

Assignment:

You have to create a REST API for an incident management system.

Development Environment: Ubuntu (Version 18 & above), Development Language Python 3.8 and above, Database MySQL (Preferred)/ PostgreSQL & React.JS/ or any language for the front end. If you do not have expertise in the front end, then you can demonstrate the same using Postman.

The Front for the incident management system can be in any language you are comfortable in and need to create the following

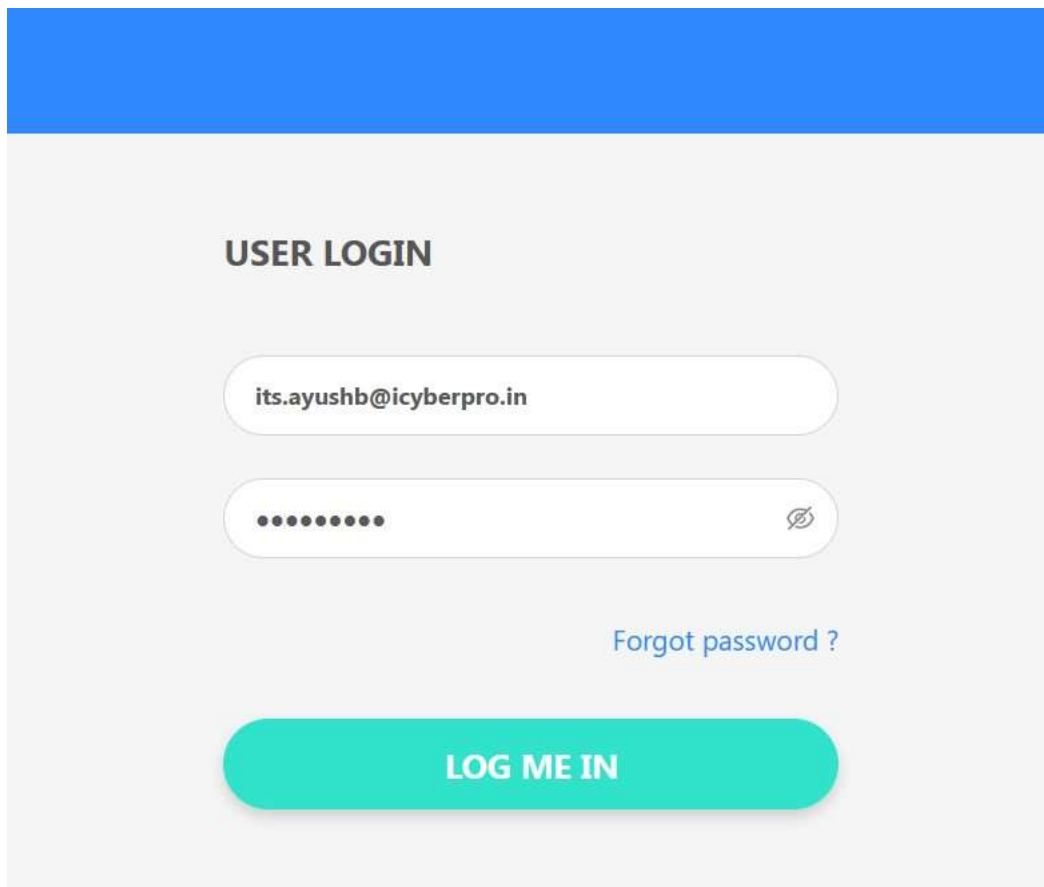
1. Front-End development: you need to create the following using ReactJs or any language.
 - a. Registration Page for the user (See file registration.png)
 - b. Login Page- (Login.png)
 - c. Forgot Password (forgot password.png)
 - d. Create/view/edit- Incident- Use your own UI based on the inputs given below in the backend section.
2. Back-End Development – this would need to be done using Python/Django Rest Framework and should allow a user to log in and create incidents. You need to use MySQL (preferred)

The Key functionalities to be demonstrated for the entire solution:

- a. System should allow you to create multiple users.
- b. Each User should be unique and should have the following details (see user data.jpg file). You need to use any library wherein the moment one enters the pin code, it should auto-select the City and Country,
 - i. User Name
 - ii. User Email ID
 - iii. User Phone Number
 - iv. User Address, Pin code
 - v. City and Country.
- c. System should allow any user to create multiple incidents.
- d. Each user can create multiple incidents.
- e. Each Incident to have the following
 - i. Fields to identify Enterprise or Government
 - ii. Details of the person reporting the incident
 - iii. Ensure that if the person entering the details exists, auto-fill previous information
 - iv. Auto-generate Incident ID and ensure that the format for the Incident ID should be the following format- RMG + Random 5-digit number+ Current year (2022) e.g. RMG345712022
 - v. You need to ensure that each incident number should be unique. So implement methods to check the uniqueness of the Incident.

