1. **Domain Context**

**Task Management** is a subset of **workflow orchestration**, concerned with the systematic execution of work through discrete, definable units called **tasks**.

In order to achieve any objective, one must first identify **what must be done** — namely, the set of concrete tasks required to reach the goal. These tasks often exhibit **dependency relations**, such that certain tasks cannot commence until others are completed. This establishes a **partial order** over the task set, forming a structure akin to a **directed acyclic graph (DAG)**.

Furthermore, all work is subject to **temporal constraints**. Each task is allotted a **finite duration**, and the **aggregate completion time** of all tasks must conform to the overall time expectation for the work.

Work may be executed by a **single individual** or through the **collaborative effort** of multiple agents. In the latter case, a designated **manager** oversees the execution. The manager's responsibilities include: **Assigning** tasks to appropriate agents, **Monitoring** the progress of execution, **Encouraging** or **urging** completion where delays are observed,

Hence, **Task Management** is best understood as the **discipline of planning, organizing, tracking, and completing work** through the management of its constituent tasks.

1. **System’s definition**

Task Management System is an application whose functionality is assisting the process of task management by poviding ultility for each activity of the process which are planning, organizing and tracking.

1. **Functional requirements**

Base upon system’s definition, the set of functionality is follow:

- User DashBoard: View assigned tasks, track progress, and get task insights.

- Task Management: Create, update, and track tasks with due dates and piorities. - Team Collaboration: Assign tasks to multiple users and track completion.

- Priority & Progress Tracking: Categorize tasks by priority and monitor completion levels.

- Task Report Downloads: Export task data for analysis and tracking.

1. **Non-functional requirement**

- Attachments Support: Add and access task

-related file links easily.

- Mobile Responsive UI: Seamless experience on destop, tablet, and mobile.

- Intuitive Navigation: Clean sidebar menu for quick access to tasks and dashboard.