Machine Test

Front-End Developer Assessment: Practical Machine Test

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Objective: Superhero Grievance Website

The goal of this machine test is to assess the candidate's proficiency in React.js, UI/UX design, backend integration, and overall web development skills. The candidate is required to create a Grievance Website for an imaginary superhero, complete with a user-friendly interface, backend integration, and separate dashboards for users and the superhero.

Scenario:

You are tasked with creating a grievance website for an imaginary superhero. This website will allow common people to log their complaints, which will be reviewed by the superhero. The site should feature a modern, appealing design with smooth functionality. Additionally, there should be a separate, secure dashboard where the superhero can view and manage all the grievances. The superhero should also receive an email notification for every new grievance logged.

Requirements

- **Frontend Development (React.js):**
- **Grievance Website**:
  - The website should have at least three inner pages:
    - **Home Page**: Introduce the superhero and the purpose of the grievance website. Use a storytelling technique to engage users.
    - **About Us Page:** Detail the superhero's mission, background, and how they intend to address grievances.
    - **Grievance Submission Page:** A form where users can submit their complaints.
  - The design should be modern, visually appealing, and responsive across devices.
  - Integration of animations or interactive elements to enhance user experience.
  - AI Model Integration (Optional but appreciated): Implement a simple AI model that interacts with users on the homepage or grievance submission page (e.g., an AI chatbot or a virtual assistant).

Backend Development:

- **Database:** Set up a backend to store all grievances. The candidate can use any technology stack (Node.js, Django, etc.) and database (MySQL, MongoDB, etc.) they are comfortable with.
- **API Endpoints:** Develop RESTful APIs to handle grievance submissions, retrieval, and dashboard functionalities.
- **Email Notifications:** Integrate an email service (e.g., SendGrid, Gmail API) to send an alert to the superhero's Gmail account whenever a new grievance is submitted.

Superhero Dashboard :

- This should be a separately hosted web application where the superhero can log in securely and view all the complaints.
- The dashboard should allow the superhero to filter, search, and manage grievances.
- It should have a clean and intuitive UI, optimized for quick access to critical information.

Hosting and Deployment:

- **Separate Hosting:** The grievance website and the superhero dashboard should be hosted separately.
- **Links Submission:** Provide hosted links to both the grievance website and the superhero dashboard as part of the test submission.

Documentation and Code Explanation

- The candidate must provide clear documentation explaining the code structure, functionality, and any external libraries used.
- During the HR + Technical interview, the candidate should be prepared to explain the code and design decisions in detail.

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Evaluation Criteria

- **UI/UX Design:** The design should be modern, responsive, and visually engaging. Storytelling techniques used on the homepage will be assessed.
- **Code Quality:** Code should be clean, well-structured, and follow best practices.
- **Functionality:** The grievance submission, backend integration, dashboard, and email notifications should work seamlessly.
- **Innovation:** The inclusion of an AI model and any creative features will be highly appreciated.
- **Time Management:** The project should be completed within 10 days of assignment.
- **Presentation:** The candidate should be able to explain their design and code decisions clearly during the interview.

Submission Guidelines

- **Project Links:** Provide the links to the hosted Grievance Website and Superhero Dashboard.
- **Source Code:** Upload the source code to a Git repository and share the link.
- Documentation: Include a README file explaining how to set up and run the project locally.
- **Code Explanation:** Be prepared to explain the code during the HR + Technical round interview.

Time Frame: 10 days from the date of assigning the test.

Note to Candidates

- Focus on making the UI/UX perfect and flawless.
- Ensure the website is engaging and user-friendly.
- Pay attention to details in both functionality and design.
- Use the storytelling technique effectively to make the homepage stand out.

Good Luck
Team WhiteMatrix