HR System for Hiring

Project Proposal

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INTRODUCTION:

The HR System will serve as a platform that simplifies the hiring process providing a seamless experience for candidates, HR personnel, and companies, ensuring the right fit for each position. Our goal is to minimize the gap between hiring managers and job applicants by developing an easy-to-use virtual platform with advanced features that help HR personnel in receiving and assessing resumes and applications, scheduling interviews, conducting tests, and shortlisting applicants based on job requirements.

OBJECTIVE:

To design an efficient, system that connects candidates with job opportunities, facilitates HR tasks, simplify the hiring process for organizations and improve candidate management efficiency.

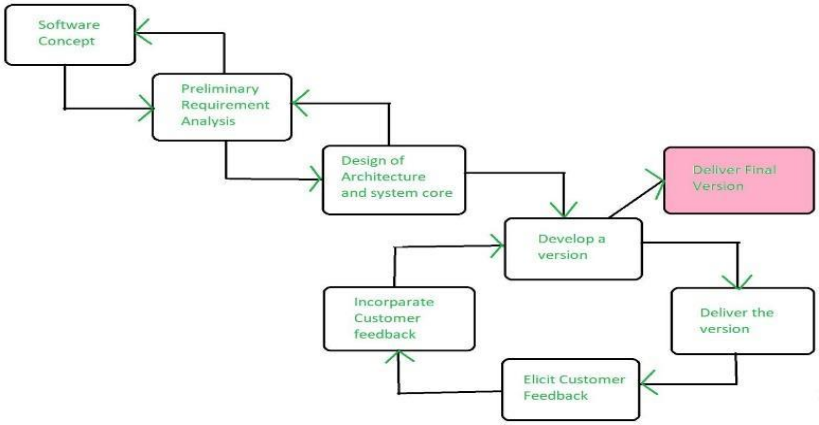
PROBLEM DESCRIPTION

The Hiring processes used today are frequently complex, challenging, time consuming and ineffective. If we follow a common hiring method it can take up to two months to fill a position, which can be costly for companies. Additionally, it is often difficult for HR professionals of companies to go through numerous CVs one by one and find the right candidate for their open position. This is where our HR system comes in handy.

Our system provides all HR professionals, companies and candidates with an efficient and user-friendly platform that not only simplifies the hiring process but also ensures candidates receive suitable job offers, even if they don't match the initial company they applied to, which maximizes job openings and using resources. Candidates can easily submit their CV and application, and complete a scenario-based test. HR professionals can receive and review shortlisted candidates CVs based on their requirements, conduct a test and schedule an interview. Company HR can avoid losing focus, strength, and resources on hiring candidates, allowing them to concentrate on other important tasks that drive the company to success.

METHODOLOGY

Evolutionary prototype is the best fit for hiring systems because it focuses on building an initial version of the system and then continuously refining and improving it based on feedback and new requirements. It focuses on user involvement, responsiveness, improved usability, and enhanced communication.
By using evolutionary prototyping in our project, we can create a system that meets the needs of HR professionals, Organizations/Companies and candidates, and that is responsive to user feedback and makes continuous improvement ensuring that the final product is effective, user-friendly and capable of simplifying the hiring process.



SCOPE

The following significant elements will be a part of the project.

1. Improving the overall efficiency of HR processes and procedures.
2. Simplifying and streamlining recruitment processes.
3. Enhancing the management of candidate data and interactions.
4. Automating routine tasks and reducing manual errors.
5. Providing real-time insights and analytics for data-driven decision-making.
6. Enhancing employee experience and engagement through self-service portals.
7. Ensuring compliance with regulatory requirements and industry standards.

