SCHOLARSHIP WEB PORTAL

Aeshna Jain[*1], Bhavik Mundra[*2]

[*1,2]Computer Science And Engineering, Acropolis Institute Of Technology And Research, India.

ABSTRACT

Scholarship is a need of today's education system because the education sector is one of the most demanding sectors of our country. But youth find difficulty in choosing the right scholarship for them. It requires lots of mental and manual work to enlist all the scholarships and apply for all that best suit your profile. Youth also faces problems like a lack of complete, authorized information on the web. Also, along with central and government schemes, there exist some private institutes and officials who provide scholarships to students who are meritorious and deserving, but due to lack of information students are unable to apply there. All this creates problems and mental stress for youth. This project focuses on solving all the above-stated problems and contributes a lot towards the education sector of our country.

I. INTRODUCTION

The education sector is among the highest demanding sectors of our country. The Government of India is trying to make it better day by day and hence launching various schemes to aid youths in their career. Scholarships are one of the schemes that government and private institutions provide to contribute to the education sector. According to the 2011 census, the literacy rate of India is 74.04% which can be increased if correct, timely and authorized information is available to citizens of India. To ensure the timely availability of information it is necessary to use the web as a powerful tool in today's era. The scholarship management system manages all scholarships and their timely updation. Using this tool people can enlist the best scholarship for them and timely apply to it by seeing the updated start and end dates on the portal.

II. OBJECTIVE

This project focuses on building a website that contains updated information about all scholarships present whether it is a central or state or international scholarship provided by the government of India. The main aim is to feature all private scholarships which are not so popular that students are aware of them. This project tried to make the process much easier for youth so that they can get the best and most useful data out of scattered information. An online system saves a lot of time and manpower; earlier, all these scholarships were managed through people and on paper but now paperwork is so less and ease and comfort increased to a big extent.

III. EXISTING SYSTEM

According to my research, I found the portal of the Indian government -National Scholarship Portal(NSP), this portal features all the scholarships provided by the Union Government, State Government and Union Territories across the country. This is the only portal that exists that mainly works for the government of India and scholarships related to it. Some portals belong to other countries and store information about scholarships provided by their country, so in this case, it's important to develop an alternative that displays all the Union government, State government and private as well as International scholarships provided by other countries for Indian students as well as by India's non-governmental organizations. There are also portals available on the web owned by specific states that provide information about that states' scholarships, there also exists some softwares that helps students get their right scholarships.

IV. SCOPE

● This project serves people with information about scholarships given by the Union government, State government, Union Territories, and International Scholarships given by governmental organizations as well as by some non-governmental organizations (private scholarships).

● It filters out scholarships based on gender, type of scholarship, caste, and other criteria so that users can filter their scholarship according to their need.

- Students can register themselves on the portal and can view scholarships that best suit them.

- Non-governmental Organizations can apply for their scholarships to be featured on this portal. All requests are collected and admins verify their scholarships manually, if found valuable then featured on the portal.

- The future scope of this project includes a recommendation system that recommends users those scholarships that are based on their details of registration or based on the actions on the portal. Recommendations based on most users' actions on the portal can be added to provide users with a competitive and useful experience.
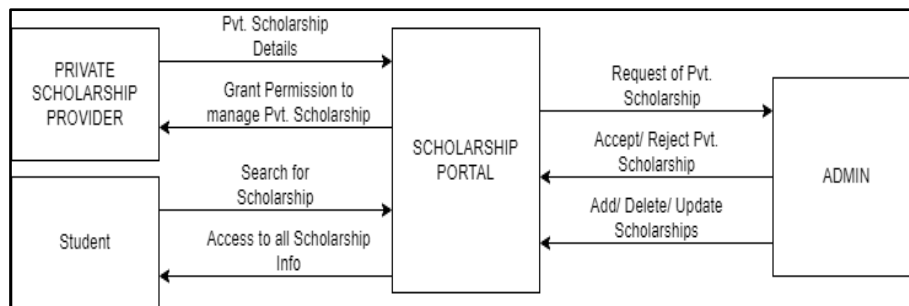
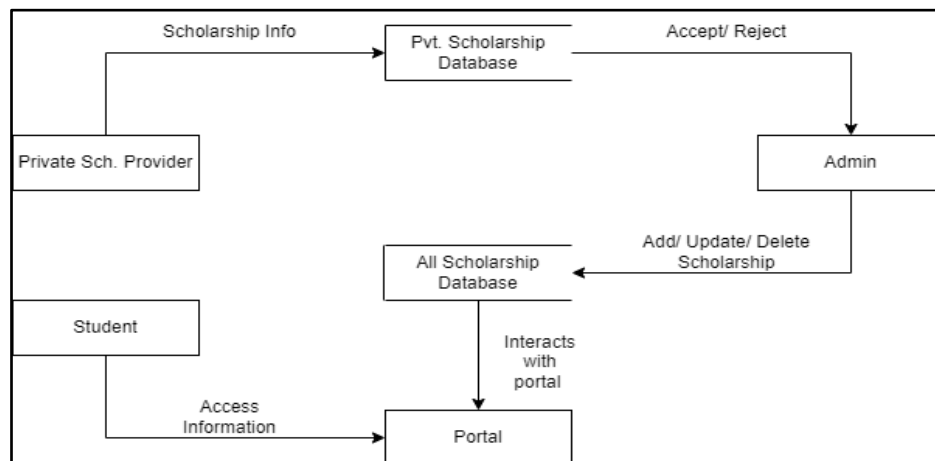## V.   DESIGN AND USE CASES

