Software Development Life Cycle (SDLC) –

Modified Waterfall

Group 5: Psuedo Devs

1. Modified Waterfall SDLC Model

Our group chose the **Modified Waterfall model** because it provides a structured and organized approach to development while still allowing some flexibility. Unlike the traditional Waterfall model, Modified Waterfall lets us revisit and revise previous phases if errors or changes are discovered. This is important for our project since we are still learning software development and may need to refine earlier work before moving forward. At the same time, the clear step-by-step flow ensures that all requirements are properly documented and each stage is completed before proceeding. This model is well-suited to academic projects where the scope is relatively stable but adjustments may be needed along the way.

Planning (Week 1)

In this phase, the project scope, objectives, feasibility, and resources will be defined to establish a clear direction.

Analysis (Week 1-2)

In this phase, system requirements will be gathered, documented, and analyzed using tools like use case and activity diagrams.

Design (Week 2)

In this phase, the system architecture and class diagrams will be created to provide a blueprint for development. Wireframes will be created to structure the interface of users.

Implementation (Week 3-8)

Initial setup (repository, environment, basic modules) prior to coding. Active coding of system modules sequentially User Registration, User Log in, Admin Log in, Admin Dashboard (User Request Management, Route Optimization Management), and Tracking Management. Conduct initial debugging.
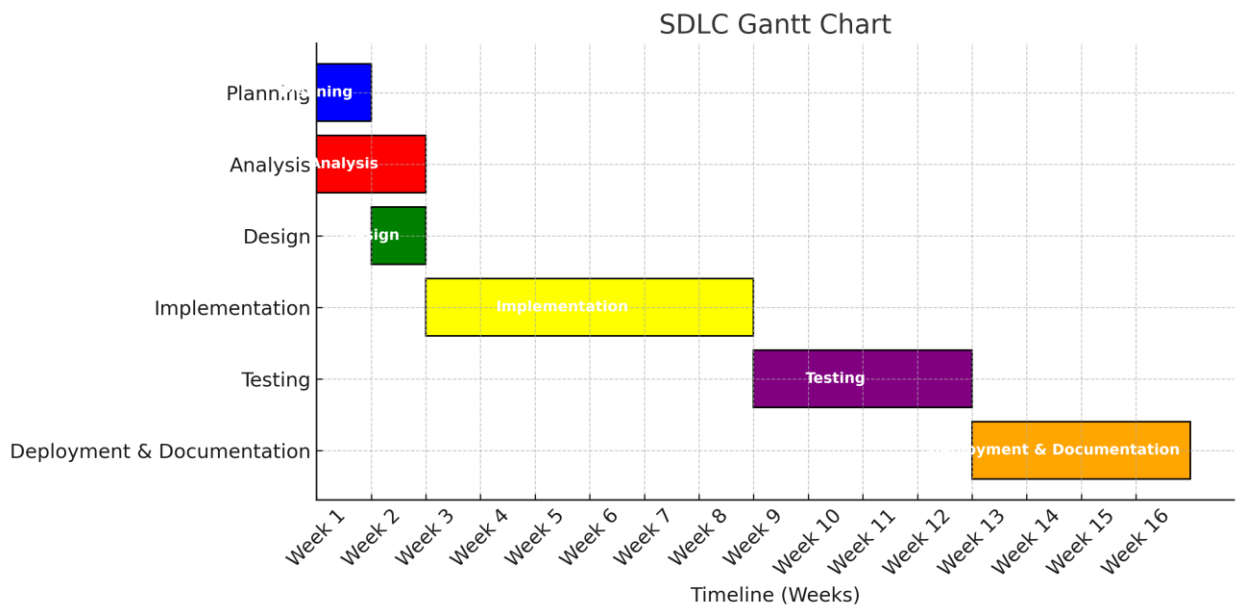
Testing (Week 9-12)

In this phase, the system undergoes unit, system, and user acceptance testing to ensure it meets requirements.

Deployment and Documentation (Week 13-16)

In this phase, the system is deployed for use, documented for users, and maintained through updates and fixes.

2. Gantt Chart (SDLC Modified Waterfall Model)

The following is the Gantt Chart for the SDLC model:

Modified Waterfall Model Gantt Chart