



Developing An Accessible E-Learning Content For Civil Service Exam Aspirants

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Abstract: E-learning is learning through the utilization of technologies. E-Learning is that the inexorable trend of the applying of recent data technology in education. It's one in all the foremost learning ways within the era of knowledge characterised by non-restriction in time and place, it's providing new prospects to teaching establishments to be ready to give versatile and price effective distance learning setting. so as to effectively use varied sorts of style data in development, it's necessary to make data management system. Developing Associate in Nursing E-learning platform will meet the necessity of progressive teaching, that may be a reasonably economical thanks to develop data technology in education and subject teaching. it's primarily the linear organization of the teaching materials and also the related data resources. this method will facilitate the scholars to check severally for his or her exams. It additionally provides the mandatory course materials, question paper, quizzes and plenty of a lot of. this method provides user friendly interface for the users and customized service whereas exploitation the system.

Keywords: E-Learning, online preparation, civil service exam, web development

I. INTRODUCTION

E-learning is that the use of electronic technologies for the method of teaching and learning. There area unit varied definitions of e-learning however all definitions overall describe the employment of electronic media within the method of teaching and learning. K.H. Fee defines e-learning as any learning that involves use of net or computer network [30]. Several researchers have provided proof that e-learning system has several edges for learners, like accessibility of learning materials anyplace and anytime and redoubled interaction with lecturers [11].

Many education establishments don't have the resources and infrastructure required to run prime e-learning resolution. this is often why flat solid and Moodle, the most important players within the field of e-learning computer code, have currently versions of the bottom applications that area unit cloud minded [1].

The e-learning technologies aim to boost the teaching quality, downmarket the teaching prices, and so build the education cheap for the plenty. sadly, technology-based learning includes the danger of uninflected the learners. to allow customized, motivating, helpful, associate degreed confirmative feedback for college kids is work-intensive even for an old teacher. Therefore, to induce facilitate from computers would be an enormous breakthrough for machine-driven e-learning systems [7].

There area unit goodly developments of mobile technologies: laptops, notebooks, itinerant, smartphones, wireless technology, GPRS technology, Bluetooth and mobile devices like PDAs and cell phones that area unit the first devices for M-learning. M-learning provides the chance to find out anytime at anyplace and it needs mobile device and association to the network [3].

Many of the authors have analysed the digital instructional resources, and developed their classification. The classification includes 2 large teams of digital instructional resources: services online and mobile apps. Each team, in turn, is split into more subgroups. On-line services include testing information of students and materials for lecturers. Mobile applications include innovative applications, analysis applications and analysis of student performance apps. [8]

II. LITERATURE REVIEW

The survey played important role during this project. We analysed existing products to develop our website. We started to study the study plan of the students and their subjects. We also downloaded many apps which were providing services to the students and studied their features and design.

In this paper we develop a mobile system that enhances the learning process of the students of computer science. Moreover, our system provides several adaptation strategies to meet the needs of heterogeneous learners. The methodology used here is Pedagogical and learning content model .[3]

This paper introduces a learning style model to represent features of online learners and to enhance recommendation of e-learning resources. It also presents an enhanced recommendation method named Adaptive Recommendation based on



Online Learning Style (AROLS), which implements learning resource adaptation by mining learners' behavioral data.[5]
 [6]The main objective of this paper was to identify these challenges and examine how they are related to the challenges facing instructors when using e-learning systems. A survey research method was used to collect the data for this study. A self-administered questionnaire was employed to test the proposed research model.

[8] The Z generation is different from any other generation because of the growth of technology. In this paper the problem of teaching the Z generation is explained. The main aim of this paper is to analyze the available digital resources and to classify them. The paper aims to present the necessity of identifying the digital resources and also study them. It also explains the importance of introducing the resources into educational institutions so that the quality of the education improves.

[9]This research paper aims at closely reviewing what are the various applications in e-learning systems. The research paper looks at the current development, or evolution, of adaptive e-learning systems and the challenges this system faces.

[10]This paper provides and examines the adoption and acceptance baseline for e-learning systems by incorporating critical external factors in the technology acceptance model.

[11]In this paper, we evaluate some studies of affective interaction e-learning systems. We also proposed our approach to develop an emotionally interactive learning system. To design an affective learning system, we need to know the learners' emotions in the learning process and respond appropriately.

[12] In this paper the learning flow and work flow differences and similarities has been mentioned. The paper has also focused on observable modelling aspects and the relative models of learning flow. The paper has also introduced the functional order for the visual modelling tools.

