

Project Presentation

Dynamic Website (E-Learning Platform)

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From development to distribution



Introduction

Welcome to our presentation on E-Learning Website Development. In this digital era, the demand for flexible and accessible education solutions is ever-growing.

E-Learning websites provide a platform for learners to access educational resources conveniently from anywhere with an internet connection.

Importance of E-Learning

Importance: E-Learning breaks the barriers of traditional education by offering flexibility, accessibility, and personalized learning experiences.

Statistics: According to , the global e-learning market is projected to reach



1. Synchronous

Learning from the sources of:

- Virtual Classroom
- Audio and Video Conferencing
- Chat
- Webinars
- Application Sharing
- Messaging instantly



Blog, Forum, Wiki, in a learning community or among different communities

Diffusion and sharing of knowledge

Enabling technologies

E-book, Learning Management System, Virtual Lab, Augmented Reality

Future of E-Learning

Innovative model of interactive and interdisciplinary personalized learning

Textbooks, lesson notes, CBT lessons, interactive simulations, virtual courses

Multimedia contents and supports Partnership and experimentat ion Schools, Universities, MIUR, Editors, ICT Companies

E-books in hundred classes for 2010/2011

Development Process

Needs Assessment:

Identify the target audience, learning objectives, and technological requirements.

Design Phase:

Create wireframes and prototypes to visualize the website layout and functionality.

Development Phase

Build the website using appropriate programming languages and development frameworks.

Testing and Quality Assurance:

Conduct rigorous testing to identify and fix bugs, ensuring smooth functionality.

Deployment:

Launch the e-learning website and monitor performance for continuous improvement.





WHAT IS WEB DEVELOPMENT?

- Web Development usually refers to developing the website for the Internet (World Wide Web) or for an Intranet (Private network).
- Also known as Web Programming.
- It is the creation of Dynamic Web Applications.
- Examples of Web Applications are Social networking sites like
 Facebook or E-commerce sites like Amazon, Flipkart, etc.
- There are two broad division of Web Development
 - ☐ Front-end Development (also called Client-side Development)
 - ☐ Back-end Development (also called Server-side Development).



A website is a collection of web pages.

A web page may contain texts, graphics, sounds, animations, and movies.

Web pages are developed with the help of a language called Hyper Text Markup Language(HTML). It is also a language of Internet.



Communication on the web can be categorised as

1. Client (browser) to webserver



2. Web server to Web server communication



FRONT END DEVELOPMENT

- Front end development refers to producing a web application so that a user can see and interact with them directly.
- It is also known as Client side development.
- It focuses on the visual elements of a website that a user will interact with.
- A front end developer has one general responsibility: to ensure that website visitors can easily interact with the page. They do this through the combination of design, technology and programming to code a website's appearance, as well as taking care of debugging.
- The common **technologies** we can use in front-end development are:
 - HTML
 - CSS
 - JAVASCRIPT



FRONTEND DEVELOPMENT TECHNOLOGIES

- HTML was first created by Tim Berners-Lee, starting in 1989. It stands for Hyper Text Markup Language.
- Hypertext means that the document contains links that allow the reader to jump to other places in the document.
- A Markup Language is a way that computers speak to each other to control how text is processed and presented.
- It describes the structure of a web page and consists series of elements.
- Its elements tells browser how to display the content.
- It's code is written in Notepad or any text editor but save it as .htm or .html extension.



FRONTEND DEVELOPMENT TECHNOLOGIES (CONT..)

- CSS was first proposed by Hakon Wium Lie on October 10, 1994
 at CERN (European Organization for Nuclear Research).
- Cascading Style Sheets (CSS) describes how HTML elements are to be displayed on screen.
- CSS saves a lot of work. It can control the layout of multiple web pages all at once.
- It is also responsible for responsive layouts of a website.
- It is also written in any text editor but save as .css extension.



FRONTEND DEVELOPMENT TECHNOLOGIES (CONT..)

- Javascript was invented by Brendan Eich in 1995.
- Javascript is the Programming Language for the Web.
- Javascript can update and change both HTML and CSS.
- Javascript is responsible for the Functioning of the website.
- It is a scripting language that enables us to create dynamically updating content, control multimedia, animate images, and pretty much everything else.
- It is also written in any text editor but add the .js extension.



