

**PROJECT
REPORT ON
YOUSCHOLAR**

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AHMEDABAD 2020-2021**

CERTIFICATE

Date: ____/____/____

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Institute Guide

Head of the Department

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This website is because of the dedication and encouragement of many individuals. We would like to thank our guide, the books which were very informative and the websites from where we got useful help in accomplishing the task of making this website. We are obligated to our Faculties and those people who helped us, inspired us, given moral support to us and encouraged us and helped us in various ways to accomplish the task.

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ABSTRACT

'YouScholar' is an elegantly crafted website to help the students find their appropriate scholarship easily and efficiently. We aim to create this website in order to tackle the problems students face these days regarding finding and applying for the right scholarship of their choice. As of now, there is no such website available in the Indian market, which gives the complete and clear information about the available scholarships, the documents required to successfully apply for it, the time duration for them etc. And thus, applying for scholarships and keeping updated with it is usually a rigorous and time-consuming task. Our main goal with this website is to help make the student's search for the right scholarship simple and easy, minimizing efforts from their part so they no longer have to spend long duration of time for finding and applying for the right scholarship.

CHAPTER 1

INTRODUCTION

1.1 NEED OF THE SYSTEM

- As of now, there is no available system in the Indian market that provides clear and complete information about all the scholarships and the procedure of applying for them in one place.
- Due to this, there are a lot of complications regarding finding and applying for the right scholarship, making it a very strenuous and time consuming process.

1.2 DETAILED PROBLEM DEFINATION

- Applying for scholarships these days is usually a very time consuming process, requiring a lot of efforts from the student's side. However despite their efforts, many times they are not able to find or successfully apply for the right scholarship for them.
- Hence, by creating this website, we aim to substantially lessen the time and effort required by the user's side by providing every single information about the available scholarships in one place. Additional functionalities like Expert help, Advanced Filters, etc. help to further simplify the process for students.

1.3 VIABILITY OF THE SYSTEM

- This website not only provides all the required information about the available scholarships and the requirements to apply for it, but it also regularly provides students the updates and news, ability to read and write reviews about the scholarships, provides special help from experts

etc. making it a complete website which provides the users a delightful experience.

- This will eliminate the excess time required to apply and follow up with their procedure of successfully acquiring the scholarship. By this way, students are also more likely to not miss out on the deadlines due to the clear information available in the website.

1.4 CURRENTLY AVAILABLE SYSTEM

(All the systems listed below provide the information of scholarships available in USA, as of now there is no available system that provides the necessary complete information about all the scholarships in one place.)

- FastWeb
- ScholarshipMonkey
- ASU Scholarships
- FederalStudentAid

1.5. FUTURE PROSPECTS

- We aim to include a blog section where people can write in depths about their experiences regarding courses, colleges, education etc.
- We also aim to provide a forum where open discussion can be held amongst the students.
- We can also provide brief quizzes of different courses for the students.

