Technical Assessment

Assessment Requirement

EPI-USE Africa is in need of a cloud hosted application to manage its organisation's employee hierarchy. The application should allow a user to create, read, update, and delete employee data, as well as control the employees reporting structure by setting an employee's reporting line manager. It should be noted that employees may not be their own manager, however, an employee may be in such a position whereby they have no manager (e.g., the CEO). As a minimum, an employee's data record should contain name, surname, birth date, employee number, salary, role/position, and reporting line manager.

The solution should have functionality to present a user with a visual representation of the organisation's hierarchy (e.g., a tree or graph structure). The user should also be able to search the hierarchy to find, edit or delete employee data. A reporting table or list view of the employees should be provided, whereby a user can sort and filter based on any of the provided employee data fields.

Furthermore, it is required that Gravatar (https://en.gravatar.com/) be integrated into the platform to allow an employee to have an avatar profile picture linked to their employee data. The application does not need to allow users to upload profile pictures, but rather only display them, however, we do promote building in upload functionality as an optional nice-to-have feature.

As previously mentioned, the solution must be deployed to a cloud platform (free options are available, e.g., Heroku, Firebase, AWS, GCP) and be easily accessible via a provided URL.

A user guide should be provided showing an end-user how to use the system and its various features. In addition, a short technical document must also be provided whereby you explain the architecture of the solution, design patterns used, technologies, and justification on why you feel this was the best way to build the solution.

Additional Requirements

- No data may be mocked using hardcoded values or local files, as all modifications must be committed to a remote database.
- A git repository must be used, and a link to this repository must be made available to us upon submission. If a private repository is used, then please ensure that the relevant access is granted.

Key Points

- The specification for this solution is intentionally vague in order to give you freedom when designing the solution.
- Any technologies may be used, as long as they are justified within your technical document.
- You are free to build in any additional functionality into the solution, just make sure that this is documented so you can get the well-deserved credit when your solution is being assessed.

Please send your submission to: **techrecruit@epiuse.com** prior to the deadline provided to you.