Figure 1: DFD Diagram Level - 0
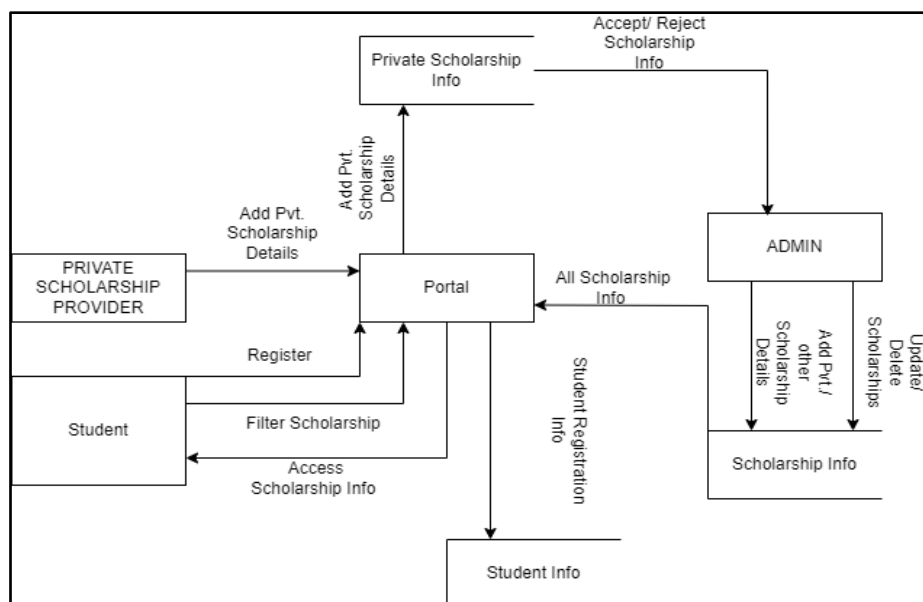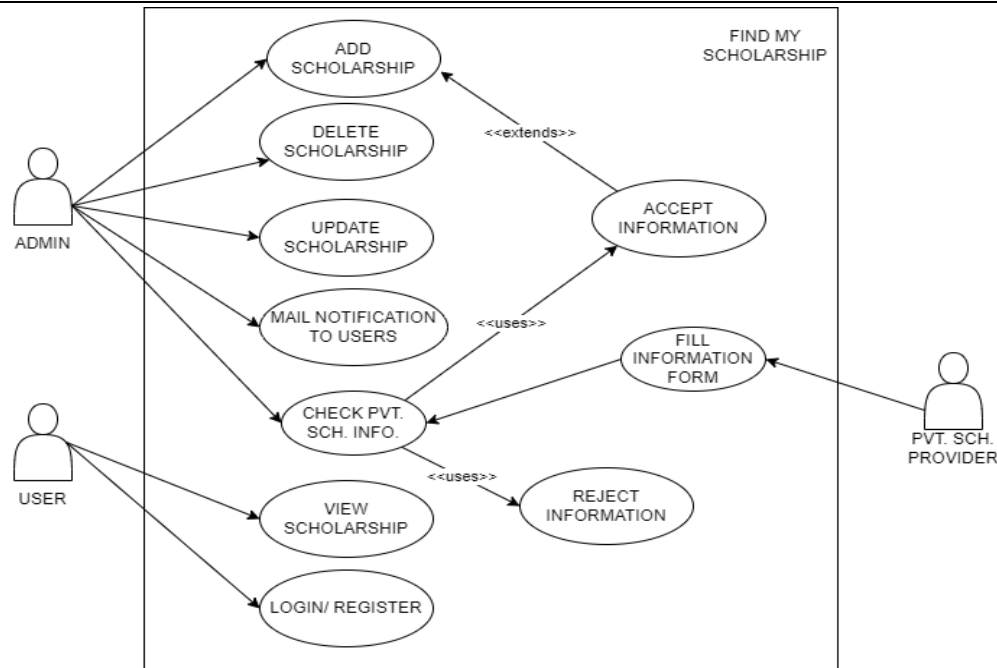