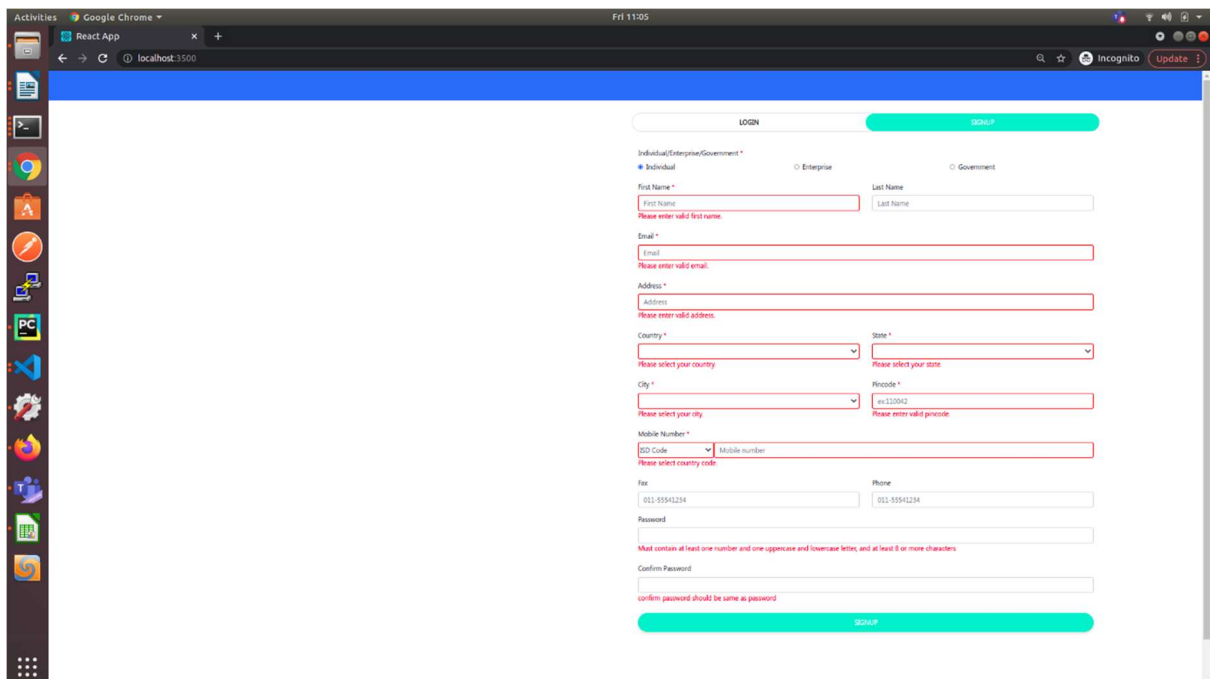
- vi. The incidents should have the following details-
 - a. Reporter name (Name of the user who logs in and creates the incident)
 - b. Incident details (text field) Should be editable
 - c. Incident Reported date and time
 - d. Priority (Dropdown with values High, Medium, Low) Should be editable
 - e. Incident status (Open, In progress, Closed) Should be editable
- f. Limitations
 - i. A User should be allowed to view and edit the incidents created by them only.
 - ii. No user should be able to view other users' incidents.
 - iii. Any Incident which has the state = closed, should not be editable.
 - iv. There should be a provision to search the incident using the Incident ID.

Login.JPG



A user login form with a blue header bar. The title "USER LOGIN" is centered. Below it, there are two input fields: the first contains the email "its.ayushb@icyberpro.in", and the second contains masked characters "....." with a toggle icon on the right. A link "Forgot password ?" is positioned below the password field. At the bottom, there is a large teal button labeled "LOG ME IN".

userdata.JPG



A registration form displayed in a web browser window. The browser's address bar shows "localhost:3500". The form has a blue header bar with "LOGIN" and "SIGNUP" tabs. The "SIGNUP" tab is active. The form includes sections for "Individual/Enterprise/Government" selection, "First Name" and "Last Name" fields, "Email" field, "Address" field, "Country" and "State" dropdowns, "City" and "Pincode" fields, "Mobile Number" field, "Fax" and "Phone" fields, "Password" field, and "Confirm Password" field. Red error messages are visible below several fields: "Please enter valid first name.", "Please enter valid email.", "Please enter valid address.", "Please select your country.", "Please select your state.", "Please enter valid pincode.", "Please select country code.", and "confirm password should be same as password". A teal "SIGNUP" button is at the bottom.