

A Project Report

On

Quiz Application

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ACKNOWLEDGEMENT

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us with the instructor Mr. Mayank Saxena, our technical trainer and supervisor.

He has been helping us since Day I with this project. He provided us with the roadmap. and the basic guidelines explaining how to work on the project. He has been conducting regular meetings to check the progress of the project and provide us with the resources related to the project.

Without his help, we wouldn't have been able to complete this project

And last but not least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training.

Thanking You

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1.ABSTRACT

Web in simple terms means a network of Internet servers that are ready to support some formatted documents and can be accessed by a web browser. About these formatted documents these are formatted in HTML (Hypertext mark-up language). Not these formatted documents create their links to their type but they also support links to some documents including video, graphics and audio files. Terms Web and Internet are interchangeably used but they are not same. While Internet refers to global network of servers that makes sharing of information, Web is the collection of information being accessed via Internet. Also, we can say that Web is a service and Internet is an infrastructure where web is a service on top of it. Alternatively, we can say Web is just a portion of the Internet. This project deals with use of web technology in the field of e-learning. Nowadays e-learning platform are encouraged as lot of manual work is not done and also it helps in saving time. People anywhere in the world with an internet connection can easily use these platforms. Not only in this field but anyone connected to an internet connection can use internet from any place in the world to shop online, pay bills, read books or newspaper, book movie tickets, reservation of buses or railway and many more.

Key Feature :

User-Friendly Navigation:

Intuitive navigation design for seamless user experience.

Clear and prominent navigation links to sections such as Sign-In, Login, Resources, Success Storie.

Sign-In and Login:

Secure user authentication system with a straightforward sign-in and login process.

Success Stories:

Inspiring success stories of individuals who have benefited from the Placement Booster platform.

Testimonials and achievements to build trust and credibility.

2.Introduction

This project deals with use of web technology in the field of e-learning. Nowadays e-learning platform are encouraged as lot of manual work is not done and also it helps in saving time. People anywhere in the world with an internet connection can easily use these platforms. Not only in this field but anyone connected to an internet connection can use internet from any place in the world to shop online, pay bills, read books or newspaper, book movie tickets, reservation of buses or railway and many more. Although the project is not exactly about teaching or studying but it is about testing students' knowledge on particular topic with the help of some objective type questions with some options. Though some set of questions cannot completely judge anyone's knowledge but this project aims to help students to evaluate themselves so that when after studying any particular topic they can correlate their concepts and some concepts that were not clear to them or those one which they have skipped can be presented to them in the form of questions by their teacher. Thus, teacher can also know about which concepts he or she should focus on as students are more often to give wrong answers on it.

1.2 Problem Statement

The objective of Online Quiz application is to facilitate user friendly platform by reducing the manual effort. In past days we have seen that quiz were taken manually but with rise of technology we are able to conduct them and generate scores automatically. Especially in the time of this pandemic use of such applications is highly appreciated as schools and colleges are very much affected.

1.3 Objective

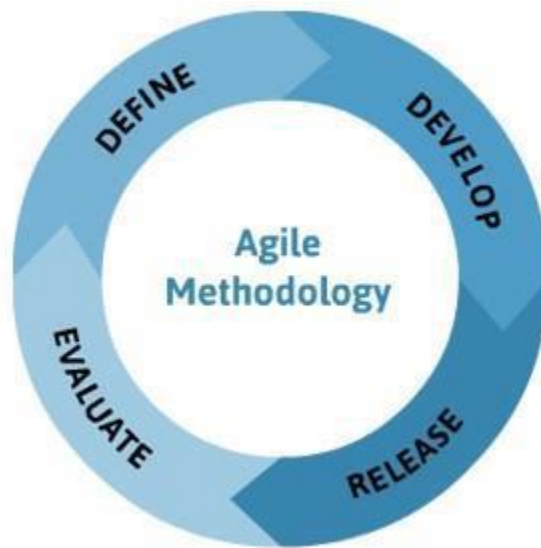
The main objective of this Online Quiz Application is to provide an online platform for both teachers and students so that teacher can take various tests or assignments in the form of quiz and students after going through a concept can assess him/herself by the quiz questions being uploaded by teacher thus also reducing the manual paper work. The project presents the following features:

1. Making of a quiz.
2. Taking of quiz.
3. Registration of teachers and students.
4. Any type of queries from users.

1.4 Methodology

The methodology used in this project include repetition of design, code and implementation then testing and analyzing the result. Further when

repeating the phases again, new functionalities are added to the project. This methodology is called agile methodology.