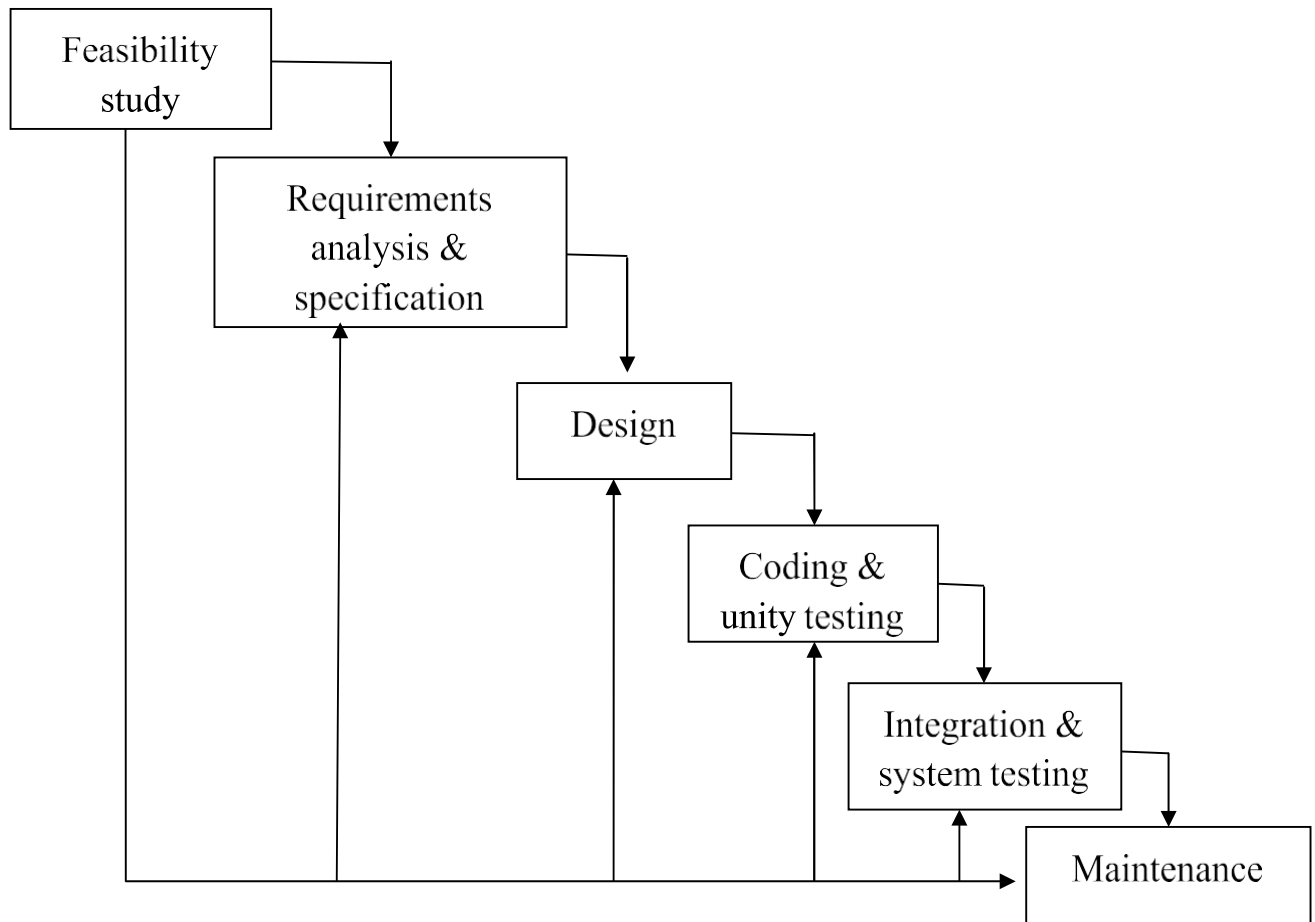
2.1 Requirement analysis

- This website encapsulates all the available scholarship details in different places in one place, making it very simple for the students to find their appropriate scholarship and apply for it.
- With the help of Expert help, users are able to specially ask questions to our experts regarding any doubts or issues they face regarding any scholarships and get a quick answer.
- News and updates provided in the website will keep the users updated with any changes taken place or inform them about the introduction of any new scholarships.
- Reviews, Effective Search, Advanced Filters, etc. further help the students find their appropriate scholarships.

2.2 Project model

- In the Iterative model, iterative process starts with a simple implementation of a small set of the software requirements and iteratively enhances the evolving versions until the complete system is implemented and ready to be deployed.
- An iterative life cycle model does not attempt to start with a full specification of requirements.

- Instead, development begins by specifying and implementing just part of the software, which is then reviewed to identify further requirements.
- This process is then repeated, producing a new version of the software at the end of each iteration of the model.



[Figure 1: Iterative Waterfall Model]

Advantages:

- It is more cost effective to change the scope or requirements in Iterative model.

- Parallel development can be planned.
- Testing and debugging during smaller iteration is easy.
- Risks are identified and resolved during iteration; and each iteration is an easily managed.

Disadvantages:

- More resources may be required.
- Highly skilled resources are required for skill analysis.
- Project progress is highly dependent upon the risk analysis phase.

2.3 Schedule Representation

Generalized project scheduling tools and technique can be applied with little modification to software projects.

Program evolution and review techniques (PERT) and critical path method (CPM) are two project scheduling method that can be applied to software development. Both techniques are driven by information already developed in earlier project planning activities:

- Estimate of effort.
- A decomposition of the product function.
- The selection of appropriate task set.
- Decomposition of tasks.

[Table 1: Schedule Representation]

ACTIVITY	START DATE	FINISH DATE
Requirement Analysis		
System Analysis		
System Design		
System Coding		
Testing and Integration		

2.4 Feasibility study

2.4.1 Technical Feasibility:

This assessment is based on an outline design of system requirements, to determine whether the company has the technical expertise to handle completion of the project. When writing a feasibility report, the following should be taken to consideration:

- A brief description of the business to assess more possible factors which could affect the study.
- The part of the business being examined.
- The human and economic factor.
- The possible solutions to the problem.
- This system include firebase to store the information of user in the database easily.

2.4.2 Economic Feasibility:

In economic feasibility, cost benefit analysis is done in which expected costs and benefits are evaluated. Economic analysis is used for evaluating the effectiveness of the proposed system.

This system is made on low budget and it will allow user the opportunity to the for the free which is beneficial for all the ends.

Economically, the application provide various features in no cost.

2.4.3 Operational Feasibility:

A feasibility study is an assessment of the practicality of a proposed project or system. A feasibility study aims to objectively and rationally uncover the strengths and weaknesses of an existing business. In its simplest terms, the two criteria to judge feasibility are cost required and value to be attained.

This system is very time efficient as the user can easily answer the question daily, which would not take more than few minutes to track the progress of their entire day.


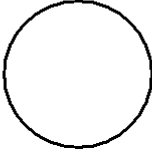
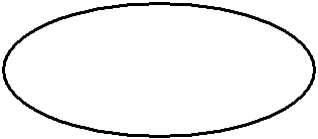
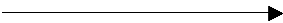
It provides daily inspiration and tips for students so that they can stay motivated on their journey.

In addition to their daily progress, they can check their weekly and monthly progress when necessary to stay on track with their long term goals.

