

EasyLearnify - A Student Study Portal

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Abstract

EasyLearnify is web-based online research developed using Django framework of Python. Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design. The research is designed to facilitate and enhance student's learning experience. The research mainly provides 8 different features for the students. It consists of Notes, Homework, YouTube, To Do List, Books, Dictionary, Wikipedia and Conversions. The main objective of EasyLearnify is to provide all in one study portal where students can manage all their study related works. The admin can also add and assign task to the students. Admin can upload notes which the students can download and assign homework for the students. Basically, it is a centralized hub for students to access various educational resources.

Keywords

Django, EasyLearnify, Study Portal

Introduction

EasyLearnify is a web portal where all features and services that students need to handle can be managed at one place. Students can interact with the online platform provided to them for seeing the activities like Notes, Homework, YouTube, To Do List, Books, Dictionary, Wikipedia, and Conversions. It also provides activities for the admin like uploading Notes for students that they can download assigning Homework for them and can provide a deadline to finish them. It might be one of the best ways to use technology for the benefits of students. The project touches all the boundaries of an Online Study Portal. The project can be implemented in a specified organization or with worldwide access. Only the User can make use of services provided in the Portal. Thus the guest user can only view the Dashboard page. After successful registration, the user can make use of the services easily.

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The first feature that the user can use is the Notes option. Here users can upload their notes module-wise and can download the notes. The second feature is Homework. In this option, the user will be assigned some tasks by the admin and it needs to be finished within the deadline. The third feature is To Do list. In this option, the user can make a list of tasks and work which he/she has to finish as per the chronological order. Fourth feature is Conversions. In this option the user can make the conversions of certain forms like mass, length, etc.

EasyLearnify is a place where all the information and services that a students need can be found in one place. From the information aspect, the first feature is YouTube. In this option the user can search for the desire topic and will get list of YouTube videos typically related to the topic searched. The second feature is Books. In this option the user can search for book of a particular topic and a list of books on that topic will be displayed for reference. The third feature is Dictionary. It is an option where the user can search for the meaning of a particular work and in result will get the meaning of the work with an example. The fourth feature is Wikipedia. In the option the user can search for information about a particular thing and in result will get detailed information in the form of Wikipedia-verified data.

The project consists of an admin module where the admin can handle two activities like Notes and Homework. Firstly, for notes the admin can upload the notes for the students and the students can download the notes for them. Secondly the admin can add or assign homework for the student with a deadline specified.

The project consists of a profile section where the user can manage their profile and account related setting. As there is a registration and login feature similarly there is a logout feature which brings the user out of the website.

Literature Review

According to Salem on his paper, A Case Study on Student Portal its usage and issues, is that they concluded that the portals need to be improved to help the students in their study needs and produce good quality of portal content for them [1]. Norris Syed Abdullah et al, Student Portal and their Need, in that they concluded that it has become more of a responsive portal and also has turned out to be very dynamic based on the demands and the requirements of the different academic community [2].

Angelos Rodanfinos et al, Student Portal for Research, In that they concluded that it is very important to have such a portal so that it will help for the students in their research work particularly [3]. Sakthivel N et al, Student Portal: An Online Platform for Students, In that they concluded that it provides the greater count of the students and enhanced their learning capabilities [4].

Y. A. Baheshm et al, Online Student Portal, In that they concluded that many universities have adopted student portal to support teaching and learning processes and new technologies are commonly thought to make a big differences in education [5]. Feras Qawasmeh et al, Performance of Student Portal, In that they concluded that technical factors such as type of services provided as well as managerial factors such as reacting to feedback

received from students are critical in shaping student's overall perceptions on their respective portals [6]. Thulasi Krishna NP Learning Portal for Every Students, in that he concluded that such portal can bring information together from different sources and can provide a better learning experience to the students.

Structure and Organization

The structure of EasyLearnify contains various components that are provided to the users, these components are Registration which works as a new user registration where user can register and create their login credentials. Login is where the user needs to provide the login credentials such as Username and Password which they created to get inside the website. Profile can be seen on the profile section which the user can see their Pending Homework and To Dos. Then, Dashboard is the section where all the features will be available.

Following are the features provided to the user such as Notes. In Notes section the user can upload the notes and can download the notes. The admin can also upload notes in this section which can be accessible by the users. Next is, Homework. In Homework section the user will be assigned by some tasks by the admin with a due date. The tasks will get arranged automatically as per the priority and the priority will be defined by the due date. The assigned task should be finished within that due date. Another feature is To Do. In To Do section the user can make a list of works to be done which will be saved in chronological order and can be mark as completed after finishing.

Some interesting features are YouTube. In the YouTube section the user is provided with a search function. Using that the user can search for desired topic and in result will get a list of YouTube videos. Next one is Books. In the Books section, same as YouTube section, the user is provided with a search function. Using that the user can search for desired book and as a result will get a list of books of different authors. There is also Dictionary. In the Dictionary section the user can search for any word and as a result they will get the meaning of that word along with one example. Next is Wikipedia. In Wikipedia section the user can search for information about any topic and as a result they will get a Wikipedia verified article about the topic searched. Last one is Conversions. In the Conversion section the user can convert from one form to another form such as mass, length, etc. This will help the user in problem solving.

Lastly, the Logout which is when using the logout option, the user can end their session and can come out the website.

Methodology

The methodology for developing a Student Study Portal can vary depending on the specific requirements and objectives of the portal. Here is the general methodology that were followed:

- (i). Define the Requirements and Objectives. In the first step we have defined the requirements and objectives of the portal. This involves identifying the features and functionality that the portal should have and how it will benefit the users.

