

STUDENTS LEARNING BYTE

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Abstract.

The use of the Web (World Wide Web) has had many positive effects on education. It overcomes time and space limitations in traditional schools. Teachers and students are now using the Web to access vast amounts of information and resources in cyberspace. PHP and MySQL is a part-based library which is used for the advancement of intelligent UIs. Respond fundamentally empowers advancement of enormous and complex online applications which can change its information without ensuring page revives. It focuses to furnish better client encounters and with blasting quick and powerful web applications advancement. The primary goal of Students Learning Byte is to provide an environment that is both convenient and efficient for students and lecturers. Students learning byte is a student information management system which is a computer application designed for the education sector to store and manage student data online. With the help of this application students can buy books online or get books on rent online.

Keywords: Online education, Online Communities, Student Management, Rent/Sell books.

Introduction

About Project

Nowadays taking notes in college can be a big challenge for students with learning and thinking differences. They may struggle with writing and organising their notes with listening or they may have trouble keeping up with a teacher because of slow processing speed.

“STUDENTS LEARNING BYTE” is a website built for students to access Notes , Question Papers , Syllabus and Resources for all Subjects of O.U (Osmania University). The Features of this website are :

1. Access documents directly within the app using an inbuilt PDF viewer.
2. Ability to access purchased materials in offline mode.
3. Report documents for admins to review.
4. Notifications about events and other information related to the university.
5. A community built for each college where students can post about the availability of academic material and can rent/sell them.

It accepts pdf, word(doc, docx)Powerpoint Presentation, ppt, pptx, Open office document(odt), jpeg, png and every other document format.

Objectives of the Project

The main objectives of this project are,

- Enhancing student interaction.
- Share appropriate educational content for students.
- Provide various forms of questions, exams and tests to be a bank of questions.
- Enhancing the quality of learning.
- Meet the learning style or needs of students.

Scope of the Project

The concept of traditional education has changed radically within the last couple of years. Being physically present in a classroom isn't the only learning option anymore — not with the rise of the internet and new technologies, at least. Nowadays, you have access to a quality education whenever and wherever you want, as long as you have access to a computer. We are now entering a new era — the revolution of online education.

There's no need to discount the scepticism surrounding education through the internet. It's hard to understand the notion of leaving behind the conventional classroom, especially if it's to face this vast space called The Internet.

- 1.It's flexible.
2. It offers a wide selection of programs.
3. It's accessible.
4. It allows for a customised learning experience.
5. It's more cost-effective than traditional education.

Literature Survey

Existing System

The existing system was built with the famous Stacked Architecture in Flutter. It is built for students to access Notes , Question Papers , Syllabus and Resources for all Subjects of O.U (Osmania University).

Content :

Notes
Previous Question Papers
Syllabus
Resources

It is a great application built using stacked architecture.Stacked is a Flutter MVVM architecture that is flexible, easy to use, very maintainable and highly testable. The architecture functionally consists of only 3 parts. Views, ViewModels and Services.

Views on top, the closest to the user, ViewModels are below that taking input from the Views and Services below that which is what the ViewModel's make use of to provide functionality.

Flutter gives you a lot of freedom to do whatever you want. Sometimes that freedom can be a drawback, though, when you're starting out. That's certainly true for state management and app architecture.

The application also has an option to download pdfs uploaded by other student.

2.2 Proposed System

The proposed system consists of two new features which are renting/selling materials/notes/books. Basically, a community for each college affiliated to O.U will be created here. The students within their college community can post text/images related to materials which will be sent as a notification to all students of the respected college.

The students interested in purchasing the material can chat with the admin of the post. Since the students belong

to the same college, they can collect the materials by paying the amount in their free time. This can help students a lot during the time of examination.

Download option in the existing system will be replaced by “view in offline mode” or read online. This is introduced because, as the admin who has uploaded the material, if downloaded, can be circulated to all of their friends. In Order to put a stop to it, these features are introduce

