mays Undergraduate Fellowship Program (MMUF) provides a term-time stipend, as well as the option for summer research

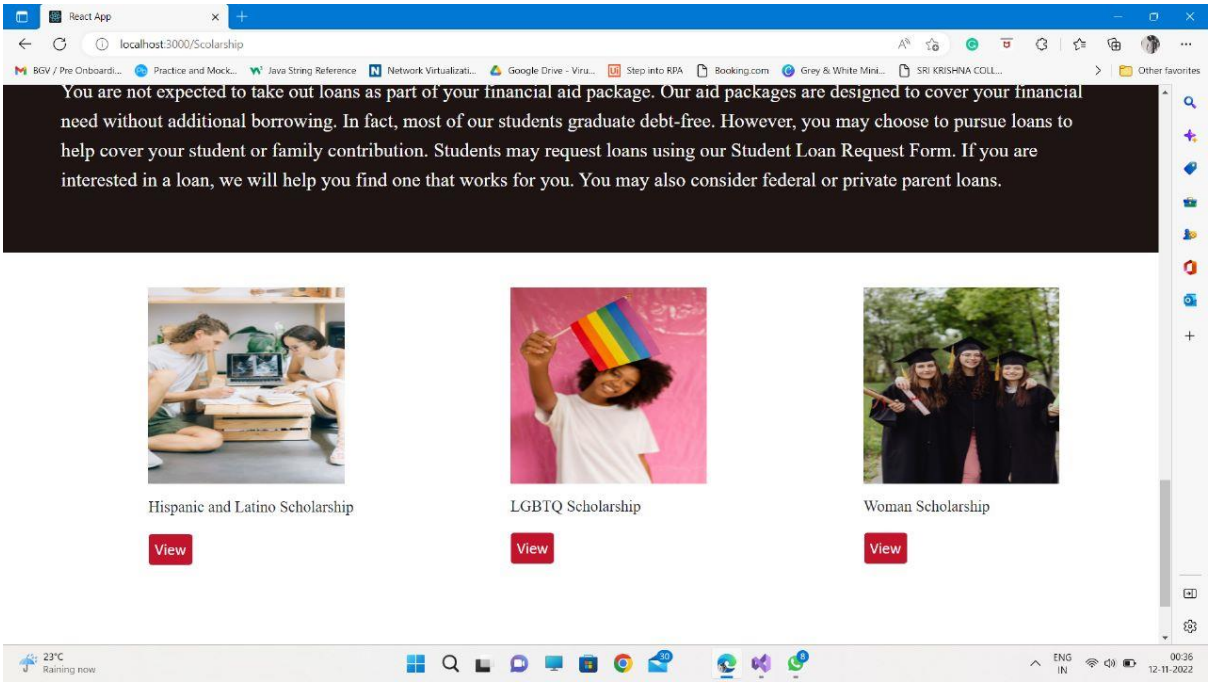
## 7.3 COURSES



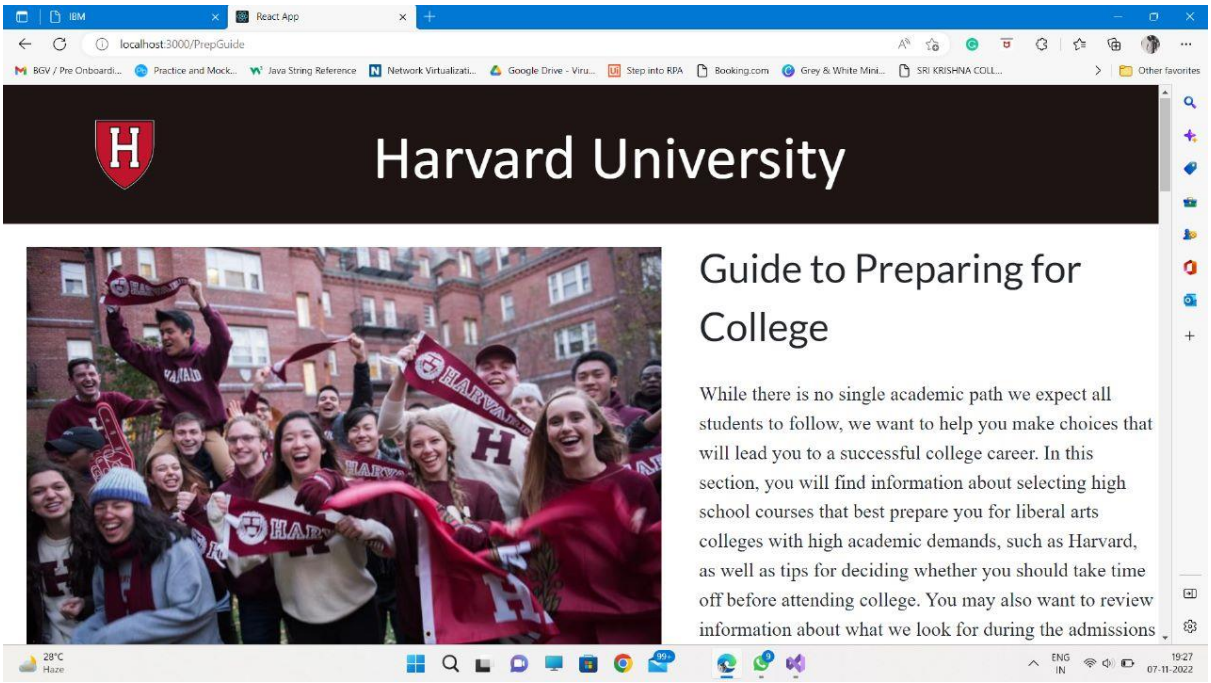
| S.NO | Courses | details |
|---|---|---|
| 1 | Modern Masterpieces of World Literature | https://www.harvardonline.harvard.edu/course/modern-masterpieces-world-literature |
| 2 | World Religions Through Their Scriptures | https://www.harvardonline.harvard.edu/course/world-religions-through-their-scriptures |
| 3 | The Ancient Greek Hero | https://www.harvardonline.harvard.edu/course/ancient-greek-hero |
| 4 | Introduction to AI with python | https://www.harvardonline.harvard.edu/course/cs50s-introduction-artificial-intelligence-python |
| 5 | Introduction to Programming with Python | https://www.harvardonline.harvard.edu/course/cs50s-introduction-programming-python |
| 6 | Web Programming with JS and python | https://www.harvardonline.harvard.edu/course/cs50s-web-programming-python-javascript |
| 7 | Introduction to Game development | https://www.harvardonline.harvard.edu/course/cs50s-introduction-game-development |