3.1 Data Flow Diagram

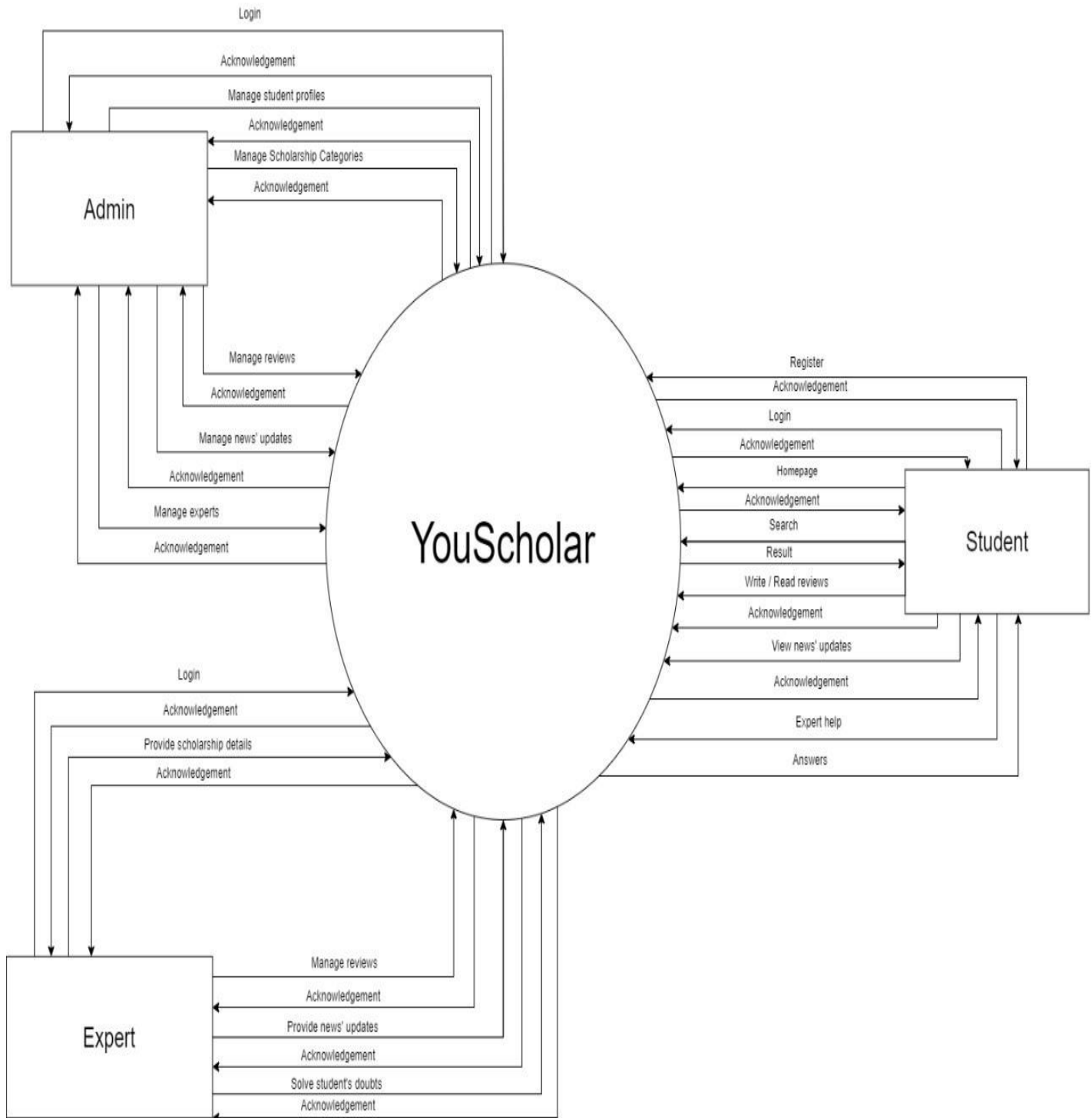
DFD (data flow diagram) is also known as bubble chart or data flow graph. DFD's are very useful in understanding the system and can be effectively used during analysis. It shows flow of data through a system visually. The DFD is a hierarchical graphical model of a system the different processing activities or functions that the system performs and the data interchange among these functions. It views a system as a function that transforms the inputs into desired output. Each function is considered as a process that consumes some input data and produces some output data. Function model can be represented using DFD.

[Table 2: Data Flow Diagram Symbols]

Symbols	Description
	Entity: Entities are external to the system which interacts by inputting the data.
	System: It shows the system name.
	Process: It shows the part of the system that transforms into outputs.
	Data Flow: It passes the data from one part to another.