[13] In this system, the random linear algorithm for question selection and intelligent examination paper grouping algorithm based on question bank structure, examination question structure and controlling parameters have been constructed and realized. The system is developed based on J2EE environment. The object oriented software engineering model, UML, Java and XML techniques are used in the system development.

[14] A new developing function is explained in this paper. It has a unit for learning mode which can help to analyse and monitor the status of the learner. It also has a unit to search the content and analyse the contents status. After the students completes learning a content, this system uses genetic algorithm to recommend a next suitable content, with the help of data mining of learners status and contents status

[15] In this paper, based on the requirements of collaborative learning, combined with the needs of the system's application, it studied the strategies in three aspects, including the recommendations of the objects consulted with by students, the identification of students role and the adjustment of study task. This paper's collaborative pattern is combined with partner, cooperation and role playing, because the members have a common goal and a positive interdependent relationship.

III. PURPOSE OF WORK

- Provide free open supply access to all or any the contents associated with the exams from everywhere the web.
- Provide access to all or any the specified resources in a very single platform. To-do list to arrange their activities daily, weekly and monthly.
- Provide monthly current affairs to supply the users the present on going news. Effective computer programme for higher understanding of the platform.
- Micro-adaptation is taken into account as a lot of valuable than macro-adaptation.
- Learners' preferences don't seem to be static however modification over their time period. it's thus very important to think about the dynamism of any projected framework.
- User profiles (including psychological profile).Learner preferences: educational material presentation preferences, device interaction preferences, interaction preferences.

IV. METHODOLOGY

After the survey we had some picture of the users preferences. So we have designed the user interface based on the following points.

- The users don't prefer reading from the screen because it affects their eyes and learning capacity. They prefer written, portable material so that they will study far from the pc.
- The users don't like to click more than 3 clicks to find out what they need or to see what they have. They usually prefer a navigation frame that's visually obtainable.
- When learners study on screen they are sensitive to the readability of the text on the screen and its layout, and also the consistent screen style. The formatting of data ,text spacing, colour ,etc are vital.



- The learners usually are not interested with pictures and logos on the working pages, however they have the ability to tell apart the course pages from external hyper coupled pages. Therefore all the course pages should possess a typical look.
- The users like to scroll a page than to click on the link and view the source. However the link has to be present either on the highest of the page or on the bottom of the page is appreciated for the design. The learners need a direct indication of what is new on the page or on the web site as short as possible.

A. ARCHITECTURE

An e-learning Platform generally has layers: practical, Technical, and Infrastructural services. practical services square measure associated with e-learning and domain-related services. Technical services include a presentation layer, portal, internet application framework, internet layout management, method layer, rules engine, endeavor watching, search, document management, image management, persistence, information access, auditing, logging, scheduling, caching, alert management, configuration management, and exceptional handling. the combination layer can have associate degree API entrance that may offer integration, communications, service interaction, message process, internet request process, and file handling services. information Services are going to be associated with reportage, business intelligence, backup, archiving, etc.

