**Deliverable # 3 :**

**Testing types that I would perform/recommend for the application design shared.**

1. API automation testing: This is the most important type of testing(Automation)
   1. API testing helps us test the functionality before the UI is ready, & thus helps in discovering the defects earlier. Also, same APIs is exposed to be used for Mobile app, & this facilitates reducing redundancy of validating the functionality separately for Web & Mobile apps.
   2. If we have RESTful services, I recommend REST ASSURED library, as it integrates well with BDD framework & Cucumber.
2. Security Testing:
   1. As there are different layers communicating with each other, it is recommended to be added.
   2. For Database testing, saving the PI/SI in an optimized encrypted format is also necessary.
3. Performance testing/ Load balancing:
   1. This is required as there are I/O operations in the application for CRED operations on the Data.
   2. Depending on peak load values, load balancing is required as well.
4. Disaster recovery/Regular Backup mechanism/Archiving (as per user needs):
   1. User data is critical & user may require referring to complete/old tasks as well, hence it is required. This is also required to ensure user data is not lost & can be recovered if data is corrupted.
5. Accessibility testing:
   1. Depending on the user needs for accessing the application, it is required to include it
6. Localization testing:
   1. Depending on the user locals that the app is catering to, it is required to include it
7. Database synchronization testing, in case the task data is flowing into multiple DBs.