



University Department Information System

Individual Contribution Document

International Institute of Information Technology, Bhubaneswar

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For the UDIS, I mainly focused on UI Design through JavaSwing and the eventual programming of UI elements. Primarily, I did,

- UI Design and Prototyping

This involved looking at the UML diagrams created and trying to incorporate all possible views, every type of user could take and minimizing the number of states the application could be in. A Mockup was generated using Figma and iterated upon to reach its current state.

- JavaSwing Programming

The UI was coded up with JavaSwing and the SidePanel was programmed by me.

- Authorisation Database

The Password database for the admins, students and faculty was set up by me and referenced to the original tables using roll nos or faculty id as foreign keys.

- Testing using JTest

Some basic assert statements were written as sanity checks by me using the Jtest Modules.

- Coherence Testing

I had to do a lot of manual testing of the final builds to see if the UI actions did affect the database or not.



Satyabrat Panda, B118054

For this project, we had to come up with a bare bones management system before UI was to be created. So, I had to do :

- Class Interfaces and Programming

Looking at the UML diagrams, I coded up all the methods and the attributes for each class and made a command-line application that just used the standard output to input data from the user and stored all the details in an array.

This helped us to better define our class structure as we could see the redundancies of our class design.

- MockUp Data

I wrote up the scripts for inserting mock data into the database for the testing of the Application

- Deployment and Bug Fixing

The Application was deployed and built on my machine and various bugs that cropped up due to erroneous SQL, bad data in the text-box fields were fixed by me.

- Database integrity Testing

Manual testing was done by me on the database as a whole to verify and validate the relations and keys through mock data.

Swapnil Sahu, B118061

For the UDIS, I was involved in planning and designing classes for the various entities. My work involved,

- Making UML Diagrams :
Had to give a top-down representation for each iteration of the software. Class methods and attributes had to be designed to remove redundancy.
- Class Designing
The Admin/HOD/Secretary class was designed by me and the data flow was made so that later down the line, Student Class and Professor Class could easily access the same data without writing any new methods.
- Equivalent Database setup
I used SQL to create a database that was coherent with the class attributes. This involved setting up first a SQL server through cmd and making sure the scripts ran on all of our machines.
- Database Connection Programming
SQL statements to access the data from the java application through a connection and callbacks to execute on successful execution of commands were written by me.
- JavaSwing and CMD program Coupling
Helped with the integration of the command line program by mixing class methods as callbacks to UI events such as button presses, text-box input, etc.