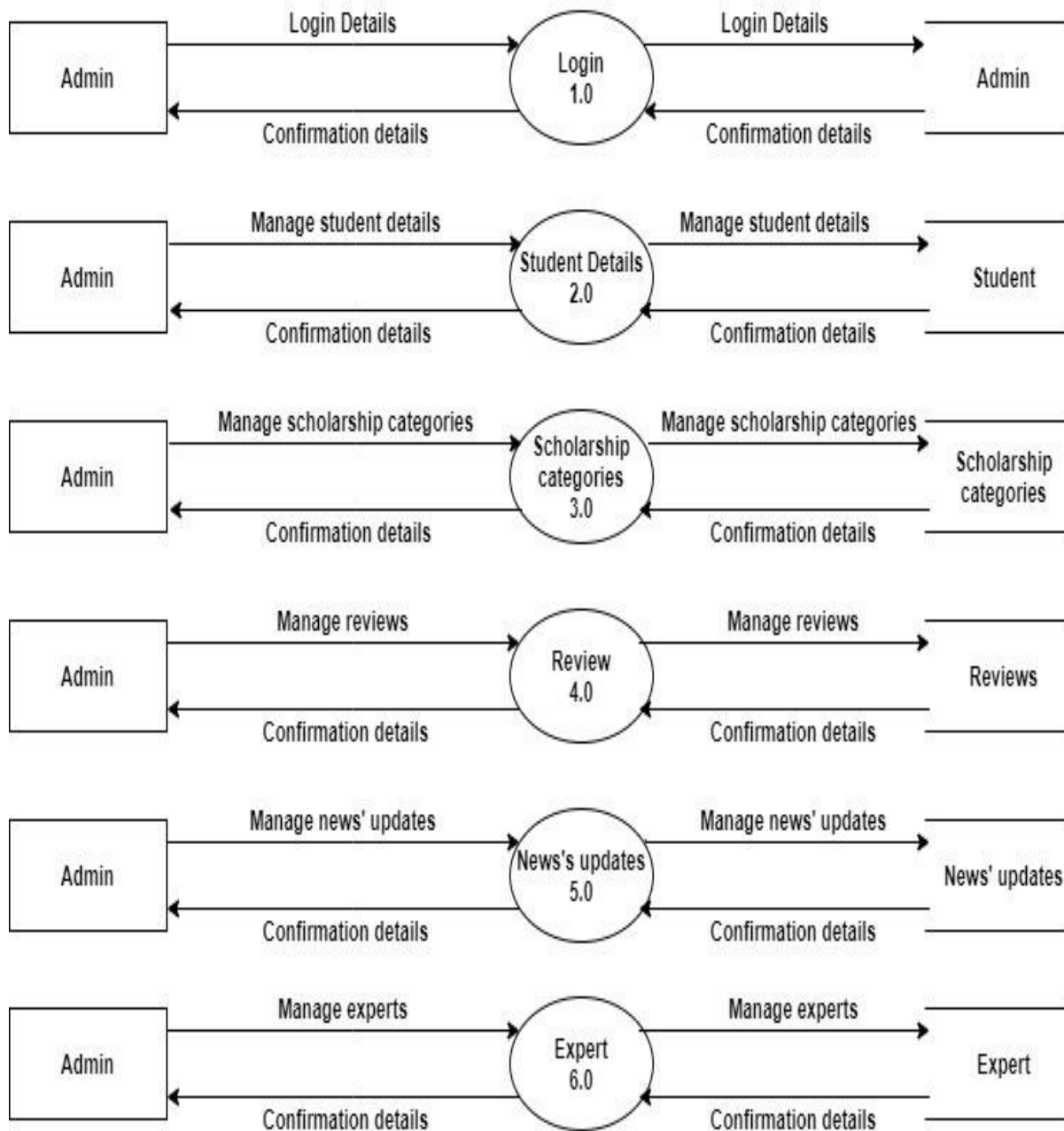
_____	Data Store: Data store is represented by two parallel lines. It is generally logical file or database.
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1. DFD Level 0:



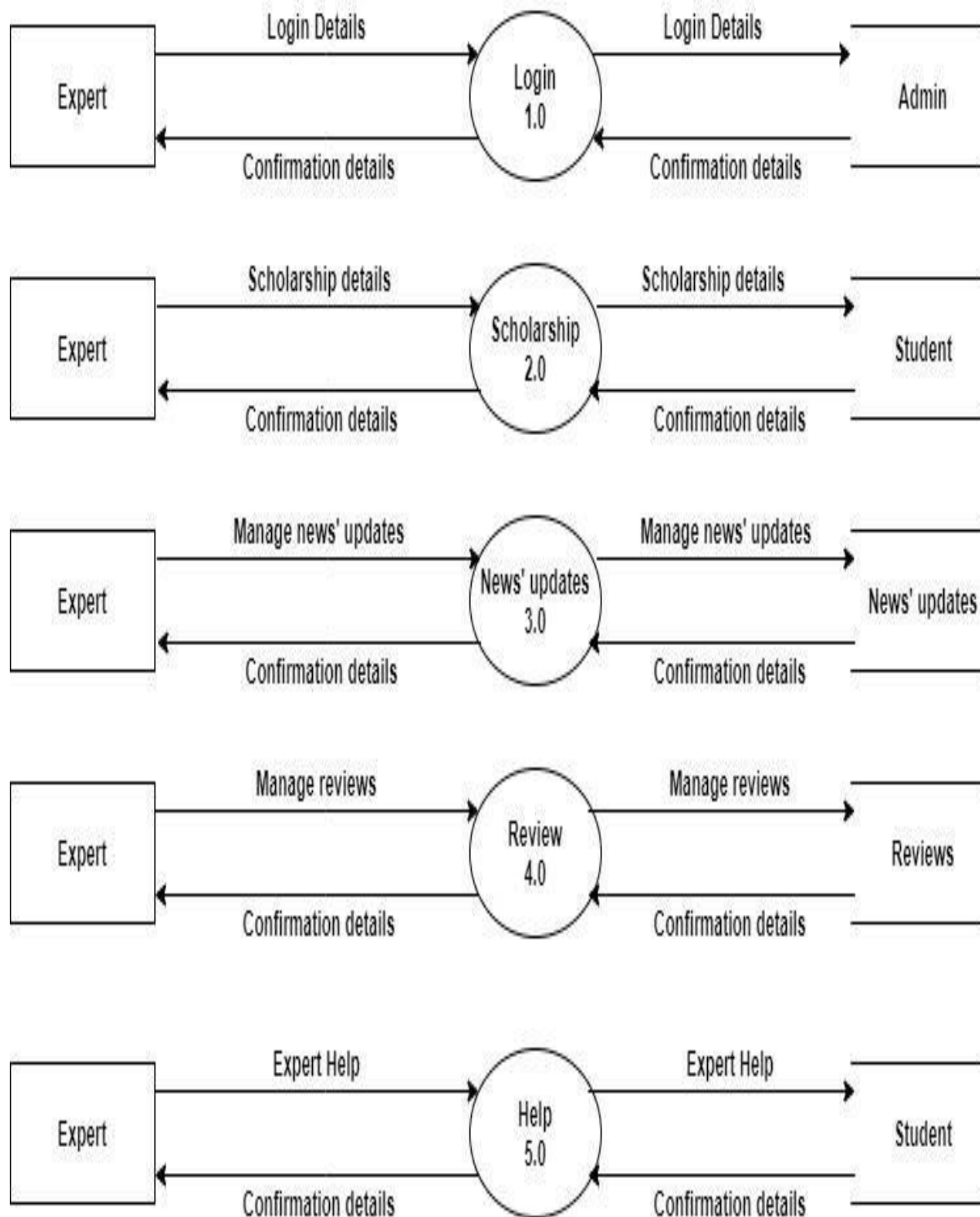
[Figure 2 : DFD Level 0]

