HELPING HANDS

(E-LEARNING SYSTEM)

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Abstract: E-learning is both cause and result of significant changes in the definition of education concept, as well as changes in the understanding of how it should be organized and managed. With the e-learning advance, educational institutions managers started to deal with different activities, requiring the development of new procedures and finding alternatives to address emerging challenges that go beyond educational issues. As we had analyzed that in many colleges, they have issues like study material not provided properly or incomplete course completion due less availability of time as a results students are unable to understand the concepts correctly. We say can that "Half knowledge is worse than ignorance" In big university, they are managing their records in folder but they do not have specific software for showing immediate data as well as new technology learning portal. College students have to study a lot and also do much researches, now in our college libraries we cannot always find latest material for researches. So our website will be providing solution to this problem statement.

Keywords: **Online learning, Knowledge management, Learning management systems**

I. INTRODUCTION

We would like to propose a website-based solution for Online Book Study and Learning. This Web application serves as a more reliable and effective means of Learning and sharing one's knowledge, because we are also planning for course providing type solution in the tutorials format. This is how we are able remove all forms of delay and stress that is occurred due to students having irrelevant knowledge as the faculties are facing with different students currently. Our Learning web based portal provides us with a fully professional solution for all types of learning done in all over the university. To solve this problem we are going to introduce Web - Application based solution, where website contain major modules are as shown below:

- **Student Portal:** Students can enter their required learning technology on this portal and even interact with their seniors for any doubts.
- **Alumni Portal:** Here the university passed out students can create their profile and can also add the technologies that they are fabulous at also, add the fees for teaching them to the other students.
- **Faculty Portal:** Faculties can add different technologies that are needed for students or could be helpful for the students in near future and can keep the students updated.
- **Admin Portal:** All the changes that need to be done on the student request can be handled from this portal by the admin who are given the all-admin rights to operate the system.

1.1 AIM & OBJECTIVES

- Studying and doing research is very important for each and every student to stand in this corporate and technical world.
- They should get continue update and should read books which help them for current researches.
- As we know the study material which are in hard copy are very costly so it is difficult for many students to purchase each and every material topic vice and pay such a big amount.
- Our targeted audience is mainly Rural Area Students those who don't get knowledge even after doing a lot of struggles. So, this web app will be helpful to these students.
- Also, we are including a feature for senior and junior interaction.
- The objective of the project is to set up learning and acquiring knowledge system and to eliminate or reduce as much as possible hardships of the students. We also focus on improving quality of learning through this process.

1.2 NOVELTY & UTILITY

- Senior Junior Interaction
- Rural Area Targeted
- Credit Points given to Seniors and Juniors which can be redeemed in future.
- Students can get technical knowledge easily and in low cost or say discounted rate.
- Study Material Requirements can be solved easily.
- Students can get industry ready at very early stage of their career journey.

II. LITERATURE REVIEW

A number of organisations suddenly changed their workflow strategies and adopted new technologies as a result of the pandemic. Most of the time, these organisations lacked the time necessary to think through how to integrate new tactics and related technologies into their current framework (Carroll & Conboy, 2020). Many countries had established online education networks before the pandemic (Mishra et al., 2020). However, no school was ready for a complete shift to online education. Students think that in-person instruction is superior to online instruction, according to empirical study (Bojovic et al., 2020).

The library, lab support for groups, and other tools are not available to students (Patricia, 2020). Students, however, feel that online education allowed them to continue their education despite the epidemic (Mishra et al., 2020). Universities now make use of innovative methods to make sure that their students obtain continuous education (Zhu & Liu, 2020). Professors now deliver course material using a variety of platforms. Professors now conduct lectures using software, social media, video chat, and online learning tools. Using online learning tools like Google Classroom and Blackboard, professors can provide students with course notes and multimedia resources. Through the online learning environments, students can turn in assignments, and teachers can keep track of their development. Planning online classes and discussion forums as well as the distribution of course materials via their websites is made easier by videoconferencing tools like Google Meet, Zoom, and Microsoft Teams. (Chatterjee 2020). The teachers are struggling with who to turn to and what resources to use. Pre-recorded videos, according to some, could be helpful, but they would limit encounters. It is challenging to create a suitable system that meets the requirements of all students in terms of convenience and learning.