Proposed Architecture

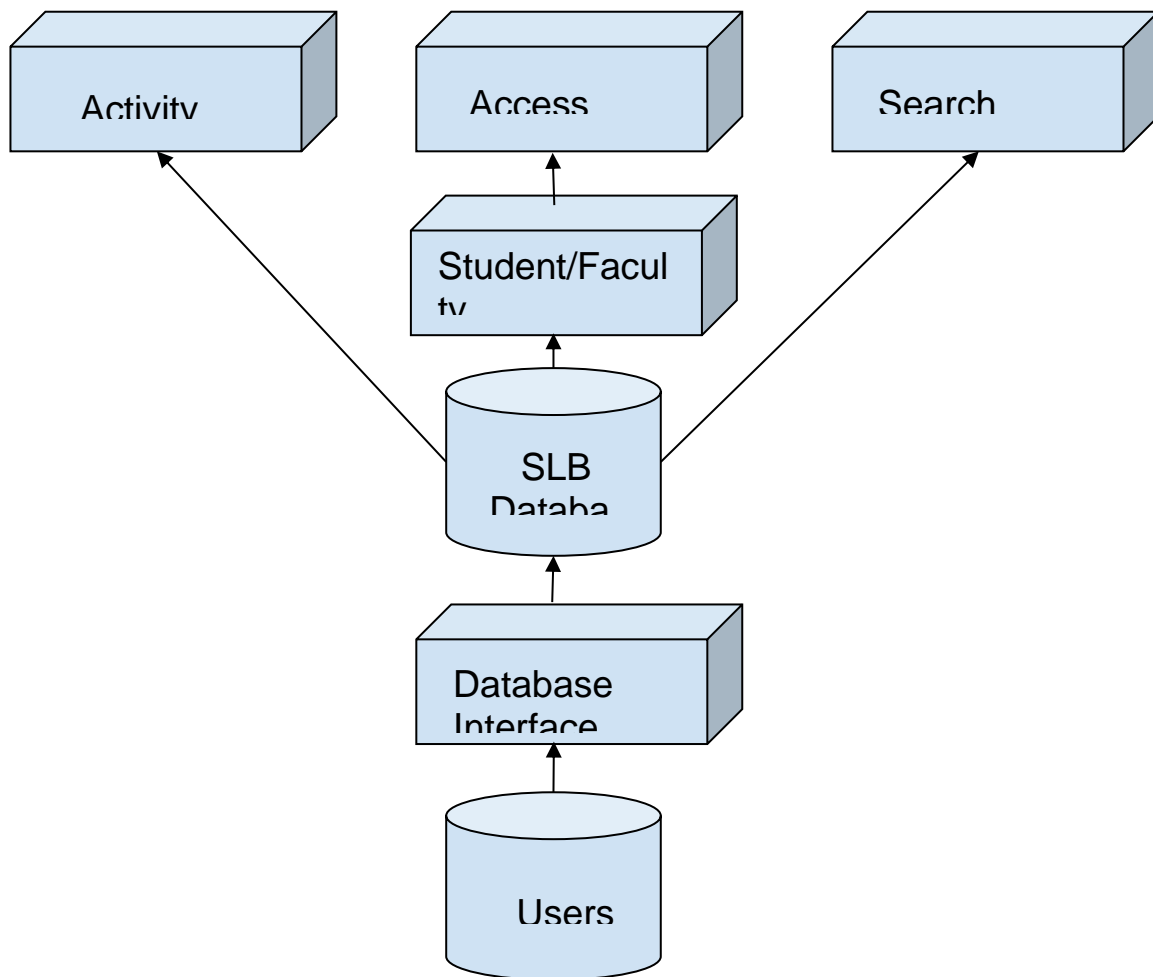
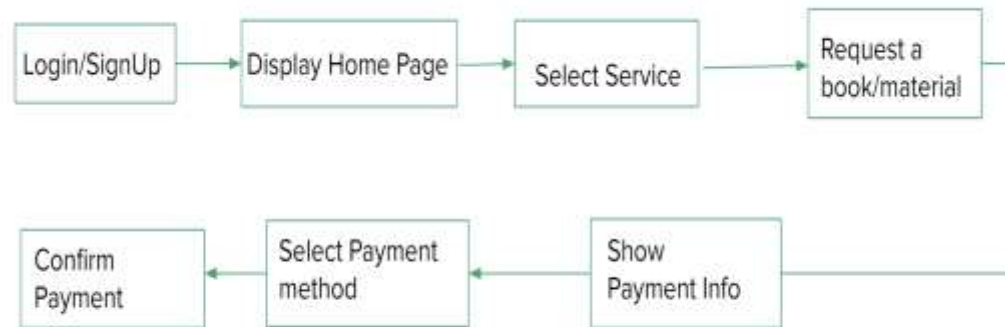


Fig 1. Proposed Architecture

3.1 Block Diagram



Implementation

Code Implementation

MODULES

Registration
Login
HomePage
Search Material
View Messages

MODULES DESCRIPTION :

Registration :

In this, first the interested students get registered by selecting their desired username and password by providing the necessary details.