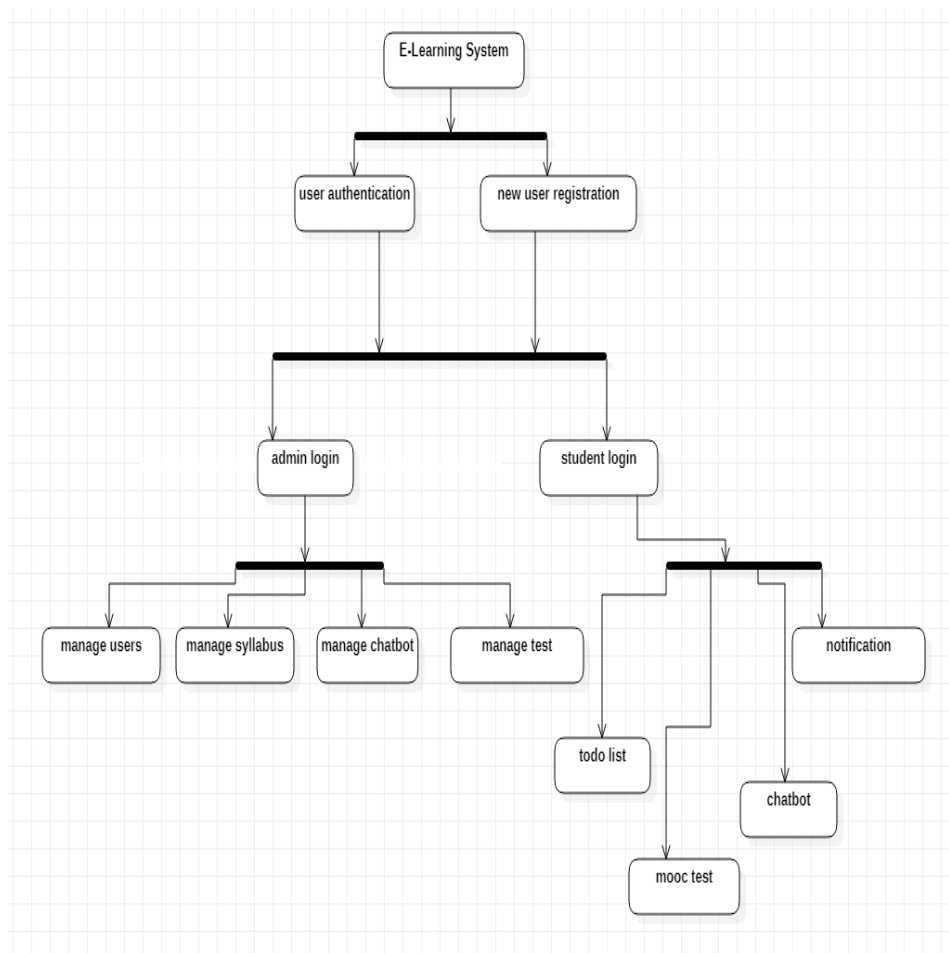


Fig. 1 Architecture of the system

B. USE CASE DIAGRAM

This Use Case Diagram may be a graphic depiction of the interactions among the weather of E-Learning Management System. It represents the methodology utilized in system analysis to identity, clarity, and organizes system necessities of E-Learning Management System. the most actors of E-Learning Management System during this Use Case Diagram area unit Admin, System User. Admin World Health Organization perform the various variety of use cases like Manage Course Manage Students, Manage Schedules, Manage Users and Full. E-Learning Management System Operations.

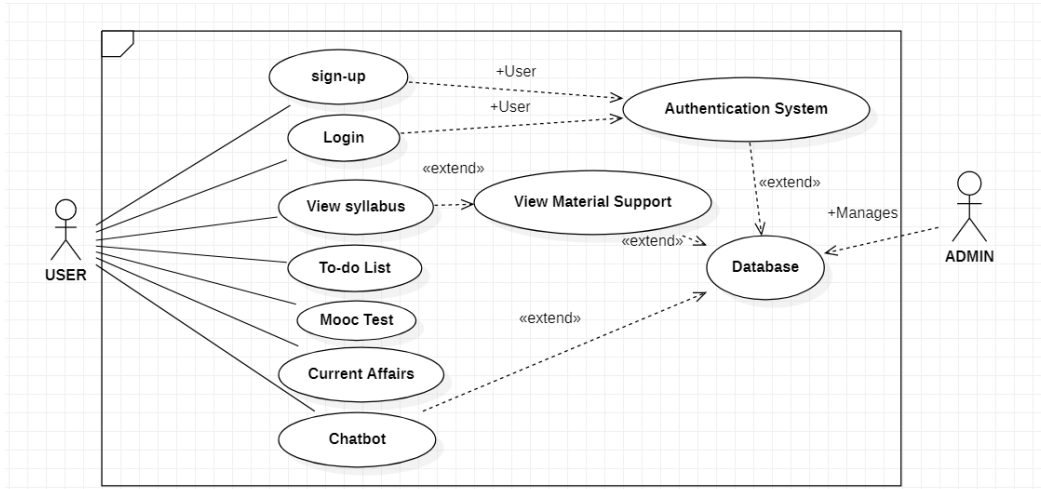


Fig. 2 Use case diagram of the system

V. CONCLUSION AND RESULTS

The project was developed to help the students to study for the civil service exams. The application was designed with many modules in the system which helped the students to plan and study accordingly. In this project we have tried to implement an effective E-learning platform for the exam aspirants who are preparing for the exams by providing them the best services and materials. We have used the modern tools like java script , react js , node and more. Below are some of the snippets of our application.