2. Admin Level 1:



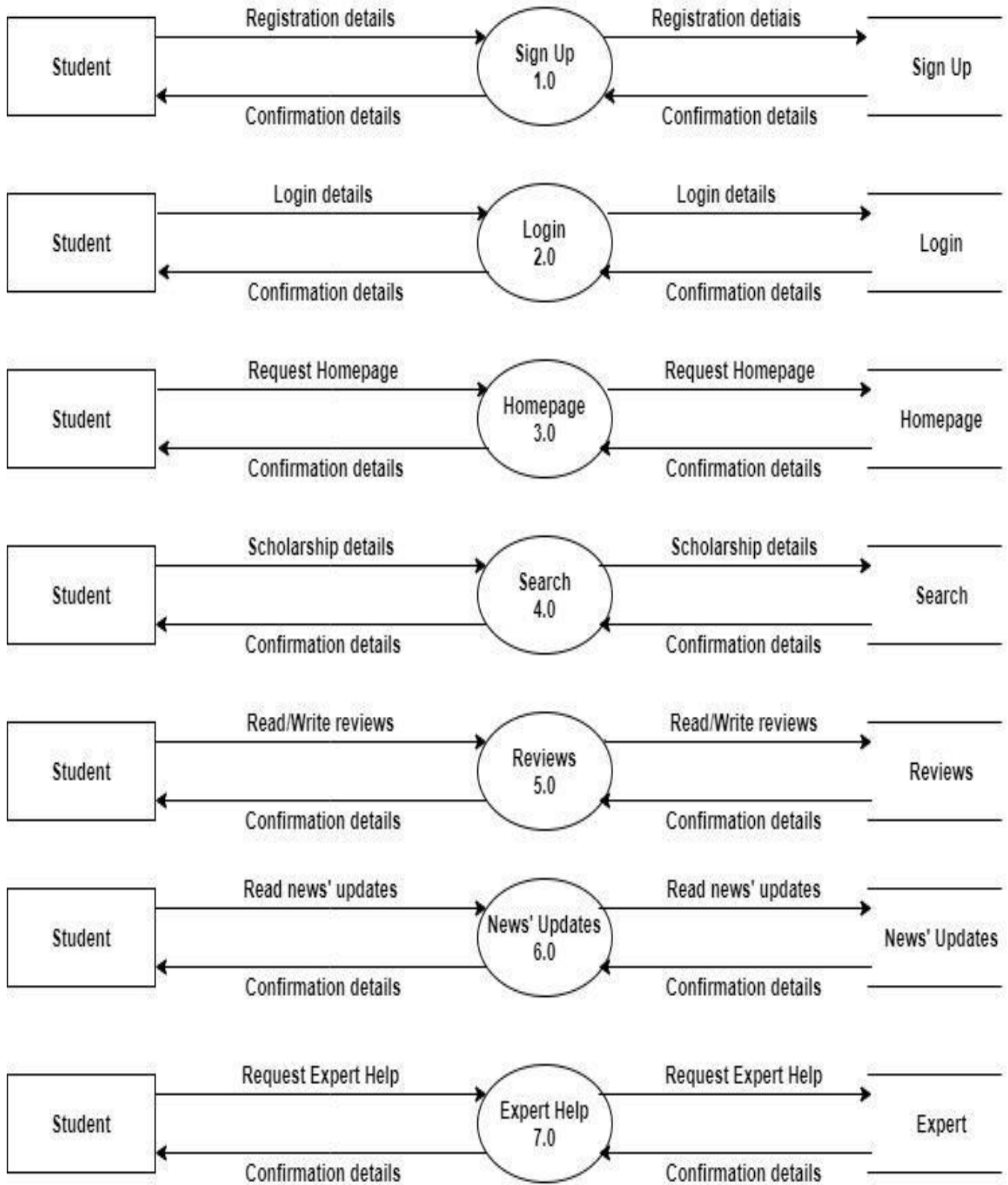
[Figure 3: Admin Level 1]

3. Expert Level 1:



[Figure 4: Expert Level 1]

4. Student Level 1:


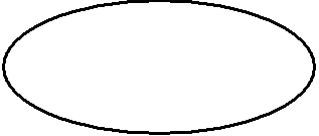
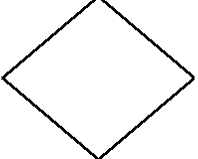




[Figure 5: Student Level 1]

3.2 ER-Diagram

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how “entities” such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships and their attributes. They mirror grammatical structure, with entities as nouns and relationships as verbs.

[Table 3: ER-Diagram Symbols]

Symbols	Description
	Entity: Data object is real world entity or thing.
	Attributes: An attribute is property of Characteristic of an entity.
	Relationship: Entity are connected each other via relations. Generally, relationships in binary because there are two entities are related to each other.
	Cardinality (One to One): An instance of entity A can relate to one only instance of B and vice versa.
	Cardinality (One to Many): An instance of entity A can relate to one or many instances of B but he can only relate one instance of A.

