

## Project Synopsis

**Project Title:** Student Information System

**Duration:** 14 weeks

**My Role:**

- Analysis of requirements
- System Design
- User Interface Designing
- Coding screens and database objects like triggers and stored procedures
- Integration and Testing

**Kind of System:**

- Generic application designed for assisting the students of an institute regarding information on the courses, subjects, classes, assignments, grades and timetable

**Methods of Software Development:**

- Rapid application development – for making the user interface screens.
- Prototyping Model – for development

**Operating System and Languages:**

- Windows 2000
- Languages / Tools Used – Oracle 8i database, Oracle Forms 6i and Reports 6i

**Team Size:**

The team size for this project was three students. Again, I was the main analysis and design person. I developed the database structure, took care of normalization and optimization of the database, so that repetition of data could be reduced and at the same time not sacrifice the response time for queries. Interface design and development of the grades module were my other responsibilities.

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**Project Title:** UML designer and C++ code generator.

**Duration:** 8 weeks

**My Role:**

- Analysis of requirements
- Design
- R&D on MFC Library
- Coding some modules
- Integration and Testing

**Kind of System:**

- Rapid Application Design and Development Tool – Designed to help a user make UML diagrams and to auto-generate C++ skeleton code based on diagrams.

**Methods of Software Development:**

- Object Oriented Analysis and Design – for the designing
- Prototyping Model – for development

**Operating System and Languages:**

- Windows 2000
- Languages / Tools Used – C++, MFC, Visual Studio IDE

**Team Size:**

The team size for this project was five. My major contribution to the project was at the analysis and design stage. I also developed the module used to write the data from the user interface to a flat file. The file was persistent and existed even after the utility was exited. The same file could be retrieved later and would represent the stored information in a visual form. The same file is used to generate the C++ skeleton code.

**Project Title:** Saansad.com

**Duration:** 14 weeks

**My Role:**

- Database Design
- User Interface Designing
- Coding interface and database connectivity for various data operations.
- Integration and Testing

**Kind of System:**

- A web based application for the Members of Parliament, India to assist them to maintain their schedules, appointments, contact information, details on their constituency and also, common notice board. The site would also provide demographic and economic information about all the parliamentary constituencies in India.

**Methods of Software Development:**

- Rapid application development – for making the user interface screens.
- Spiral Model – for development

**Operating System and Languages:**

- Windows 2000
- Languages / Tools Used – Access 2000 database, ASP, DHTML, XML.

**Team Size:**

This project was done by a five member team. The work was divided equally at every stage of the lifecycle of the project among the team members.

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**Project Title:** Graphics Design Tool

**Duration:** 4 weeks

**My Role:**

- User Interface Designing
- Coding interface and Open GL functionalities.
- Integration and Testing

**Kind of System:**

- A utility that was 2D Drawing Tool and could render 3D of 2D images drawn. It also allowed rotation and zoom in 3D space with lighting and shadowing effects and choice of texture.

**Methods of Software Development:**

- Spiral Model – for development

**Operating System and Languages:**

- Windows XP
- Languages / Tools Used – Win32 API for interface and Open GL for the functionalities.

**Team Size:**

This project was done by a three member team. My role in the project was to understand Open GL and developing various functionalities using the Open GL libraries.

**Project Title:** Information Management System

**Duration:** 10 weeks

**My Role:**

- Analysis of requirements.
- System Design.
- Coding interface and database functionalities.
- Integration and Testing.

**Kind of System:**

- This utility was for the use of the Placement Cell at IMT to maintain and access a database of over a thousand companies. This included addition, deletion and update of records, sorting and searching, printing for selective data and mailing labels.

**Methods of Software Development:**

- Waterfall Model – for design and development

**Operating System and Languages:**

- Windows 98
- Languages / Tools Used – Access 97 as database, Visual Basic and VB scripts.

**Team Size:**

This project was done by a four member team. My role in the project was to understand requirements and developing the user interfaces and writing scripts to manipulate data.