For example, while creating the basic structure and less of focus on creative interface first iteration of the phases was done. After evaluation in each cycle more focus on interface and debugging was done.

3.Literature Servey

Web in simple terms means a network of Internet servers that are ready to support some formatted documents and can be accessed by a web browser. About these formatted documents these are formatted in HTML (Hypertext mark-up language). Not these formatted documents create their links to their type but they also support links to some documents including video, graphics and audio files. Terms Web and Internet are interchangeably used but they are not same. While Internet refers to global network of servers that makes sharing of information, Web is the collection of information being accessed via Internet. Also, we can say that Web is a service and Internet is an infrastructure where web is a service on top of it. Alternatively, we can say Web is just a portion of the Internet.

Particularly whenever a client surfing web makes a request to web server, it first find resources and then sends some return response in HTML to the browser and a web browser know how to display them to client. Web pages are the documents written in HTML which provides meaning and some structure to any web content and collection of these web pages is called a website which consists of static files. A web application however is same as a website but with dynamic functionality like where user can manipulate the restricted data. A website seems to be too informational while a web application is interactive. User spend more of its time reading, listening or viewing a website but in a web application like social media

applications where user spend a lot of interaction or banking application that performs transactions on customer's input. Authentication can also be a point of difference between website and web application. Since in a web application, interaction of user is high and manipulation of data is there, therefore user accounts must be secured in order to prevent unauthorized access and any leakage of sensitive data. Most of the web application requires authentication but for the informational websites it is not obligatory. An example for this can be that while reading any news or article you don't need to go through any authentication process but to comment on it that includes interaction you have to go through a log in process.

Performance Analysis

1. Agile Methodology



During making of this project Agile methodology was used. We already know that there are many advantages of agile method in comparison with the waterfall method. Client describe its need and expectations in the beginning and with the constant evaluation and iteration of several phases it works better to meet customer's expectation. Any kind of modification can be easily achieved by following this methodology. In making of this project initially more emphasis was given to the basic structure that is simple login page then redirection to the quiz and then the scores. By constant iteration of different phases, many functionalities were added to the application like more interactive interface, various articles in the form of blogs, a portal to put queries by user to the administrator etc.



2 Performance Analysis

While analyzing the performance of any web page speed is a very important criterion. Because if your user find that your web page is taking longer time to load then he or she might not visit your page or will look for an alternative. A recent study by google suggest that 53% of the visit to the web pages are not preferred if the web page takes more than three seconds to get loaded.

Also, various studies have shown that human patience level is decreasing in this world of technology. So, keeping in mind these facts on should keep in mind the speed analysis while analyzing performance of a web page. Analyzing the speed by which the home page of the web application gets loaded we found that most of the images, CSS and JSP files took less than 900ms which is even less than 1second. One important point to be noted here that before loading the home page cache memory was cleared so that it could

be more specifically analyzed that without the use of cache how much time is being taken by each file to get loaded.

Software Requirement Analysis

Problem Statement:

Navigating the job market and achieving successful placements can be challenging for both job seekers and employers. The Placement Booster platform is designed to address these challenges by providing a comprehensive solution that empowers job seekers through skill development, personalized resources, and efficient job matching, while simplifying the recruitment process for employers.

Impact on Daily Life:

- Enhanced Employability: Empowering individuals to improve their skills and increase their chances of successful job placement.
- Efficient Job Matching: Streamlining the recruitment process for employers and connecting them with well-suited candidates.
- Continuous Learning: Facilitating ongoing skill development to keep users competitive in the evolving job market.

Hardware Requirements:

1. Server Infrastructure:

- Robust server infrastructure to handle user data, algorithms, and facilitate real-time interactions.
- Cloud-based hosting for scalability and reliability.

2. Database System:

- Database for storing user profiles, job listings, and other platform-related data.
- Efficient querying and data retrieval for seamless user experience.

