

# Challenge for Interview Round-1

We need to assess your coding capability and management skills at first. Therefore, you need to develop microservices-based Full stack basic application, which must have at least 3 micro-services (SSO Authentication, Notification & Request) in which user first need to create a request, which require to be approved from his/her superior. Frontend in React and Backend need to be developed in NodeJS.

## Submission Requirement:

1. Your complete source codes
2. Step-by-step implementation guide for your team member, who should be able to implement your application using your source codes and step-by-step user guide.

## Work-Flow:

### Step-01:

User need to log into your application using his google account. Once user logged into your application, then notification service should send E-mail notification for this successful login.

### Step-02:

Now there should be customer dashboard visible to the logged-in user (request creator) in which there should have a link to create new request with following properties.

- Title of Request
- Description of Request
- Type of Request (Leave, Equipment, Overtime)
- Urgency

User should provide his/her superior's E-mail address. Once all above required information is provided then user should create his/her request. This creation of new request should trigger Email notification to both persons (requestor and his/her superior) for required approval.

### Step-03:

User (requester) need to click to log out from your application using his google account. Before logging out the user logged from your application, notification service in your application should send E-mail notification for this successful log-off.

### Step-04:

- Now superior/Manager user will log into your application using his google account. Once user logged into your application, then notification service should send E-mail notification for this successful login.

### Step-06:

- Now, there should be customer dashboard visible to the logged-in user (request Approver) which indicate the request need to be approved and he/she should be able to approve this

pending request. This approval of pending request should trigger Email notification to both persons (requester and his/her superior) for new approved status.

**Step-07:**

User (Approver) need to click to log out from your application using his google account. Before logging out the user logged from your application, notification service in your application should send E-mail notification for this successful log-off.

**Step-08:**

- User (requester) need to log into your application using his google account. Once user logged into your application, then notification service should send E-mail notification for this successful login.

**Step-09:**

- After successful logged-in, the requester user showed be able to see approved/rejected status of his/her request.

**Workflow process diagram**

