

AVBookSite: An E-Learning and Student Support Platform

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Abstract –

From decades the learning and teaching techniques are evolving in all its possible ways. At first the teaching and learning was done in oral way, then it evolved to written as well and finally it all grown up to the classroom teachings. Apart from that the digitalization of the world has made the teaching in learning field undergone a sea change. Students or learners are able to get knowledge of what they want to explore and because of Internet. Also the covid-19 pandemic has caused sudden shutdown of classrooms and colleges and hence e-learning was focused more. Taking these crucial points into consideration an e-Learning and student support platform named AVBookSite is introduced.

1. Introduction:

The digitalization of the world and the covid-19 pandemic focused more on the online learning. Where students are free to learn and explore various study materials. AVBookSite is an e-learning and student support platform where the students & learners are provided with number of learning contents in various forms like PDFs, PPTs, Audios and Videos all on the single platform. It also provides a programming section where three online compilers are embedded to enhance the programming knowledge of a student. If user requires some subject material in some particular format which is not available on the dashboard then one can drop a request specifying the name of the subject and type of resource which is stored into database and also received to the Admin's mail directly. If the user needs some technical assistance then AVBookSite provides the TalkBot. Finally a user can provide feedback about the overall experience with the website. AVBookSite is fully integrated with Database i.e., it stores all the Resources, Requests dropped by users, feedbacks given by users into the Database.

2.1 Limitations of Existing Systems:

- ✚ Each platform is dedicated for specific type of data.
- ✚ Requires switching between sites to get required data.
- ✚ Doesn't provide technical assistance.
- ✚ Low quality and costly study materials are provided.

2.2 Proposed Methodology:

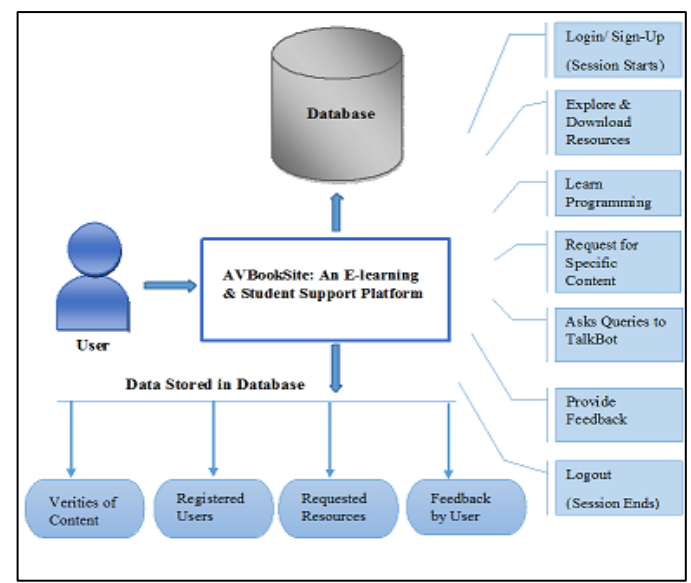


Fig. No. 2.1 Proposed Methodology

The fig. above shows the proposed methodology of the Project. It overcomes the limitations of existing e-learning systems and adds up more functionalities to improve user's experience. AVBookSite is fully integrated with DBMS to store the data like the data available on the dashboard, registered user's information, requested contents, etc. User is provided with various forms of data like PDFs, PPTs, Audios and Videos on single platform along with the programming section. The virtual assistant is used to solve the queries of student. User can directly contact the Admin specifying the name of subject and type of resource required which is then uploaded on the dashboard by Admin. Also the feedbacks are stored to improve more and serve user the best.

2.3 State Transition Diagram:

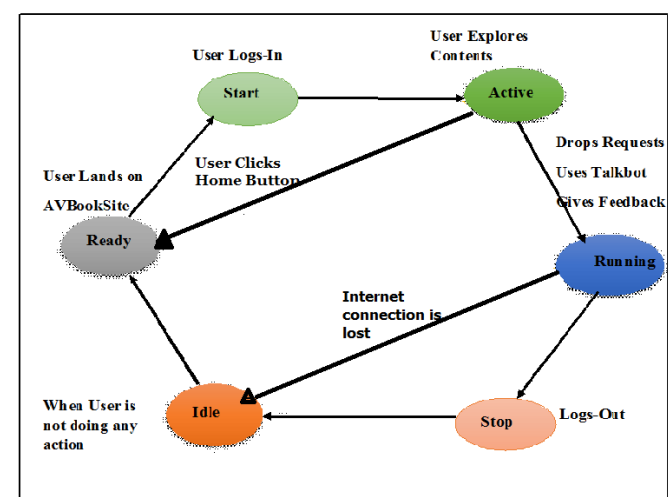


Fig. No. 2.2 State Transition Diagram

The fig. above shows the state transition diagram where the states are indicated by oval shapes and the arrows are the direction after the respective event occurs.

2.4 Result Analysis:

Analysis Criteria	Existing e-learning systems	Proposed e-learning system
1. Availability of all forms of data on one platform.	It doesn't have this facility.	In this System, users are provided with this facility.
2. Various coding editors and compilers on single platform.	At a time a single platform contains single code editor and compiler.	There are three compilers are available on single platform: HTML, Java, & Python.
3. Resources on Request service.	The existing e-learning systems doesn't implement the Resource on request service.	Users are free to request for their requirement hence it implements.
4. Technical Assistance.	It do not always provide Technical Assistance to users.	It implements TalkBot to provide Technical Assistance
5. Downloadable, Sharable, Printable data.	Not every existing system implements all these facilities.	It provides all these facilities to users.

Table No. 2.1 Result Analysis

3. Conclusion:

E-learning has spread its roots from small courses to large Universities. We have developed a web application AVBookSite that adds up much more functionality to a typical e-learning system. The features provided by AVBookSite makes student capable to get knowledge not in just one form but it covers all the forms in which data can be presented in. AVBookSite is also provided with technical assistance thus makes the user answered to his/her doubts. Exploring AVBookSite covers mostly all the forms in which teaching and learning can be done.

4. Future Scope:

AVBookSite has a number PDFs, PPTs, Audios & Videos available. In future it is going implement the end-to-end doubt solving sessions between student and teacher. Now, we are using search box for searching any resource but in future if student having a facility of QR code by scanning it they can get their required resource. The Test section will be implemented to organize tests, quizzes, to evaluate the user's performance.

5. References:

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