LEARNING AND DEVELOPMENT PORTAL USING ASP.NET

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ABSTRCT

The term "Learning and Development Portal" (L&D) refers to a kind of web-based platform designed specifically for the administration of training programmes. It's a web-based client-server system that's used to manage things like enrollment, content distribution, attendance tracking, and more. It works well for comprehensive training programmes. The project's primary functions are the ability to upload files, send messages, create courses, and download them. It's easy to upload lessons because of support for many different file formats. Students and teachers now have access to the login features.

1. INTRODUCTION

VISIONET SYSTEMS PVT. LTD. Over the course of twenty years, Visionet Systems Inc. has created and deployed high-value, productivity-enhancing technology solutions for businesses of all sizes. Visionet, founded in 1995 and headquartered in Cranbury, New Jersey, provides its customers with a wide variety of IT-related services, such as BPO (business process outsourcing), BPO (consulting), software product development, IT administration, help desk, content migration, database management, and BPO (business process outsourcing). Among our illustrious clientele are market leaders in the fields of retail, fashion, consumer packaged goods, insurance, and consumer lending, to name just a few.

The business and technology experts at Visionet use their hands-on experience to help clients succeed. Visionet Systems work on numerous projects at the same time in different departments such as ECommerce, Finance and more to enable customers to realize their full potential by supporting them with Smart Technology and Business Solutions.

1.1 Services Provided: Visionet Systems provide various services and is very active in delivering the projects successfully in the listed areas below:

- DIGITAL Transformation
- Digital Commerce
- Digital Consulting Services
- Cybersecurity
- App Modernization
- Data Science And Ai
- Data Management Services
- Application Integration
- Data & Analytics
- Cloud Services
- Mortgage Processing
- Contact Center Services

2. PROJECT OVERVIEW

A Learning and Development Portal (L&D) facilitates education using a range of methods, including classroom instruction, peer mentoring, and on-the-job training. Learning and development portals have been widely used by businesses for online training of staff and clients. The convergence of technology and the market has led to a dramatic shift away from traditional classrooms and towards online education. Students and teachers/instructors/administrators make up the bulk of LMS customers. Users enrolled in training programmes are known as "learners," while those in charge of the learning and development portal are known as "administrators." Administrators are responsible for populating the portal with training programmes and the tools that allow users to monitor their own growth. L&D is widely used by businesses since it allows them to store information on their trainees and their courses in one convenient location. Learning and Development (L&D) is crucial since it allows users and administrators to control and manage material. The ASP.NET provides a range of tools and technologies that enable developers to create responsive and user-friendly interfaces. This includes support for modern web technologies such as HTML5, CSS3, Bootstrap, and jQuery, which can be used to create a seamless user experience across all devices.

2.1 Technology Used:

➤ ASP.NET

➢ Entity Framework for data access
➢ SQL Server for database management
➢ Bootstrap for front-end design
➢ JavaScript and jQuery for client-side functionality
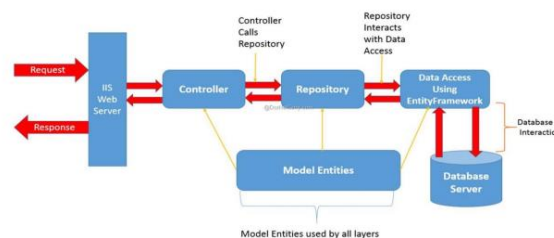➢ Visual Studio as the IDE

2.2   Industrial scope

The industrial scope of Learning and Development portal is vast, as it can be applied to various industries and sectors, including education, corporate training, healthcare, government, and more. It provides organizations with a cost-effective and scalable solution for delivering training and education to their employees and customers, enhancing their skills, knowledge, and productivity. Moreover, it enables organizations to track and monitor the progress and performance of their learners, providing valuable insights into their training programs' effectiveness and impact. The L&D portal under evaluation is designed to provide a comprehensive and engaging learning experience. It offers a wide range of courses and resources, including lectures. The portal is accessible through a web browser, and can be used on desktops, laptops, tablets, and smartphones. Overall, the L&D portal under evaluation is an innovative and powerful platform that has the potential to transform the way we learn and teach. This report will provide a detailed analysis of the design and functionality of the portal, and offer recommendations for enhancing its effectiveness and usability.

