# **Backend Engineering: Multi user approval Assignment**

## 1. 1. Postgres Database and Login:

- Create a PostgresSQL database to store user information such as name and email.
- Develop a login APIs that allows users to sign up and assigns them an internal login ID.
- Develop APIs to create tasks. Any user can create a task. (You can assume a schema for the task.). Taks should have status.
- Implement a bonus feature That lets other users provide approval for the task

### 2. Multi approval Process:

- Develop APIs for multi-approval processes where a task needs to be approved by 3 other users to be in approved status.
- Provide design pointers or hooks for
  - User creating task to choose the 3 other users from a dropdown list and send email notifications to each user when a new task is created.
  - Add the functionality for users to add comments.
  - Ensure the process creator receives a notification on their page when anyone signs off, and notify all parties involved via email when everyone signs off.

#### 3. API:

- Break down the multi-signature process into REST APIs.
- Ensure that the APIs can be integrated into any webpage.

#### Timeline

This assignment must be submitted within 48 hours of receiving it.

### **Objectives**

- Create a simple web application with just Backend API Implementation.
- Create a private GitHub repository and share with satish-xalts, reuvab , Ankit-Xalts
- Email a link of the Github repository to <u>satish.prasad@xalts.io, reuven.aboulker@xalts.io</u> and <u>vaibhav.goyal@xalts.io</u>

### Timeline

This assignment must be submitted within 48 hours of receiving it.

Languages Accepted - Java, Javascript, Typescript, Golang