

Experiencing the Traditional Waterfall Software Development Model

Tuition Class Management System

Phase 1: Planning

- Problem statement

In most tuition classes, student details, attendance, fees and schedules are managed manually. This leads to problems such as data loss, errors, and difficulty in identifying student progress, as well as repeated entries of the same data. To solve these problems, a computer system that can efficiently manage tuition class activities is essential.

- Objectives

- To manage student registration and records
- To maintain class schedules and subject details
- To track student attendance
- To manage monthly fee payments
- To reduce paperwork and manual errors

- Scope

- Register students and teachers
- Manage subjects and class schedules
- Record student attendance

- Assumptions and constraints

| Assumptions | Constraints |
|---|--|
| <ul style="list-style-type: none">• Users have basic computer knowledge | <ul style="list-style-type: none">• Limited development time |
| <ul style="list-style-type: none">• Data entered is accurate | <ul style="list-style-type: none">• Small budget |
| <ul style="list-style-type: none">• System is used for a single tuition class | <ul style="list-style-type: none">• Basic technologies only |

Phase 2: Requirements Analysis

- Functional requirements

- The admin can be able to add, update and delete student records.
- The admin can be able to manage teachers and subjects.
- The admin can be able to record student attendance.

- Non-functional requirements

- The system should be easy to use
- The system should respond quickly
- The system should be secure with login authentication
- The system should be reliable and available during class hours

- Use case Diagram