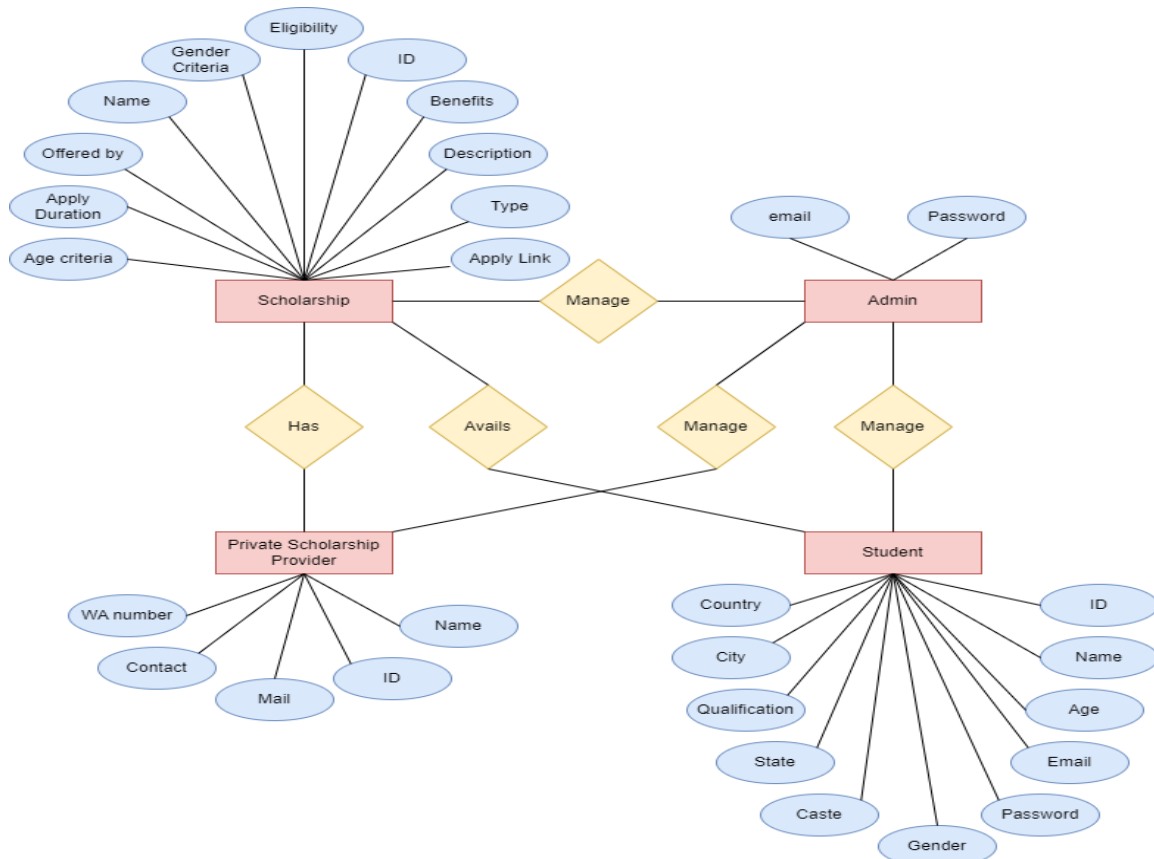**Figure 2:** DFD Diagram Level- 1

Figure 3: DFD Diagram Level- 2

Figure 4: Use Case Diagram

Admin: The person manages all Scholarships and students. It has its user-id password and can change any part of the portal.