2.3 Goal

The goal of an L&D portal is to provide a comprehensive and integrated platform that enables educators and learners to create, manage, deliver, and track learning content and activities effectively. It aims to provide a personalized and engaging learning experience for learners, with features such as personalized learning paths. Moreover, it aims to simplify the management and administration of learning programs for educators, allowing them to focus on designing and delivering high-quality learning content. Ultimately, the goal is to enhance the effectiveness and accessibility of L&D, providing learners with the skills and knowledge they need to succeed in their respective fields. The goal of an L&D using ASP.NET is toprovide a convenient and secure platform. The website should be user-friendly and easy to navigate.

3.   METHODOLOGY

Model Entities used by all layers

3.1 Implementation

➢ **Database Design:** The database will consist of tables for Student, Staff, Feedback, Messages, Admin. The tables will be linked using foreign keys.

➢ **User Interface:** The website will have a responsive design using Bootstrap. The homepage will display featured Login, Registration, Feedback, Notifications and admin. Student can login with their details and also can register. Staff can mark attendance and send some notification. The website will have a login and registration page for users.

➢ **Admin Panel:** The admin panel will allow administrators to manage staff, files and messages. The admin panel will require authentication for access.

➢ **Data Access:** Entity Framework will be used for data access. Entity Framework will allow us to work with the database using LINQ queries and will provide an object-relational mapping (ORM) layer between the application and the database.

3.2 Description of Language ASP.NET:

It's a Microsoft framework for building online apps, and it's based on the familiar online form architectural pattern. This framework provides a structure for the development of web applications and separates the application logic into three distinct layers, making it easier to develop, test, and maintain the application.

C#: It is a contemporary, object-oriented programming language created by Microsoft for use in creating programmes for the.NET Framework. C# is used to write the back-end logic that powers the web application.

HTML/CSS/JavaScript: These are the industry-standard technologies used while developing the front end of a website. It is the job of HTML to lay down the framework for the web pages, CSS to style the pages, and JavaScript to offer interaction and dynamic functionality.

Microsoft SQL Server: It is a relational database management system (RDBMS) created by Microsoft, and it is both powerful and scalable. E-commerce websites rely on it to store and manage their data.

Entity Framework: Accessing and managing data in a database is made easier using this Microsoft-created Object-Relational Mapping (ORM) technology. It allows developers to interact with the database using strongly-typed C# classes and offers a greater degree of database abstraction.

jQuery: It's a lightweight, quick, and feature-packed JavaScript framework that makes it easier to perform things like navigate and modify HTML pages, respond to events, and generate animations and effects.

Bootstrap: It's a common front-end framework since it makes it easier to create mobile-friendly and responsive websites. It offers a collection of prefabricated elements and designs that may be modified to suit the needs of every given online store.

4 Output Result :

5 CONCLUSION

In today's digital era, Learning and Development portal have become an essential part of the education world. The ASP.NET provides a reliable and efficient platform for developing L&D portal websites, as it enables developers to create dynamic, responsive, and user-friendly web applications. This project involved the development of an L&D Portal using the ASP.NET. The project aimed to create a robust and scalable platform,

the project used a variety of technologies, including HTML, CSS, JavaScript, and databases, to ensure that the website was visually appealing, interactive, and easy to navigate. The system requirement specifications provided a detailed understanding of the various hardware and software requirements needed to develop the website. The input and output design ensured that the website had a userfriendly interface, with features such as Uploading file, marking Attendance.

REFERENCES

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