FEASIBILITY STUDY

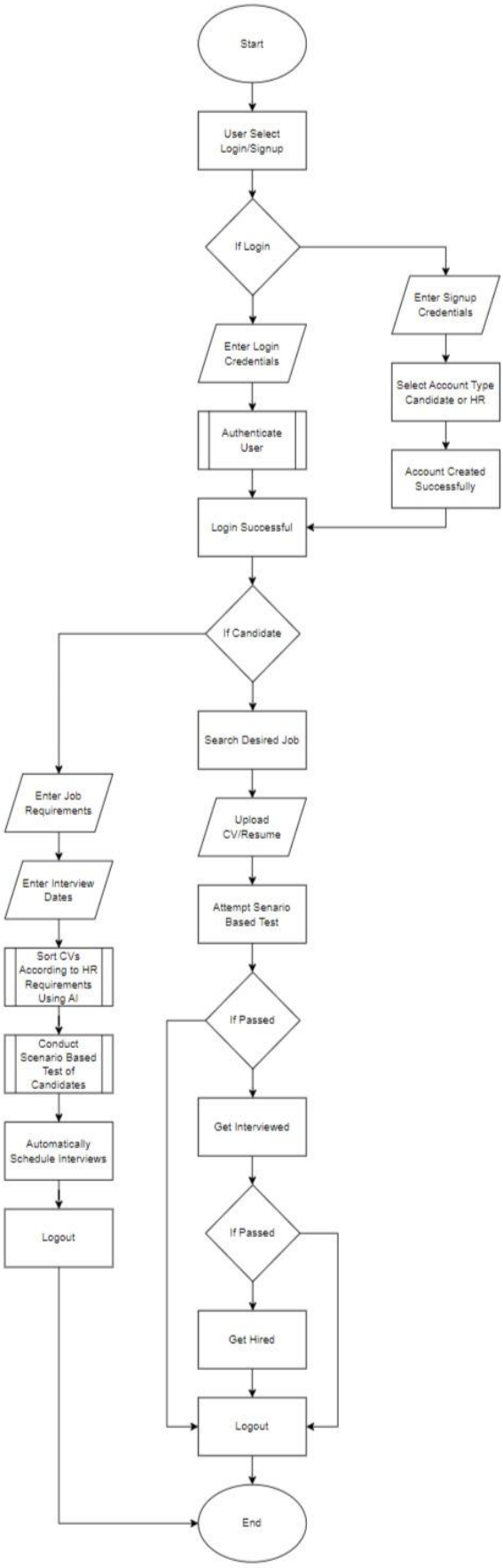
I. Risks Involved:

- Integration of various modules and ensuring seamless data flow. Minimized by iterative development and extensive testing.
- Ensuring the system is user-friendly. Reduced by usability testing and user input.
- A module for administering and evaluating scenario-based tests will be developed, providing a standardized method for assessing candidate suitability.
- Protecting sensitive data of candidates and HR. Reduced by using encryption and strong security mechanisms.
- If the user does not like the design, By continuously involving the user from the very beginning and collecting their feedback, we can ensure that their expectations are met.
- An AI-based shortlisting feature will filter candidates based on HR-defined criteria, improving efficiency and accuracy in candidate selection.
- The system will include a calendar integration for scheduling interviews, ensuring efficient time management for HR professionals and candidates

II. Resource Requirement:

- **Computing Resources:** Laptops for development, a server for deployment.
- **Software:** Development tools (IDE, version control), MongoDB, Express.js, React.js, Node.js.

FLOWCHART


Start
User Select Login/Signup
If Login
Enter Signup Credentials
Enter Login Credentials
Select Account Type Candidate or HR
Authenticate User
Account Created Successfully
Login Successful
If Candidate
Search Desired Job
Enter Job Requirements
Upload CV/Resume
Enter Interview Dates
Attempt Senario Based Test
Sort CVs According to HR Requirements Using AI
If Passed
Conduct Scenario Based Test of Candidates
Get Interviewed
Automatically Schedule Interviews
If Passed
Logout
Get Hired
Logout
End

SOLUTION APPLICATION AREAS

The HR System holds significant value especially for those industries like IT, healthcare, finance, and education. Organizations can reduce administrative expenses, improve candidate experience, and make better hiring decisions by simplifying the recruitment process. This will lead to better recruitment and will result in success for the organization.

TOOLS

SOFTWARE:

- VS Code
- MongoDB Compass
- Insomnia
- Thunder Client
- Git Bash
- Github Desktop

HARDWARE:

- **PROCESSOR:** CORE i7 4th Generation or higher
- **RAM:** 8GB or higher
- **INTERNET:** 12MB connection or FIBER OPTICS

RESPONSIBILITIES OF TEAM MEMBER

Project Deliverable Activity	Co-Supervisor	Supervisor	Muhammad Hassan	Ramiz Shahnawaz	Shayan Yar Khan
Project Planning	C, I	C, I	R	R	R
Project Analysis	C, I	C, I	A, I	R	R
Project Design	C, I	C, I	R	R	R
Project Implementation	C, I	C, I	A	A	R
Project Documentation	C, I	C, I	R, A	R, A	R, A
Finalize and Deployment	C, I	C, I	R, A	R, A	R, A

PLANNING

REFERENCES

[1] "Lever | Recruiting Software for Today's Hiring Teams". "https://www.lever.co/". (accessed Jun. 26, 2024).

[2] "Talent Acquisition and Recruiting Software". " https://www.workday.com › products › talent-management". (accessed Jun. 26, 2024).