Students- Students can register on the portal and can filter information provided by the portal as per their needs.

Private Scholarship provider: organizations that want to add their scholarship can add their scholarship on the apply_your_scholarship section.

Figure 5: Entity-Relationship Diagram

VI.   PROJECT DESCRIPTION

The project includes the user's registration and login to the portal to access information. The home page describes the portal and consists of an about section and navigators to reach a particular type of scholarship. The Portal takes private scholarships from their provider through a form and then the admin verifies and validates the scholarship manually, if found valid and useful, adds it to the portal for users. The application form takes all useful information about any scholarship like the name of the scholarship, scholarship providers, contact information, eligibility criteria, application link etc. Students register on the portal through a registration form and generate a password which enables him/her to access their account later on; users get a confirmation mail that they are successfully registered on the portal and the same applies to private scholarship providers as well.

VII.   METHODOLOGY

1. Requirement Analysis:

The requirements of the project are a windows computer, python installed libraries and a good network connection.

2. Data Collection

This is an information system where we get information about all Scholarships available by the Union government, state government and by some non-governmental organizations. so a collection of all data is the foremost approach.

3. Technology Analysis:

The three parts of the website that is a frontend, backend and database connectivity are handled through HTML 5, CSS 3, Bootstrap, Flask and FlaskSQLAlchemy respectively. SQLite is used as a database to store and retrieve information on all the entities of the portal. Flask-SQLAlchemy is a flask extension which will be used to provide tools and methods to interact with databases in flask applications through SQL Alchemy.

4. Design Flow:

The flow of development of the website is according to its use, first, all pages are designed according to the use case and entity relationship designs then the database is designed to store the data of students, scholarships and private scholarships then connectivity of these frontends and databases was done to make the website work properly.

5. Working:

As planned earlier first, students need to register themselves on the site to access all the information by filling out the registration form, during registration students generate a password and username which they can use to login into their account. They can Filter out their scholarship based on criteria on the type of scholarships and based on their educational qualification. Every scholarship is provided with eligibility criteria and a link to apply there based on their eligibility. The management of scholarships is done by the admin who has a separate user-id and password which is hardcoded so that he/she can make changes to existing scholarships and student information. On the top of the home page is an option for private scholarship providers to add their scholarships to the portal, which will then be verified by the admin and added to the portal.

Development of different modules like a notification system that sends notifications to all registered students and scholarship providers immediately upon their registration is done by another flask extension: flask-mail and the use of javascript are still under development.

VIII.   EXPECTED OUTCOME

All the above-stated work resulted in a well-working website which enables users to access information such as eligibility criteria, start date, end date , application link, description of the scholarship and everything you need to know about it. The portal can provide you with authorized information and direct you to working sites. According to the survey, there doesn't exist any portal that manages all scholarships, the union, state and non-governmental scholarships.

Besides providing authorized information, this portal provides you features to sort your scholarships according to your need, filtering on the portal is primarily done based on the type of scholarship and eligibility.

The mailing system is implemented on the portal so that every registered user can get confirmation of their presence on our side and they remain in direct contact with us.

This portal gives you access to all non-governmental scholarships which are usually missed by people due to a lack of awareness. This provides those providers with a useful platform to feature their scholarship and propagate their ideas and contribute to the education sector.

IX.   CONCLUSION

In today's world, it's so difficult to manage the information we have, daily a huge amount of information is generated and implemented, and to keep track of that information it's necessary to introduce an information system. This portal is an information system which manages all the information related to scholarships and fixes the problems that youth face, like difficulty in finding appropriate and authorized data at the right time. Implementation of such a system reduces man work of arranging a big amount of data and management of information makes searching and application work much easier. Earlier when records of these scholarships were stored in the file system manually there were huge chances of incomplete data and corrupted data but the online system reduced those possibilities and made the process smooth for users. The interactive user interface where data is properly arranged makes users feel comfortable and motivated to search for their desired information and make good use of the existing system.

X.   REFERENCES

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