Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur

Project Kit

Title of the Project

Web-Based Recruitment Process System for the HR group for a company

Abstract of the project

This project focuses on the development of a Web-Based Recruitment Process System designed specifically for the HR group of a company. The primary aim is to create an efficient, user-friendly platform that automates and streamlines various recruitment processes, addressing the challenges of traditional methods. Utilizing modern web technologies such as HTML, CSS, and Spring Boot, the system offers a robust framework for managing job postings, candidate applications, and interview scheduling.

Keywords

Generic Keywords :

Integration,Databases, Programming

Specific Technology Keywords :

HTML, CSS,JavaScript,ReactJs,MySQL,SpringBoot

Project Type keywords :

UI/UX Interface,API Integration,Testing, Security

Functional components of the project

Users of the system:

- HR
- Company
- Candidate
- Managerial Staff

Functionality:

Platform incorporates functionalities such as a candidate tracking system, customizable job listings, and an intuitive dashboard for monitoring recruitment metrics. Key features of the system include authentication for secure access, ensuring that sensitive HR data is protected. Additionally, the platform incorporates functionalities such as a candidate tracking system, customizable job listings, and an intuitive dashboard for monitoring recruitment metrics.

- Homepage: This is the main landing page of our website. It should provide an overview which services are provided and are available.

- Find Jobs: Job posting creation and editing, category and location management ,visibility controls (internal, external),expiration date management.

- Job Candidate Management: Candidate registration, profile creation, Resume uploading ,storage ,search and filtering based on criteria like skills, experience, education ,status tracking (applied, shortlisted, interviewed, hired).

- Application Tracking: It is Online application submission, it also helps Automatic resume parsing to extract relevant information tracking and status updates.

- User Accounts: Allow users to create accounts to access features like application history, account details , edit information,manage professional information.

- Contact and Support: Provide contact information and a support section where users can reach out for inquiries, assistance, or customer support.

- Registration and Login: Implement user registration and login functionality for HR to access their accounts and personalized features.

- Communication Management: Email communication templates for candidate interactions and Candidate portal for accessing application status and communication.

- Interview Scheduling: Interview scheduling tool with calendar integration with Reminder notifications for interviewers and candidates.

- Security Measures: Implement robust security measures to protect user data and financial transactions.

Non Functional Requirements:

- Performance: Ability to handle increased user traffic during peak recruitment periods .
- Scalability: The system should be scalable to accommodate future growth.
- Reliability: System stability to prevent unexpected crashes or errors.
- Security: Protect user data, candidate information, and the website against security threats.
- Usability: Intuitive user interface design for easy navigation
- Accessibility: Redundancy measures to ensure access during system failures.
- Compatibility: Support major web browsers and devices.
- Maintainability: Ease of updating and modifying the system code.

Steps to start-off the project:

Creating a Web based recruitment system involves several steps and considerations to ensure its functionality, security, and user-friendliness. Here's an outline of the website making process:

1. **Market Research and Planning:**
   - Define the scope and objectives of the website.
   - Identify the target audience and potential candidates.
   - Conduct market research to understand the needs & challenges to recruitment process.

2. **Domain Name and Hosting:**
   - Choose a suitable domain name that reflects the website's purpose.
   - Select a reliable web hosting service to host the website.

3. Website Platform and Technology:

- Decide on the technology stack for website development (e.g., HTML, CSS, JavaScript, backend language, and database).

4. Website Design:

- Create a visually appealing and user-friendly design for the website.
- Ensure that the design is responsive and accessible on various devices (desktops, tablets, smartphones).

5. Frontend Development:

- Implement the website's user interface based on the chosen design.
- Develop interactive features, such as search options, filters, and user registration forms.
- Optimize the frontend for a smooth user experience.

6. Backend Development:

- Set up the server and backend infrastructure.
- Implement the database to store user data, candidate information, and job information by using react.js and springboot .

7. User Authentication and Security:

- Implement a secure user authentication system.
- Ensure the website follows best practices for data security and protection.

8. Payment Gateway Integration:

- Integrate a secure payment gateway to facilitate financial transactions.
- Enable various payment options to accommodate user preferences.

9. Testing and Quality Assurance:

- Conduct thorough testing to identify and fix any bugs or issues.
- Test the website on different devices and browsers to ensure compatibility.

10. Launch and Marketing:

- Launch the Recuritment system Website and make it accessible to users.
- Implement strategies to attract company and promote the platform.

11. Monitor and Improve:

- Regularly monitor website performance and user behavior.
- Gather user feedback to identify areas for improvement and future feature enhancements.

Requirements

Hardware requirements

Number	Description	Alternatives (If available)
1	PC with 8 GB hard-disk a MB RAM	Not-Applicable

Software requirements

Number	Description	Alternatives (If available)
1	Windows 10 or Window 11	Not Applicable
2	Visual Code Studio	CodePen
3	MySQL	Postgress SQL
4	Windows	Ios
5	Postman	ThunderClient

Manpower requirements

3 students can complete this in 4– 5 months if they work part-time on it.

Milestones and Timelines

Number	Milestone Name	Milestone Description	Timeline (in weeks)	Remarks
1	**Requirements Specification**	Complete specification system(with appropriate assumption constitutes this milest document detailing the should be written a presentationonthatbe	2-3	Attempt should be made to some more relevant function other thanthosethatarelisted document
2	**Technology familiarization**	Understanding of technology needed implementtheproject.	4-5	The presentation should be from point of view of being able to it to the project, rather than theoretical perspective
3	**Database creation**	A database of atleas entries of users, 50 products, shouldbecreated.	5-7	It is important to finalize o database at this stage itself development and testing proceed with the actual data itself.
4	**High-level DetailedDesign**	Listing down all possible scenarios and then comment with flow-charts pseudocode to handle scenario.	7-9	The scenarios should map the requirement specification (ie each requirement that is specific corresponding scenario should there).
5	**Implementation front-end of the system**	Implementation of the screen giving the facility, screen that fo the login giving various options, screens for each the options	10-12	During this milestone period would be a good idea for the (or one person from the tea start working on a test-plan for entire system. This test-plan updated as and when new scene come to mind.

6	**Integrating front-end with databas**	The front-end develop the earlier milestone will be able to update database.Other feature Inshort, the system show ready for integrations.	12-13	Integrating the front-end with database is a crucial step in development, and it inv connecting the user in the (front-end) to the data storage retrieval system(database).
7	**Integration Testing**	The system should thoroughly tested by run all the test cases written the system	14-15	Another 2 weeks should be th handle any issues found d testing of the system. After this final demo can be arranged.
8	**Final Review**	Issues found during previous milestone are and the system is read the final review.	16-18	During the final review of project, it should be checked the requirements specified are fulfilled.

Guidelines and References

- https://www.mysql.com/
- https://react.dev/
- https://www.w3schools.com