

MERN Stack Developer Assessment

Project Name: DNS Manager

Purpose:

Develop a web application to provide a central dashboard for automating management of domains and DNS records in bulk on GCP.

- **Task 1: Setup**
 - Set up a MERN stack environment for the DNS Manager project.
 - Ensure that you have access to GCP services for backend integration.
- **Task 2: Frontend Development**
 - Develop a simple dashboard using React for uploading and viewing domains and DNS records in a tabular format.
 - Implement forms/modals for adding, editing, and deleting DNS record entries for domains.
- **Task 3: Enhancements**
 - Enhance the dashboard with filters and search options for easy navigation of bulk data.
 - Incorporate graphical charts/metrics to display domain and record type distribution.
 - Integrate CSV or JSON bulk uploads for domain/records data.
- **Task 4: Backend Integration**
 - Set up backend API endpoints using Node.js and Express to connect the UI to the DNS system on GCP.
 - Implement API calls for CRUD operations on DNS records.
- **Task 5: User Interface**
 - Design status indicators, alerts, and notifications for user guidance.
 - Implement secure user authentication and authorization using JWT or OAuth.

Resources:

- Google Cloud DNS documentation: <https://cloud.google.com/dns/>

Evaluation Criteria:

- **Functionality:** Does the application meet the specified requirements?
- **Code Quality:** Is the code well-structured, readable, and maintainable?
- **UI/UX:** Is the user interface intuitive and visually appealing?

- **Error Handling:** Does the application handle errors gracefully?
- **Security:** Is user authentication implemented securely?
- **Bonus Features:** Are any of the bonus features implemented?

Submission Requirements:

- The submission should be in DOCX or PDF format.
- The candidate should not provide any external links to previously completed projects.
- Submit your project code along with any necessary setup instructions and documentation through <https://link.krite.sh/mernstack> by **March 30th 11:59 PM**.
- If selected for further consideration, you will receive a response within 2-3 working days. If not, it may take longer due to the volume of submissions.
- Complete each task according to the specifications provided.
- Ensure that your code is well-structured, readable, and follows best practices.
- Provide clear instructions for running your code and accessing the application.
- Please include some snippets of the output of the assessment in the solution file. This will facilitate our evaluation process.

Note:

Plagiarism or unauthorized use of code from external sources will result in disqualification. Candidates are expected to demonstrate their own skills and understanding of MERN Stack development concepts.