4.1 Data Dictionary

A data dictionary is a collection of descriptions of the data objects or items in a data model for the benefit of programmers and others who need to refer to them. A first step in analyzing a system of objects with which users interact is to identify each object and its relationship to other objects. This process is called data modeling and results in a picture of object relationships. After each data object or item is given a descriptive name, its relationship is described (or it becomes part of some structure that implicitly describes relationship), the type of data (such as text or image or binary value) is described, possible predefined values are listed, and a brief textual description is provided. This collection can be organized for reference into a book called a data dictionary.

When developing programs that use the data model, a data dictionary can be consulted to understand where a data item fits in the structure, what values it may contain, and basically what the data item means in real-world terms. For example, a bank or group of banks could model the data objects involved in consumer banking. They could then provide a data dictionary for a bank's programmers. The data dictionary would describe each of the data items in its data model for consumer banking (for example, "Account holder" and "Available credit").

4.2 Database Designing

Data Dictionary:

Table Name:-admin_master

Primary key:-admin_id

Foreign key:-N/A

[Table 4: admin_master]

Field_name	Data_type	Constraints	Description
admin_id	Int(5)	Primary key, Auto Increment	Stores Admin id
admin_name	Varchar(35)	Not Null	Stores Admin name
admin_email	Varchar(50)	Not Null	Stores Admin email
admin_password	Varchar(20)	Not Null	Stores Admin password

Table Name: user_master

Primary key:-user_id

Foreign key:-user_id references edu_master, state_master, caste_master

[Table 5: user_master]

Field_name	Data_type	Constraints	Description
user_id	Int(5)	Primary key, Auto Increment	Stores id of user
user_name	Varchar(35)	Not null	Stores user Name
user_email	Varchar(50)	Not null, Check	Stores user email
user_password	Varchar(20)	Not null	Stores the password of user
user_mobile	Int(10)	Not null	Stores the contact of User
user_dob	Varchar(6)	Not null	Stores date of birth of user

course_id	Varchar(15)	Foreign Key	Stores course id
caste_id	Varchar(15)	Foreign Key	Stores caste id
state_id	Varchar(15)	Foreign Key	Stores state id

Table Name: edu_details_master

Primary key:- edu_id

Foreign key:- N/A

[Table 6: edu_details_master]

Field_name	Data_type	Constraints	Description
course_id	Int(15)	Not null	Stores course id
edu_course	Varchar(40)	Not null	Stores the names of the course

Table Name: state_details_master

Primary key:- state_id

Foreign key:- N/A

[Table 7: state_details_master]

Field_name	Data_type	Constraints	Description
state_id	Int(15)	Not null	Stores state id
state_name	Varchar(25)	Not null	Stores the names of the state

Table Name: caste_details_master

Primary key:- caste_id

Foreign key:- N/A

[Table 8: caste_details_master]

Field_name	Data_type	Constraints	Description
caste_id	Int(15)	Not null	Stores caste id
caste_name	Varchar(15)	Not null	Stores the names of the caste

Table Name:-expert_master

Primary key:-expert_id

Foreign key:-N/A

[Table 9: expert_master]

Field_name	Data_type	Constraints	Description
expert_id	Int(5)	Primary key, Auto Increment	Stores expert id
expert_Name	Varchar(35)	Not null	Stores name of expert
expert_password	Varchar(20)	Not null	Stores password of expert
expert_mail	Varchar(30)	Not null	Stores E-mail of expert
expert_area	Varchar(30)	Not null	Stores locality of expert
expert_org	Varchar(30)	Not null	Stores organization of expert
expert_contact	Varchar(10)	Not null	Stores contact of expert

Table Name:-scholarship_master

Primary key:- scholarship_id

Foreign key:- scholarship_id references scholarship_category_master

[Table 10: scholarship_master]

Field_name	Data_type	Constraints	Description
scholarship_id	Int(4)	Primary key, Auto Increment	Stores scholarship id
scholarship_title	Varchar(40)	Not Null	Stores scholarship title
scholarship_desc	Text	Not Null	Stores the scholarship Description
scholarship_url	Varchar(10)	Not Null	Stores the URL of Scholarship
scholarship_count	Int(8)	Not Null	Stores view count of the Scholarship
Is_countryLevel	Boolean(true)	Not Null	Checks weather applicable to whole country or not
scholarship_cat_id	Int(4)	Foreign Key	Stores scholarship category id

Table name:-Scholarship_category_master

Primary key:-category_id references state_id, caste_id

Foreign key:-N/A

[Table 11: scholarship_category_master]

Field_name	Data_type	Constraints	Description
scholarship_cat_id	Int(4)	Not Null	Stores scholarship category id
scholarship_id	Int(4)	Not Null	Stores scholarship id
category_marks	Varchar(15)	Not Null	Stores marks required
state_id	Int(15)	Not Null	Stores state id
caste_id	Int(15)	Not Null	Stores caste id

Table Name:-help_master

Primary key:- help_id

Foreign key:- user_id references

user_master,

expert_id references expert_master

[Table 12: help_master]

Field_name	Data_type	Constraints	Description
help_id	Int(4)	Primary key, Auto Increment	Stores the help id
help_desc	Text	Not Null	Stores the description of query
help_ans	Text	Not Null	Stores the answer from the expert
help_date_rq	DateTime	Not Null	Stores date and time of help requested
help_date_ans	DateTime	Not Null	Stores date and time of help provided
user_id	Int(5)	Foreign key	Stores user id
expert_id	Int(5)	Foreign key	Stores expert id

