**Timesheet App Case Study**

| **1** | **Name of the Project** | **Timesheet App** | |
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| **2** | **Objective/ Vision** | Build a system to capture the Timesheet records for an employee and generate the timesheet reports. | |
| **3** | **Users of the System** | All Internet users with given permission | |
| **4** | **Functional Requirements** | It is a Role based Service.  1)**Admin** :  Admin can add the new employees and projects into the Timesheet Management System Application.  2) **Supervisor/PM**:  Can allocate the project to an employee.  Can pull the timesheet reports.  3)**Employee**:  Can fill the timesheets on daily basis using timesheet service  Can update their personal details  Can view their project details  **Common things application for all the features:**   * Method level validations need to be done * Wherever needed, data should be pre-populated | |
| **5** | **Non-functional requirements** | 1. All Rest Services should be communicated through API Gateway and should have fallback methods for each services | |

| **6** | **Testing Requirement** | 1. Code should be unit tested 2. APIs should be tested for different HttpStatuses and responses 3. Possible scenarios should be handled in Test cases 4. Test cases must be written in Mockito | |
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| **7** | **Tools and Technologies to be used** | 1. VCS : Gitlab 2. Middleware : Spring Boot 3. Data Store :MySQL, MongoDB 4. Unit Testing : Junit and Mockito 5. API Testing : Swagger 3 | |
| **8** | **MileStones** | 1 Sprints should be planned and it should be happening parallely. Each member of the team should independently develop (API) and test the allotted features. Sprint should have 7 milestones in it.  **MileStone 1 :** Development and Testing of Employee Microservice APIs (St date:07.07.2021 End date:09.07.2021)  **MileStone 2 :** Development and Testing of Project Microservice APIs (St (St date:07.07.2021 End date:09.07.2021)  **MileStone 3 :** Development and Testing of Allotment Microservice APIs (St date:07.07.2021 End date:09.07.2021)  **MileStone 4 :** Development and Testing of Timesheet Microservice APIs (St date:07.07.2021 End date:09.07.2021)  **MileStone 5 :** Development and Testing of Report Microservice APIs (St date:07.07.2021 End date:09.07.2021)  **MileStone 6 :** Development and Testing of Authentication Microservice APIs (St date:07.07.2021 End date09.07.2021)  **MileStone 7 :** Development and Testing of Service Discovery, API Gateway and Configuration Server(St date:07.07.2021 End date:09.07.2021)  **Process to be followed:**  Everyday standup meeting  Peer review  Completion should be preceded by demo of the features implemented | |