- (ii). Choose the Development Framework. In next step we choose a suitable development framework, such as Django or another web development framework, depending on the requirements and expertise of the developer.
- (iii). Design the User Interface. The user interface design is a critical aspect of the portal, as it should be easy to use and navigate. The design should consider the needs of the users and the branding guidelines of the institution or organization.
- (iv). Develop the Portal. The development process involves coding the portal features, integrating them with the chosen development framework, and testing the portal for functionality and usability.
- (v). Test and Debug. Once the portal is developed, it should be tested thoroughly to ensure that all features work as expected and there are no errors or bugs.
- (vi). Deploy the Portal. After testing and debugging, the portal can be deployed to a server or cloud hosting service. It is important to ensure that the server infrastructure can handle the expected traffic and usage.
- (vii). Maintain and Update. Once the portal is live, it requires ongoing maintenance and updates to ensure that it stays secure, up-to-date, and meets the changing needs of the users. Figure 1 shows the dataflow diagram.

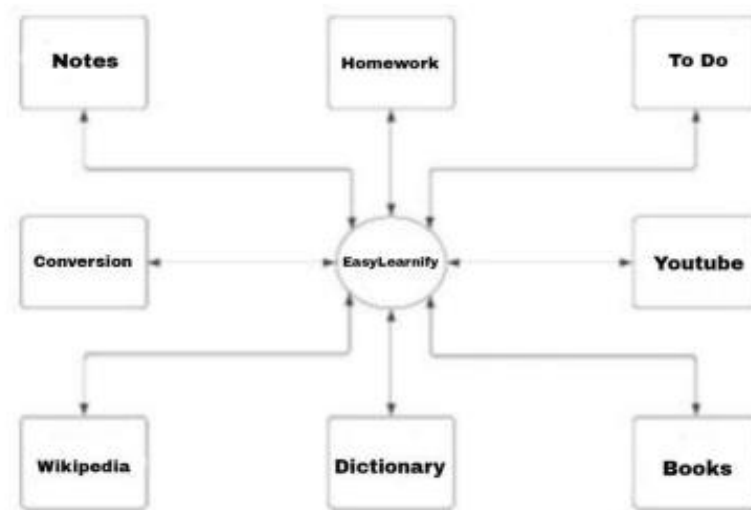


Figure 1: Dataflow Diagram

Result

The important results of the study portal are Academic Achievements, Engagement and Participation, Usage Patterns and Patterns of Access, User Satisfaction and Feedback, Communication and Collaboration, User Behavior and Retention Rates, etc.

One of the primary results to analyze is the impact of study portal in student's academic achievements. This can be measured by comparing the grades of students who actively use the portal with those who do not. Measuring student engagement and participation is crucial to understanding the effectiveness of a study portal. This can be measured by analyzing data such as the frequency of logins, time spent on the platform, etc. Higher engagement indicates that students find the portal valuable and are actively using it to enhance their learning experience.

Analyzing usage patterns can provide insights into how students utilize the study portal's features and resources. Understanding access patterns will help developer to identify features and areas that require improvement or further development. Collecting feedback from students about their experience with the study portal is crucial for continuous improvement. The qualitative data can provide valuable insights into student's perspectives, allowing developer to make informed decisions about enhancements or modifications.

Analyzing the impact of study portal on communication and collaboration among students and between students and instructors is essential. Positive results in this area indicate that study portal efficiently facilitated collaborative learning and student-instructor interactions. Analyzing user behavior metrics, such as the frequency and duration of portal usage, can provide insights into student retention rates and continued engagement. Developers can use this information to identify strategies to encourage consistent usage and address any barriers to sustained engagement. Following graph shows the increasing trend in Online Learning. Figure 2 shows the total registered learners online platform. Figure 3 shows the total enrollments on Online Platform.

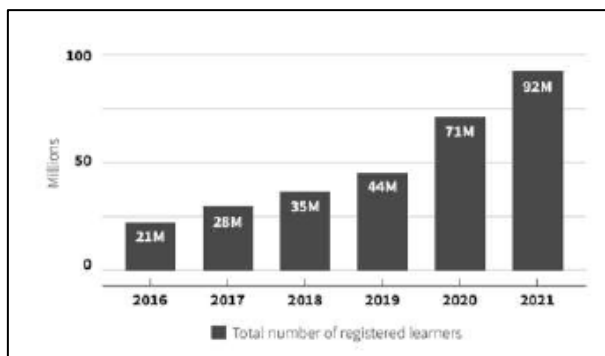


Figure 2: Total Registered Learners on Online Platform

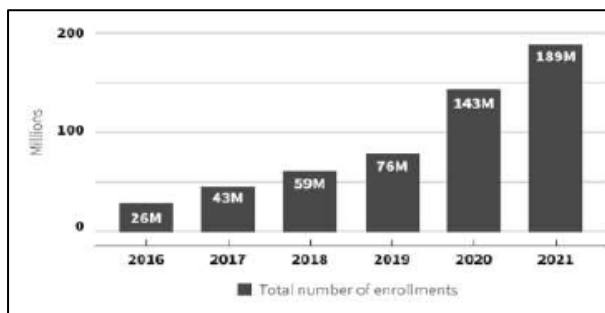


Figure 3: Total Enrollments on Online Platform

Conclusion

Student study portal has become an indispensable tool in the modern educational landscape, revolutionizing the way students learn, engage, and collaborate. The study portal has transformed the education experience empowering students with greater flexibility, access to resources and opportunities for collaboration. The implementation of a study portal has shown to enhance academic achievement by providing students with convenient access to course materials, facilitating self-paced learning and promoting active engagement with the content. Although challenges and limitations exist, by addressing those challenges, developer can further optimize the study portal's effectiveness, usability and accessibility for all students. And the main objectives to use Django framework are that it is open-source framework. It can be used on any platform. It can be used to develop full-fledged applications with no need to download any other software.

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