1.3 ADVANTAGES OF DIGITAL LEARNING

Advantages of Digital Learning over Traditional Education System:
- Absence of Real Limits
- No Geographical Limitations
- Smarter Students
- Self Motivated and More Accountable
- Comfort Zone for Learners
- Enhancing employability of Students
- Cost Effectiveness

III. METHODOLOGY & TECHNOLOGY

Our main focus is to provide full-stack Learning material for college students in the form of Website with full satisfaction and admin controllable panel system. It is beneficial for all students and faculties by improving the quality of learning. Students are benefited with the extra credit points that are given to both seniors and juniors which will be redeemed in the future. If a student want to study a particular technology or say course and a senior already knows that technology & he/she wants to teach the juniors. So, we will be keeping a dashboard type in which seniors can keep updating the technologies they know and can teach efficiently after which students can see those updates on his/her dashboard and can contact directly to that senior. So in this way Inter-college students can interact with one another and can teach in much lower costs than what we providing at different platforms.

IV. IMPLEMENTATION

We will be developing web based application so it will contain technology like:
- HTML
- CSS
- JavaScript
- PHP
- SQL

1.HTML: Hypertext Markup Language (HTML) is the most popular markup language for texts meant to be viewed in a web browser (HTML). Programming languages like JavaScript and technologies like Cascading Style Sheets (CSS) can be helpful. Online multimedia sites should show HTML texts that are sent from a web server or local storage to web browsers. HTML originally had visual cues for the text and described a web page's structure semantically. The parts that make up HTML pages are known as HTML elements. HTML constructs can be used to embed images and other objects, such as interactive forms, in the rendered website. HTML allows you to create structured documents by displaying structural semantics for text elements like headings, paragraphs, lists, links, quotes, and other elements. HTML components are separated by tags, which are expressed using angle brackets. Img and input tags immediately insert content onto the page. Other tags, like <p>, surround and describe the content of the document. They may also contain other tags as sub-elements. Browsers do not show the HTML tags, but they are used to decipher the page's content. In order to create a web page or web application, we used HTML.

2.CSS: When a document is presented using a markup language like HTML, the appearance can be controlled using the style sheet language CSS (Cascading Style Sheets). On the internet, CSS is important, just like HTML and JavaScript are. With the help of the style sheet known as CSS, you can manage the structure, colours, and fonts of your content. This separation can enhance content accessibility, provide more freedom and control when specifying presentation features, and allow numerous websites to share formatting by supplying the required CSS in a separate file. The CSS file allows caching, which decreases complexity and repetition in the structural content and speeds up page loads for sites that share the file and its formatting. We can also add animations to websites or documents using CSS. We used CSS to style Web pages.

3.JAVASCRIPT: JavaScript is a high-level, multi-paradigm programming language. It requires prototype-based object orientation, first-class functions, dynamic coding, and curly-bracket syntax. JavaScript is one of the fundamental tools of the World Wide Web. A key component of web applications is the programming language JavaScript, which enables interactive web sites. The overwhelming majority of websites use JavaScript for client-side page behaviour, which is supported by all of the major web browsers. We use java script for whenever user interact with web page or something event occur from client side to handled it and take approximate action against it.

4.PHP: An all-purpose scripting language that excels at web creation is PHP. On a web server, PHP code is typically processed using a translator, which can be implemented as a module, a daemon, or a Common Gateway Interface (CGI) executable. The complete or a part of an HTTP response on a web server would be made up of the output of the interpreted and executed PHP code, which could be any kind of data (such as generated HTML or binary image data). In this system we use php to easily interact with MySQL database as well as is also able to authenticate user whenever person will login.

5.SQL: A computer language used to store, manipulate, and obtain data from relational databases is called Structured Query Language (SQL). Students and working professionals who want to become excellent software engineers, especially those who work in the software development field, MUST learn SQL (Structured Query Language). Almost all application software uses SQL to keep and modify data, including software used in banking, finance, education, and security. SQL is the language of choice for communicating with relational computer systems. All Relational Database Management Systems (RDMS), including MySQL, MS Access, Oracle, Sybase, Informix, Postgres, and SQL Server, use SQL as their common database language.