Each person will register only one time. Details of each person along with their username and password is saved permanently in the database.

Login :

After providing the correct username and password, the user's logs into the Students Learning Byte homepage. There the user can select the available subjects to further learn about them. If the user enters wrong username or password then an alert message is shown to the user for entering invalid credentials.

HomePage :

After entering the valid credentials, the user log's into the website homepage. Here at the homepage there are many choices available to the user.

User can take the following steps:

Upload Material

[View Material](#)
[Search Material](#)
[View Messages](#)
[Send Messages](#)
[Logout.](#)

Search Material :

Search allows users to quickly locate content across an app. Basic search enables users to input a query into a search text field to view related results. A user can type a query or select from a suggestion (if available). Upon pressing Return, the search is submitted. Search results are displayed below the search bar.

View My Material :

This module displays all the materials that are available or purchased by the user.

5. Result

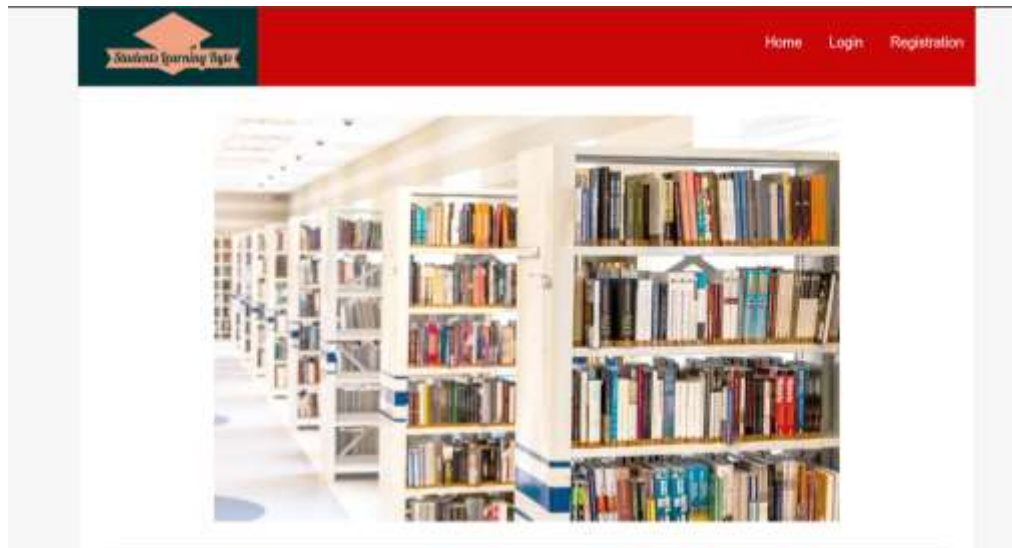


Fig. 3
Home
Page

Fig 4. View My Material

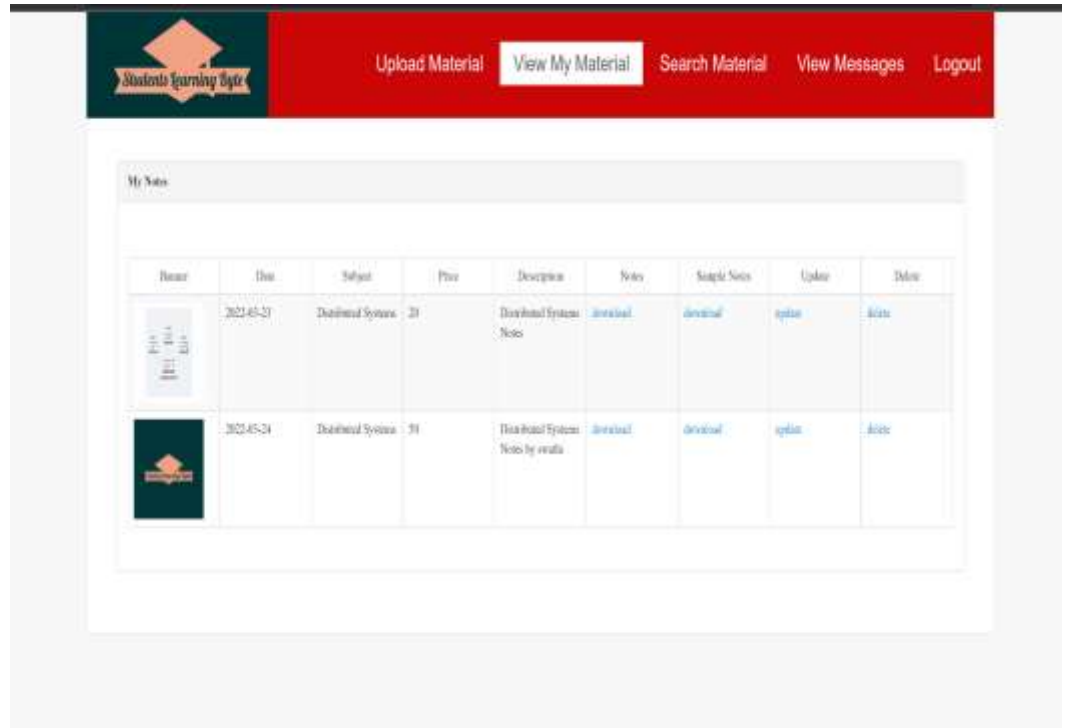
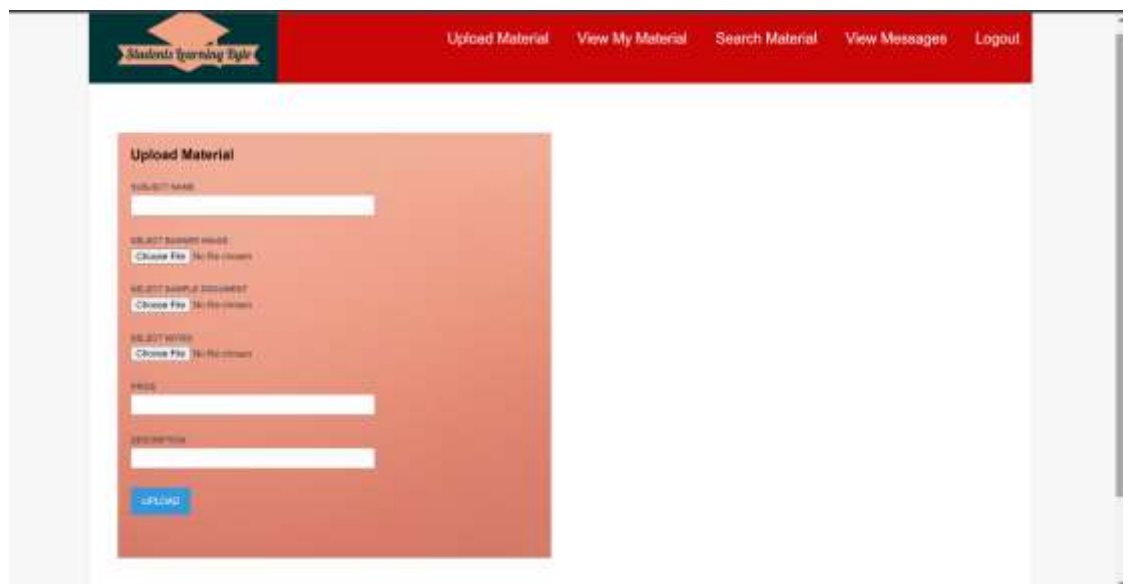