BACK END DEVELOPMENT

- Backend development controls what goes on behind the scenes of the web applications.
- It is also known as server side development.
- Backend usually consists of three parts:
 - A server
 - An Application
 - A Database
- Users can't see how the backend works but this code is what communicates the database information to the browser.
- Common Backend development technologies are:
 - SQL
 - PHF



BACKEND DEVELOPMENT TECHNOLOGIES (CONT..)

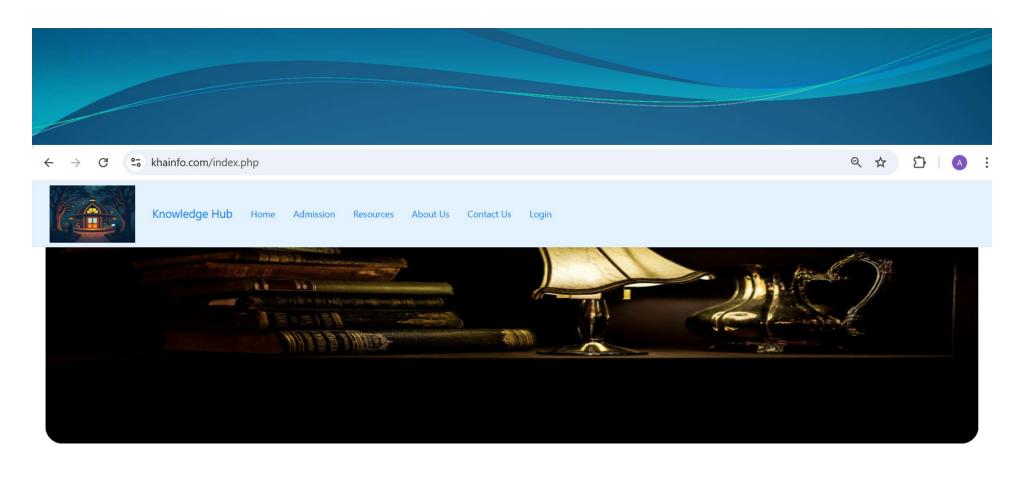
- PHP is an acronym for "PHP: Hypertext Preprocessor".
- PHP is a widely-used, open source scripting language.
- PHP scripts are executed on the server.
- PHP is free to download and use.
- PHP is a server side scripting language that is embedded in HTML.
- It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites.



BACKEND DEVELOPMENT TECHNOLOGIES

- SQL stands for Structured Query Language.
- SQL let us access and manipulate databases.
- SQL became a standard of the American National Standards Institute (ANSI) in 1986, and of the International Organization for standardization (ISO) in 1987.
- SQL is a database language, it is used for database creation, deletion, fetching rows, and modifying rows, etc.
- It can retrieve data and executes queries against the database.
- Every website is supported by a database at the backend. Each time a user submits information or searches something in the website, data gets stored and retrived from the database. SQL is the language for qurying and storing data in the database.



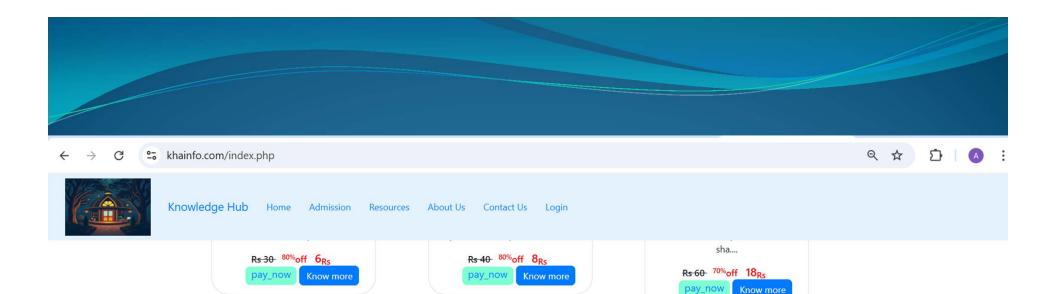


Courses Offered





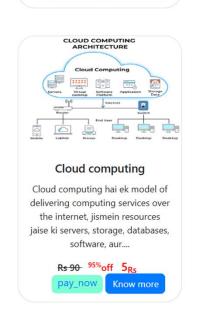






Know more





Conclusion

E-Learning is not intended to replace conventional methods and learning in classroom. Its aim is to create an augmented learning environment where technology is used to deliver a combined range of teaching and learning techniques aimed at maximizing the individuals participation and achieving the goals in the learning and teaching process as a greener world.