Figure 4.1 Home Page of Digital Learning

Above given Figure 4.1 gives you first view for Helping Hands Digital Learning site.
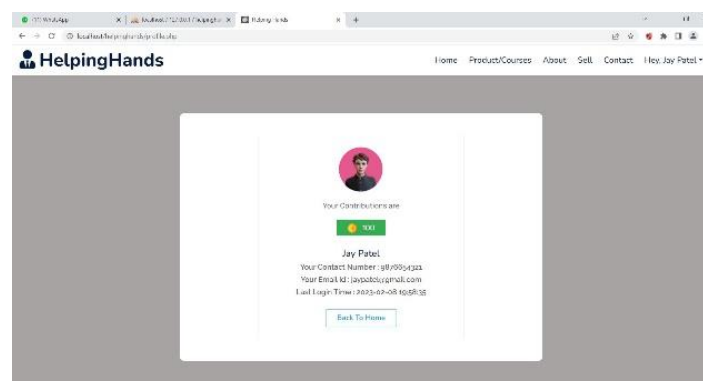

Figure: 4.2 Profile Page for Helping hands

Above figure 4.2 shows profile page displaying personal details fetched from backend after the user registration.
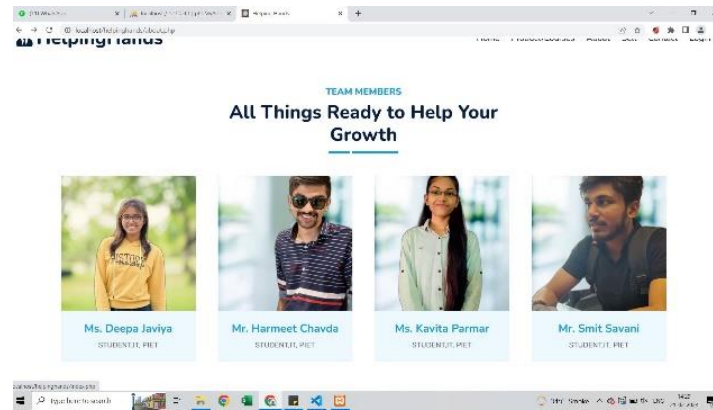
Figure: 4.3 Team Members of Helping hands

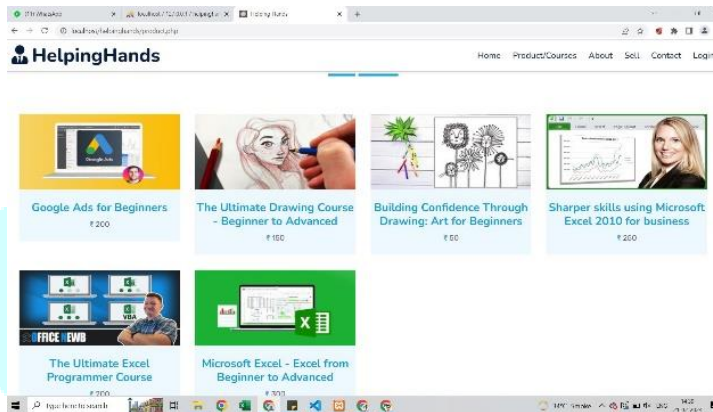Above figure displays team details of Helping Hands Website

Figure 4.4 Courses available on Helping Hands

Above figure gives us detailed information about courses available on Helping hands website page giving us detailed information about courses and learnings available.
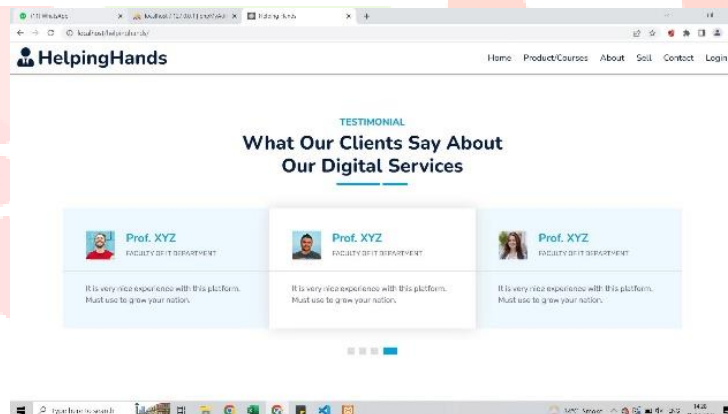

Figure 4.5 Review page provided on Helping Hands Page.

Above figure gives us view of Review pages which have been posted on Helping hands website by the clients and giving deeper knowledge about our provided services.

V. CONCLUSION

E-learning is unquestionably a comprehensive strategy to teaching and learning in addition to being a cutting-edge method of instruction. As a result, we can say that digitalizing education is unquestionably necessary for today's learners, but there are a few things to consider before putting digital education into practise. Our main motive is to provide fully automatic Learning System, Which will be working for the betterment of the students and making the youth more expert in the expertise that they want or say get knowledge of those technology in which they are interested. We can conclude from this is give better today to get better tomorrow. Educated rural area students cannot be much better than the given solution. It will help a lot to all the students.

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