Table Name:-review_master

Primary key:-review_id

Foreign key:- review_id

References user_id, scholarship_id

[Table 13: review_master]

Field_name	Data_type	Constraints	Description
review_id	Int(4)	Primary key, Auto Incremented	Stores review id
review_desc	Text	Not null	Stores reviews
user_id	Int(5)	Foreign key	Stores id of user
review_date	DateTime	Not Null	Stores Date and Time of review post
Scholarship_id	Int(4)	Foreign key	Stores scholarship id

Table Name: news_updates_master

Primary key: news_id

Foreign key: expert_id, admin_id

References expert_master, admin_master

[Table 14: news_updates_master]

Field_name	Data_type	Constraints	Description
news_id	Int(4)	Primary key, Auto Increment	Stores news Id
news_title	Varchar(50)	Not null	Show news tiles
news_desc	Text	Not null	Stores news Description
news_time	DateTime	Not null	Stores news post time
news_link	Varchar(15)	Not null	Stores page link
expert_id	Int(5)	Foreign key	Stores expert id
admin_id	Int(5)	Foreign key	Stores Admin id

5.1 Hardware Specification

5.1.1 RAM: 1GB

5.1.2 Hard Drive Storage needed: 500MB

5.1.3 Other Hardware requirements: N\A

5.2 Platform

5.2.1 Supported Operating System: Windows XP and above, MacOS, Linux

5.2.2 Programming Server: APACHE Server 2.4.46

5.2.3 Framework: N\A

5.3 Programming Languages used

5.3.1 Markup Language: HTML 5

5.3.2 Programming Language: PHP 7.2

5.3.3 Scripting Language: JavaScript

5.4 Technical Specification

5.4.1 Front-End: HTML 5, CSS 4

5.4.2 Back-End: MySQL 5.7.23

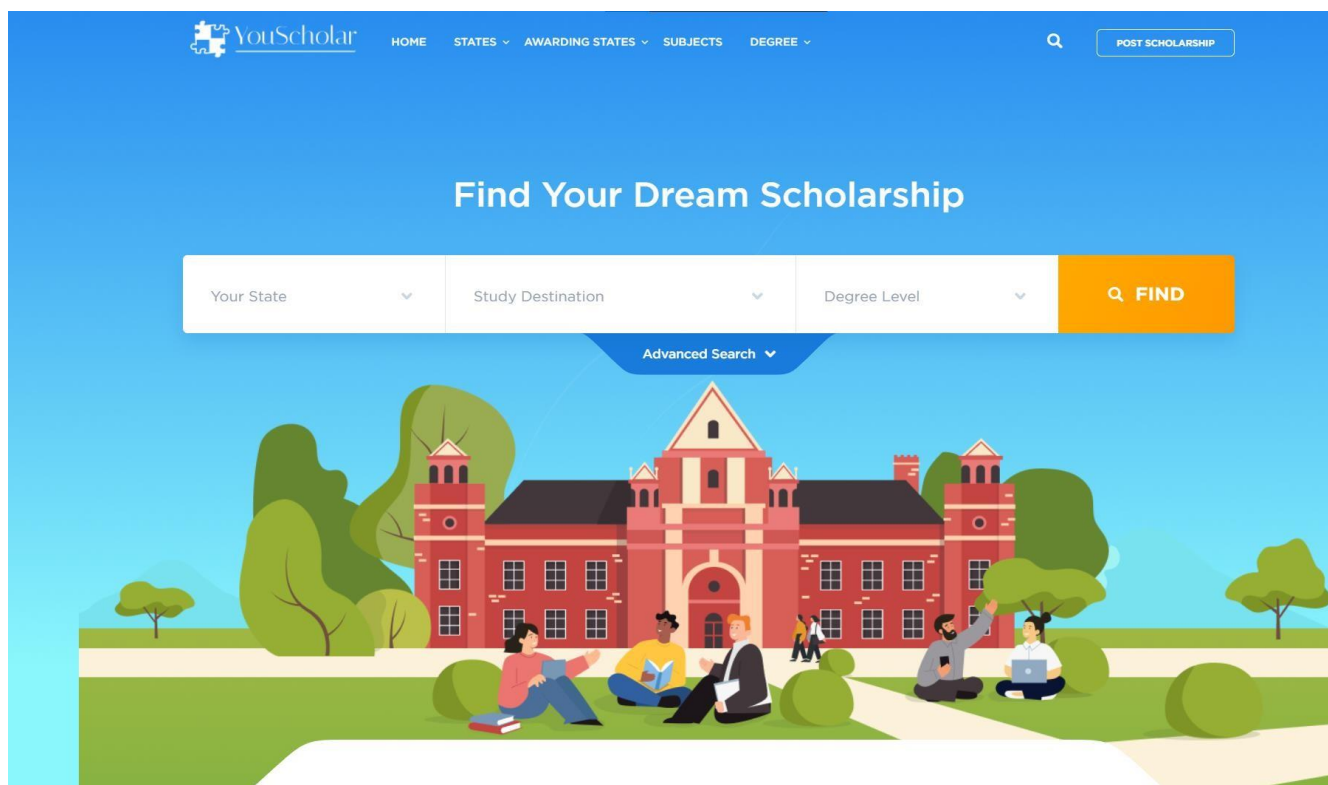
5.4.3 IDE: Sublime Text 3

5.4.4 UML Tools: Microsoft Visio 2016