3. Security Measures:

- Encryption protocols to ensure the security of user data.
- Regular security audits and updates to protect against potential threats.

Software Requirements:

1. User Authentication and Profile Management:

- Secure user registration and authentication.
- User profiles for job seekers and employers with relevant information.

2. Job Matching Algorithm:

- Intelligent algorithm for matching job seekers with relevant job opportunities.
- Customizable filters for both job seekers and employers.

3. Resume Builder:

- User-friendly tool for job seekers to create and manage professional resumes.
- Integration with user profiles for easy submission to employers.

4. Resource Library:

- Curated collection of resources, articles, tutorials, and webinars for skill enhancement.
- Categorization and search functionality for easy access.

5. Success Stories and Testimonials:

- Section to showcase success stories and testimonials from individuals who have benefited from the platform.
- Builds trust and credibility among users.

6. Communication Module:

- Messaging and communication features between job seekers and employers.
- Notifications for job updates, interview requests, and other relevant communications.

7. Analytics and Reporting:

- Generation of reports on user engagement, job placement success rates, and platform usage.
- Analytics for continuous improvement and feature enhancement.

8. Mobile Application:

- Cross-platform mobile application (iOS, Android) for on-the-go access.
- Intuitive and user-friendly interface for seamless navigation.

9. Community Building Features:

- Forum or community section for users to interact, share experiences, and seek advice.

- Community engagement features to enhance user networking.

By addressing these hardware and software requirements, the Placement Booster platform aims to revolutionize the job placement process, making it more efficient, personalized, and empowering for both job seekers and employers.

Implementation Plan and User Interface Design

Week 1: Project Setup and User Authentication

Implementation:

1. Set up the development environment, including server infrastructure and database.
2. Implement user authentication and registration functionalities.
3. Develop a secure and user-friendly login page.

User Interface:

- Clean and intuitive login page with fields for username/email and password.
- User registration form with essential details.

- Error handling for incorrect login attempts.
- Welcome dashboard upon successful login.

Week 2: User Profiles and Resume Builder

Implementation:

1. Design and implement user profile creation and editing.
2. Develop the resume builder tool with sections for education, skills, experience, etc.
3. Integrate the resume builder with user profiles.

User Interface:

- User-friendly profile creation form.
- Interactive resume builder with drag-and-drop functionality.
- Preview mode for users to review and edit resumes.
- Save and submit buttons for easy navigation.

Week 3: Communication Module and Mobile Application

Implementation:

1. Implement messaging and communication features between job seekers and employers.
2. Develop push notifications for job updates, interview requests, etc.
3. Create a cross-platform mobile application for on-the-go access.

User Interface:

- Messaging interface with threaded conversations.
- Notification center for updates and alerts.
- Responsive mobile application design for iOS and Android.
- Consistent UI elements for seamless navigation.

Ongoing: Analytics and Community Building Features

Implementation:

1. Implement analytics for tracking user engagement, job placement success rates, etc.

2. Develop a community forum for users to interact, share experiences, and seek advice.

User Interface:

- Analytics dashboard with visual representations of key metrics.
- Engaging community forum with threads and user profiles.
- Moderation features to ensure a positive community experience.

Post-Implementation: Testing and Iteration

1. Conduct thorough testing to identify and fix any bugs or issues.
2. Gather user feedback through surveys or beta testing.
3. Iteratively improve features based on user input and performance analytics.

By following this four-week implementation plan, the Placement Booster Platform can be developed and launched in a phased manner, ensuring a systematic and user-focused approach to feature development.

FUTURE SCOPE

This project has a vast scope as many other functionalities can be added to it. In first place a timer can be added to each quiz. Due to no limited time for the test students can find answers to the questions anywhere else which ultimately will not be an honest evaluation of their result. Also, to prevent this many other functionalities can be added to the user side especially to the student like restricting any kind of switching of tabs in the browser and introduction of webcam for more honest evaluation of the students. More creative way of showing result and deletion of test by adding an administrative part to the system can be done. In the administrative part addition and deletion of user can be done.

CONCLUSION

After completion of this project we have concluded that this web application works as per the need and requirement of the client and is user friendly. Also this mini project helped me to understand the design, code and implementation processes which are performed while making any project. Many concepts were revised and many of them were very new which were learnt in making of this web application.

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