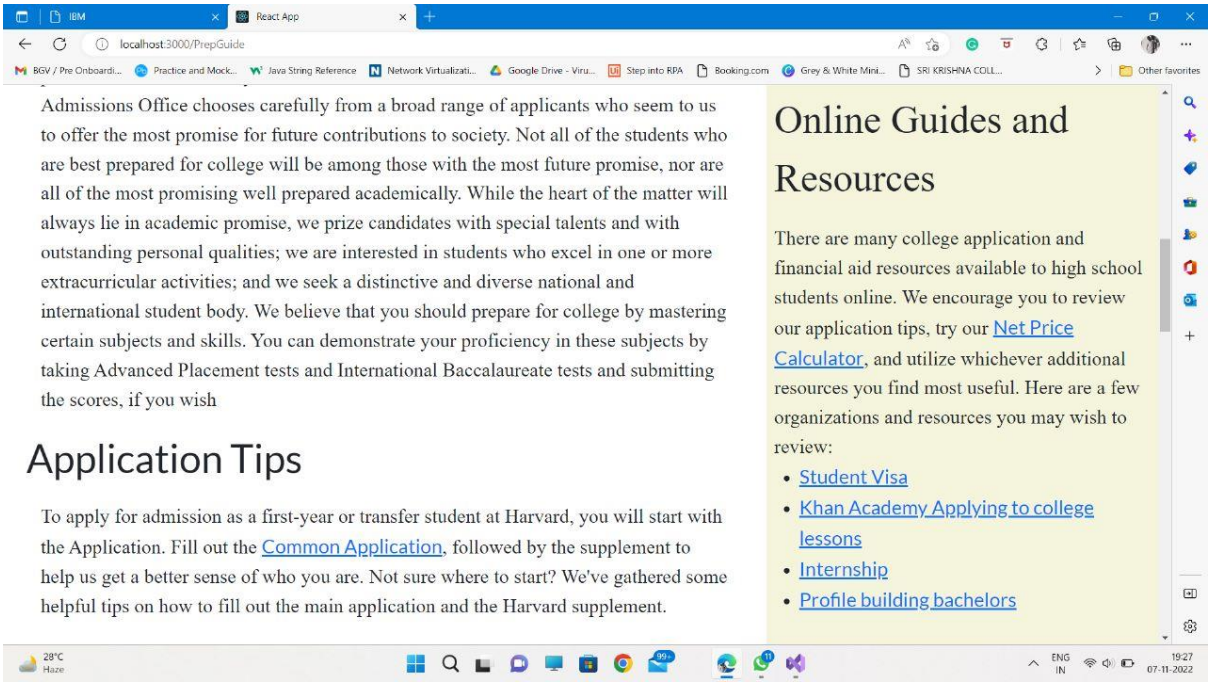
## 7.4 SCHOLARSHIP






## 7.5 PREP GUIDE




IBM
React App
localhost:3000/PrepGuide
Admissions Office chooses carefully from a broad range of applicants who seem to us to offer the most promise for future contributions to society. Not all of the students who are best prepared for college will be among those with the most future promise, nor are all of the most promising well prepared academically. While the heart of the matter will always lie in academic promise, we prize candidates with special talents and with outstanding personal qualities; we are interested in students who excel in one or more extracurricular activities; and we seek a distinctive and diverse national and international student body. We believe that you should prepare for college by mastering certain subjects and skills. You can demonstrate your proficiency in these subjects by taking Advanced Placement tests and International Baccalaureate tests and submitting the scores, if you wish
Application Tips
To apply for admission as a first-year or transfer student at Harvard, you will start with the Application. Fill out the Common Application, followed by the supplement to help us get a better sense of who you are. Not sure where to start? We've gathered some helpful tips on how to fill out the main application and the Harvard supplement.
Online Guides and Resources
There are many college application and financial aid resources available to high school students online. We encourage you to review our application tips, try our Net Price Calculator, and utilize whichever additional resources you find most useful. Here are a few organizations and resources you may wish to review:
Student Visa
Khan Academy Applying to college lessons
Internship
Profile building bachelors

# CHAPTER 8

# TESTING

## 8.1 TEST CASES

1. Verify if user is able to see landing page
2. Verify if the menu bar is clickable
3. Verify user is able to navigate to create your account page?
4. Verify user is able to recovery password
5. Verify login page elements are clear
6. Verify if the social media profiles of the university are accessible
7. Verify if proud alumni feature of the university are accessible
8. Verify if the guide files are downloaded

## 8.2 USER ACCEPTANCE TESTING

### Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

| Resolution | Severity1 | Severity2 | Severity3 | Severity4 | Subtotal |
|---|---|---|---|---|---|
| By Design | 4 | 4 | 2 | 3 | 13 |
| Duplicate | 1 | 0 | 3 | 0 | 4 |
| External | 2 | 3 | 0 | 1 | 6 |
| Fixed | 11 | 2 | 4 | 20 | 37 |
| Not Reproduced | 0 | 0 | 1 | 0 | 1 |
| Skipped | 0 | 0 | 1 | 1 | 2 |
| Won't Fix | 0 | 5 | 2 | 1 | 8 |
| Totals | 18 | 14 | 13 | 26 | 77 |

### Test Case Analysis

This report shows the number of test cases that have passed,failed and untested