5.4.5 SRS Tools: Microsoft Word 2016

5.5 Design Layout

5.5.1 Home Page

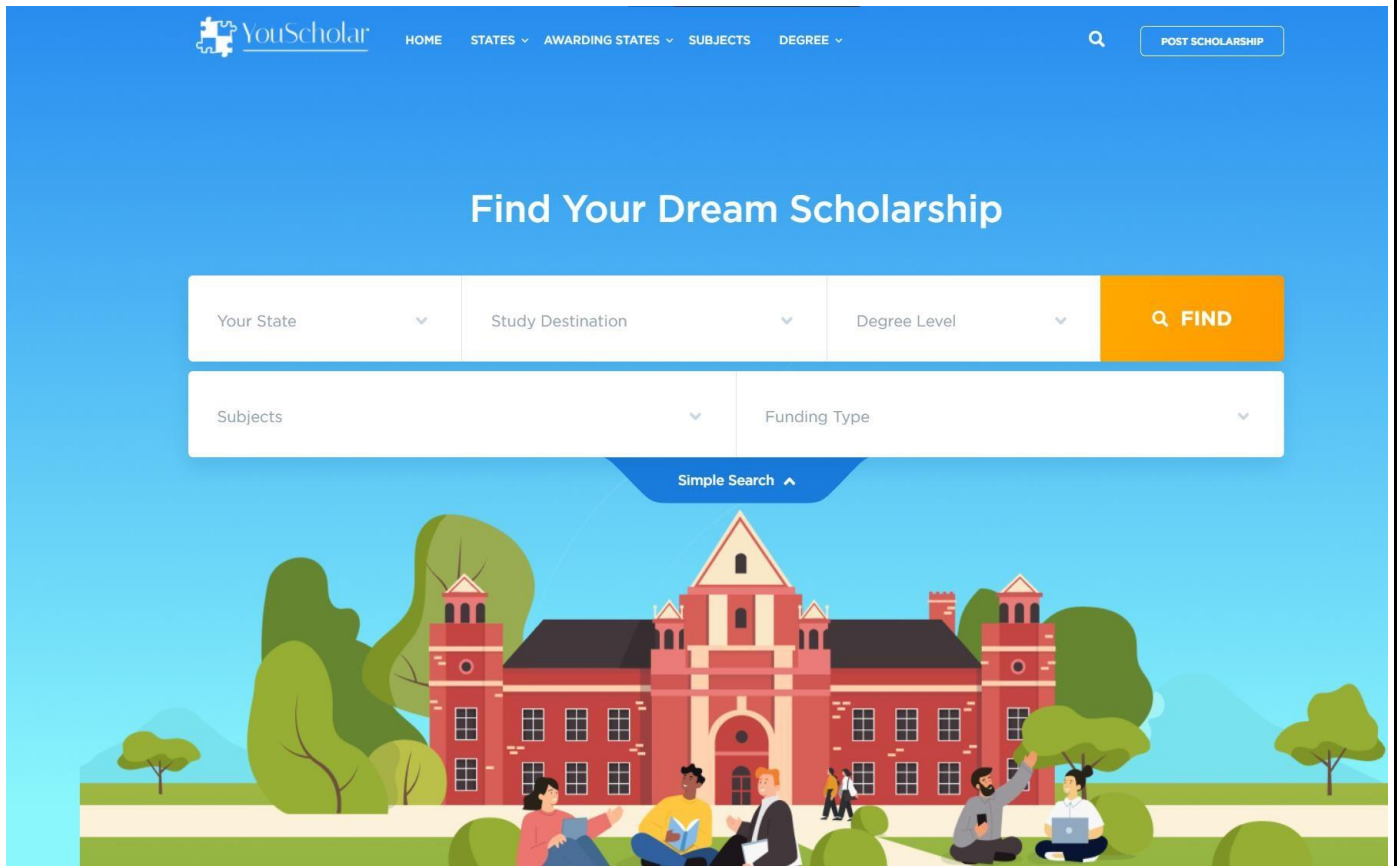


[Figure 7: Design Layout : Home Page]

5.5.2 Login/Registration Page

[Figure: Design Layout : Login/Register Page]

5.5.3 Home Page



[Figure: Design Layout : Advanced Search]

CONCLUSION

It was a wonderful experience to work on this project. In this process, we have learnt a lot. This project has taken us to many phases of project development and gave us a real insight into the problem while finding an appropriate scholarship in a short span of time. This project will result in students being able to find the desired scholarship for them very quickly with no compromise in the details available for those scholarships.

Bibliography

- **Book References:**

- [1] Rajib Mall , “Fundamentals of Software Engineering”, *Prentice Hall Learning India Private Limited*. [Edition 4]
- [2] Jon Duckett, ”HTML and CSS: Design and Build Websites”, *Wiley*. [Edition 2]
- [3] W. Jason Gilmore , “Beginning PHP and MySQL From Novice to Professional”, *Apress*. [Edition 4]
- [4] David Sklar,”Learning PHP 5”,*Oreilly*. [Edition 5]

- **Website References:**

- [1] “W3Schools”, <https://www.w3schools.com/php/default.asp>
- [2] “php”, <http://php.net/manual/en/function.session-id.php>
- [3] “Bootstrap”, <https://getbootstrap.com/>
- [4] “Geek for Geeks”, <https://www.geeksforgeeks.org/php/>
- [5] “Tizag”, <http://www.tizag.com/phpT/>
- [6] “Zend Developer Zone”,<https://devzone.zend.com/6/php-101-php-for-the-absolute-beginner/>
- [7] “PHP Buddy”, <http://www.phpbuddy.com/>