Fig 5. Upload Material



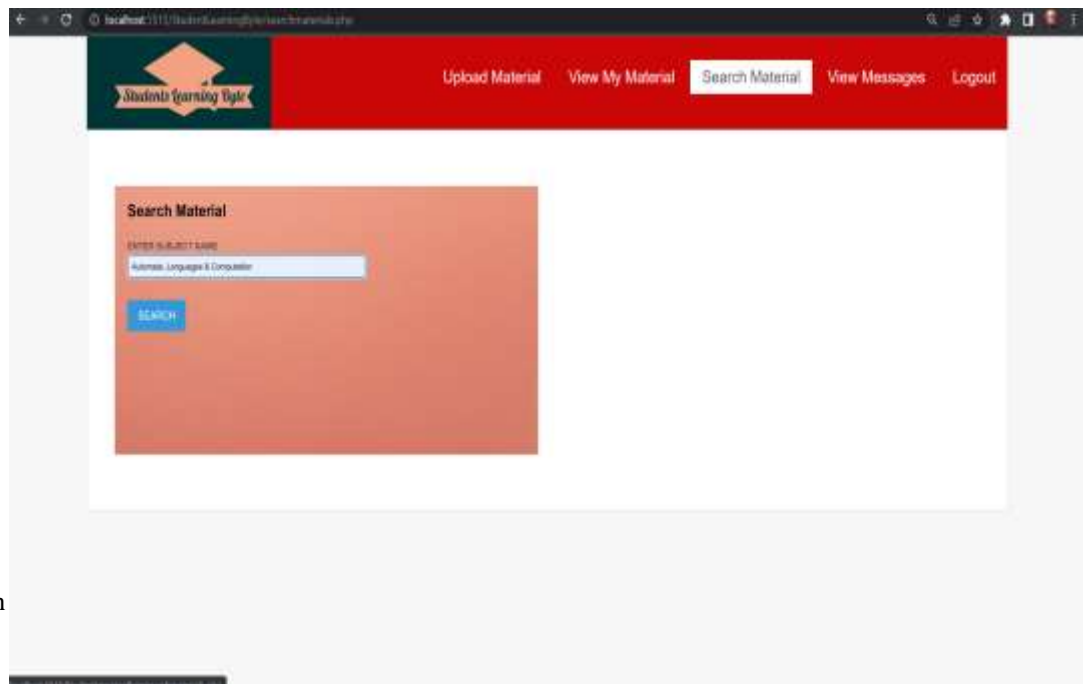


Fig 6. Search Material

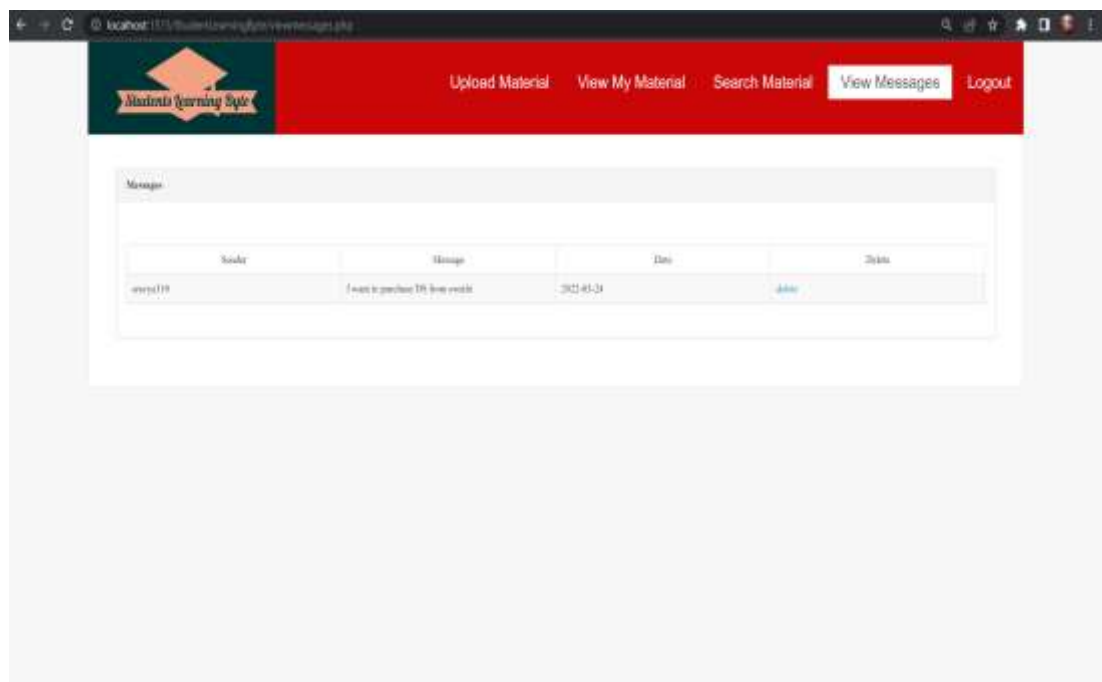


Fig 7. View Messages

Conclusion

This project deals with the analysis of building a website using a lucid and precise style. It consists of a UML class diagram. It also covers the advantages using **PHP** technology over **STACKED ARCHITECTURE IN FLUTTER**.

All the above aspects should make the document extremely valuable for web development beginners. It is a very user-friendly website created which helps engineering students immensely.

At the end it is concluded that we have made efforts on following points :

We included features and operations, including scree layouts.

We designed user interface and provided validation

We understand the problem domain and procedure and model of the system, which describes operations that can be performed.

Finally the system is implemented and tested accordingly.

Future Scope

We can give more advance for Learning Management System including more facilities.

We can host the platform on online servers to make it accessible worldwide.

Integrate multiple load balancers to distribute the loads of the system.

Create the master and Slave database structure to reduce the overload of the database queries.

The above mentioned points are the enhancements which can be done to increase the applicability and usage of this project. Here we can maintain the records of Assignments and Student. Improvements can be done to maintain all the Assignments, Student, Teacher, Quiz, and Questions.

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