| Section | TotalCases | Not Tested | Fail | Pass |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Print Engine | 2 | 0 | 0 | 2 |
| Client Application | 12 | 0 | 0 | 12 |
| Security | 1 | 0 | 0 | 1 |
| Outsource Shipping | 3 | 0 | 0 | 3 |
| Exception Reporting | 1 | 0 | 0 | 1 |
| Final Report Output | 4 | 0 | 0 | 4 |
| Version Control | 2 | 0 | 0 | 2 |

# CHAPTER 9

# RESULTS

## 9.1 PERFORMANCE METRICS

| FR No. | Non-Functional Requirement | Description |
|---|---|---|
| NFR-1 | **Usability** | The UI/UX enhances the user experience. The entire journey of the customer throughout the application will be hustle free making it a smooth experience for the user. |
| NFR-2 | **Security** | It is safe to use this application since no user data is stored |
| NFR-3 | **Reliability** | The system will give accurate and reliable results 98 percent of the times. |
| NFR-4 | **Performance** | The landing page supporting 1000 users per hour must provide 6 second or less response time in a Chrome desktop browser, including the rendering of text and images and over an LTE connection |
| NFR-5 | **Availability** | The admission predictor will be available to users 99.98 percent of the time every month. |
| NFR-6 | **Scalability** | The system must be scalable enough to support 1,000,000 visits at the same time while maintaining optimal performance. |

# ADVANTAGES & DISADVANTAGES

## ADVANTAGES:

- Avoids data redundancy and inconsistency.
- It is fast, efficient and reliable.
- It helps student for making decision for choosing a right college.
- Here the chance of occurrence of error is less when compared with the existing system.

## DISADVANTAGES:

- Machine errors are unavoidable when occurred. (Hardware failure, network failure, others).
- Reach to geographically scattered student.
- Reducing time in activities
- Paperless admission with reduced man power
- Operational efficiency
- The predictions made are not 100% accurate but accurate to an acceptable value.

# CONCLUSION

The project uses a Linear regressor to predict the output and a web application is built to make the UI more accessible and easy using various technologies such as python, React JS, HTML5, CSS, Flask, Scikit, Matplot, Numpy, Pandas, Seaborn and other libraries. After the deployment of the web application, it can be accessed from anywhere with internet connection. This project reduces the long hours of analysis to predict the eligibility of the admission to a rated university.

# FUTURE SCOPE

The future scope of this project is very broad. Few of them are:

- This can be implemented in less time for proper admission process.
- This can be accessed anytime anywhere, since it is a web application provided only an internet connection.
- The user had not need to travel a long distance for the admission and his/her time is also saved as a result of this automated system.

# APPENDIX

## GITHUB LINK

https://github.com/IBM-EPBL/IBM-Project-16755-1659621483