

20. CASE Tool Setup – Install and Configure StarUML

Tool Selected:

StarUML v5.1.0

Installation Steps:

1. Downloaded StarUML from official website.
2. Installed using default configuration.
3. Activated licensed version.
4. Installed additional plugins:
 - MD-Java (Code generation)
 - Database Modeling Plugin
 - Documentation Generator Plugin

Configuration Settings:

- Default UML 2.x profile selected
- Diagram auto-layout enabled
- Auto-save interval set to 5 minutes
- Export format configured to PNG and PDF

21. Team Workspace Setup

Version Control:

Git-based collaboration repository

Folder Structure:

```
SchoolERP/  
├── models/  
│   ├── usecases/  
│   ├── classdiagrams/  
│   ├── sequencediagrams/  
│   ├── activitydiagrams/  
│   ├── componentdiagrams/  
│   └── deploymentdiagrams/  
├── documents/  
├── exports/  
└── resources/
```

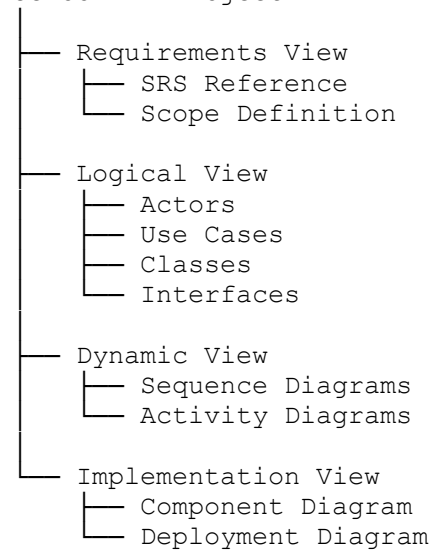
Collaboration Strategy:

- Each member assigned diagram responsibility
- Naming conventions maintained
- Weekly model review sessions
- Version tagging after major updates

22. Project Structure Creation

Project Hierarchy in CASE Tool:

SchoolERP Project



23. Actors Identification

Actor	Description	Primary Use Cases
Student	Access academic information	View Marks, View Attendance
Teacher	Manage academic activities	Mark Attendance, Enter Marks
Admin	Manage system operations	Manage Users, Create Timetable
Principal	Monitor performance	View Reports
IT Admin	Technical maintenance	Backup Data
System	Automated processing	Generate Report Cards

24. Use Case Definition (10 Core Use Cases)

UC-01: Login

Authenticate users and provide role-based access.

UC-02: Mark Attendance

Teacher records daily attendance.

UC-03: Enter Marks

Teacher enters subject-wise exam marks.

UC-04: Generate Report Card

System generates PDF report cards.

UC-05: View Timetable

Display class schedules.

UC-06: Manage Fee

Define and track fee payments.

UC-07: Post Announcement

Publish notices to users.

UC-08: Manage Users

Create/update/delete accounts.

UC-09: View Reports

Access analytics and summaries.

UC-10: Backup Data

Perform database backups.

25. Use Case Relationships

1. Login includes Validate Credentials
2. Login extends Password Reset
3. Mark Attendance includes Login
4. Enter Marks includes Login
5. Generate Report Card includes Enter Marks
6. Manage Fee extends Generate Receipt
7. Post Announcement extends Send Notification