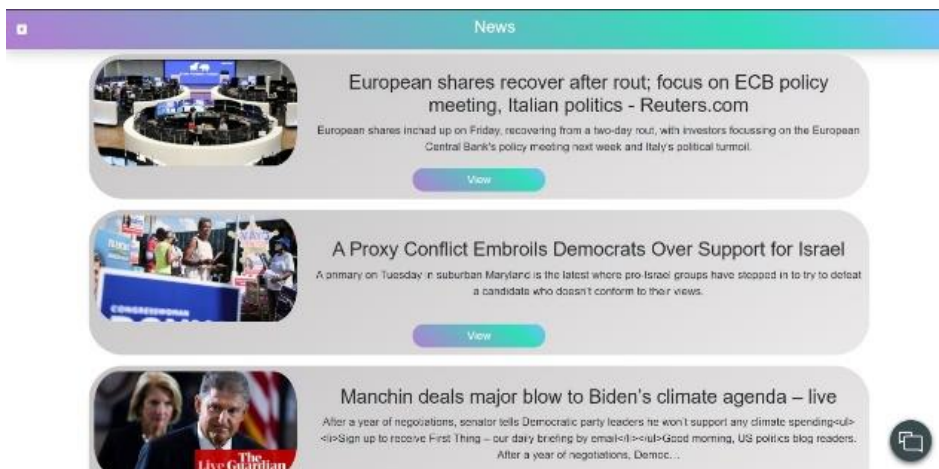


Fig.3 News module

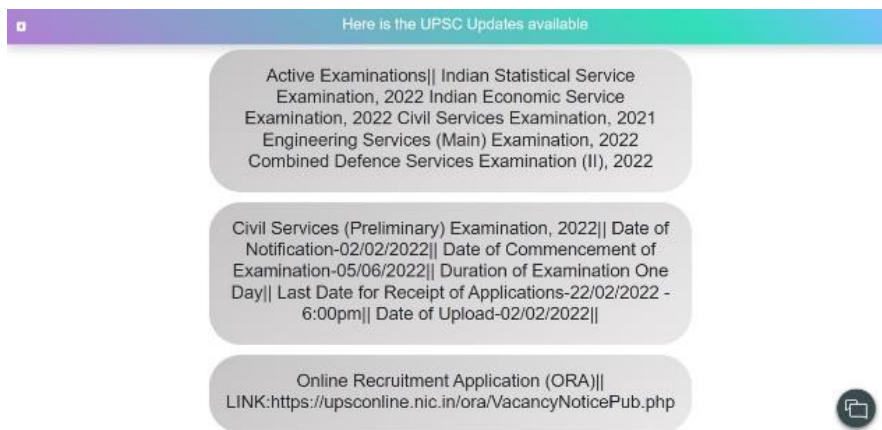


Fig.4 The update module

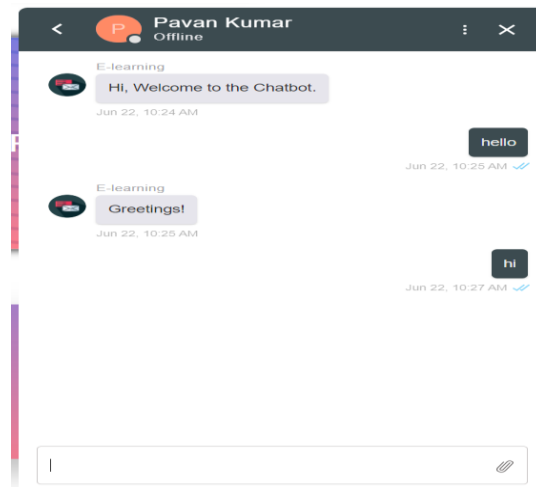


Fig.5 The chatbot module

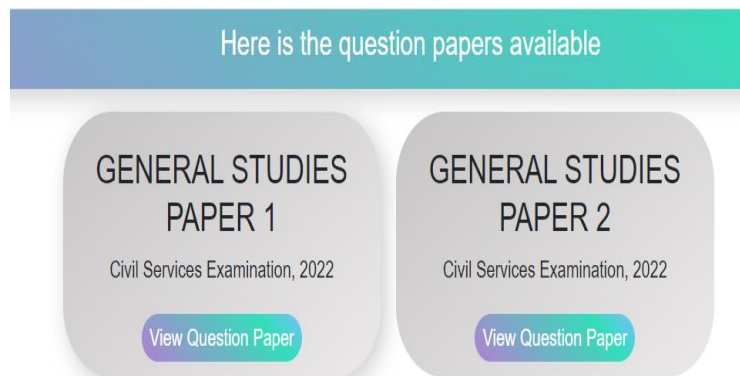


Fig.6 The question paper module

VI. FUTURE SCOPE

The future enhancement of our project is to improvise by developing a recommendation system. The users will be recommended to the courses they specialize in and the basic courses that all aspirants study.

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