Danutha Navodya Imbulpitiya

Undergraduate Student

PROFILE

Second-year Software Engineering student at IIT with a passion for solving real-world problems and building scalable systems. Eager to contribute to impactful projects and grow as part of a collaborative team.

EDUCATION

BEng Software Engineering

the Informatics Institute of Technology (IIT), affiliated with the University of Westminster, UK

S. Thomas' College - Bandarawela

Physical Science Stream 2021

SKILLS

- MERN Stack
- Mysql
- OOP
- Spring Boot
- NestJS
- Docker
- Firebase

PROGRAMMING LANGUAGES

Tava

JavaScript

Python

Kotlin

PROJECTS

Post-Harvest Farmer Buyer Network System ∅

Digital Platform for Connecting Farmers and Buyers

A full-stack Mobile application using

- Flutter
- Django
- TensorFlow

Real-Time Ticketing Simulation System \mathscr{D}

The Real-Time Ticketing Simulation System is an application that allows users to simulate a dynamic ticketing environment.

- Backend: Spring Boot
- Frontend: Angular
- **Database**: MySQL (for storing configurations)

Personal Expense Tracker (Backend) - NestJS &

Built a RESTful API with NestJS and MySQL to manage personal expenses, including expense tracking, total calculations, and category management. Focused on modular design and data validation.

- Add, retrieve, update, and delete expenses
- Calculate total and highest expenses
- Manage custom expense categories

Student Management System 🔗

A Student Management System for registering students, managing records, storing/loading details, and generating reports.

- Registered, deleted, and searched student records using unique IDs (w1234567 format).
- Stored and retrieved data from .txt files using Java File I/O.
- Implemented modular design using OOP principles with Student and Module classes.
- Generated sorted student lists and calculated total marks, averages, and grades.
- Used error handling and validation for smooth user interaction.

Dice Game ∅

Strategic Dice Game with Adaptive AI and Modern UI

A player vs computer dice game built with Jetpack Compose! Set a target score, roll the dice, and strategize to win. Features smart AI, win tracking, tiebreaker rounds, and a sleek UI.

- Built entirely with Jetpack Compose for modern, declarative UI.
- Designed an adaptive AI with phase-based strategic decision-making.
- Focused on accessibility, performance optimization, and responsive design for phones and tablets.

Movie App ∂

A feature-rich Android app for movie enthusiasts with modern UI.

A modern Android app that allows users to search for movies by title, actor, or IMDB ID using real-time data from the OMDB API. The app features a clean, responsive UI built with Jetpack Compose and Material 3,

- Instant Search by Title, Actor, or IMDB ID
- OMDB API Integration Real-time movie data
- Modern UI Built with Jetpack Compose and Material 3
- Responsive Design Optimized for phones and tablets
- Fast Image Loading Using Coil for smooth image rendering

Task Manager Web App (MERN Stack) ∂

A simple web app to manage daily tasks. Users can add, edit, delete, and track tasks by status, priority, and due date.

- Add, update, and delete tasks with title, description, due date, and priority
- Track task progress with status: To Do, In Progress, Done
- Filter and sort tasks by status or priority
- Built RESTful API for efficient frontend-backend communication
- Responsive and modern user interface with clean UX
- Modular and scalable codebase structure for maintainability

CERTIFICATES

Winner of CodeRally 5.0 ∂

Organized by IEEE Computer Society, Informatics Institute of Technology, Student Branch Chapter

Java (Basic) Certificate ∅

It will cover basic topics in Java language such as classes, data structures, inheritance, exception handling

Problem Solving (Basic) Certificate ∅

It covers basic topics of Data Structures (such as Arrays, Strings) and Algorithms (such as Sorting and Searching).

IEEEXtreme 18.0 Programming

A global competitive programming challenge organized by IEEE & .

Python (Basic) Certificate 🔗

Python (Basic) It covers topics like Scalar Types, Operators and Control Flow, Strings, Collections and Iteration, Modularity, Objects and Types and Classes

EXTRA CURRICULAR ACTIVITIES

Sports

- Member of the college's U-17 Badminton team and went on to represent the school in all island competitions
- Member of the college U-13 Cricket Team

Clubs and Societies

- President of college's photography club
- Member of Scouting Organization