

Yash Kshitiz

Roll No.: IMH/10050/22 Integrated Master of Science Mathematics and Computing Birla Institute of Technology, Mesra

EDUCATION

• Birla Institute of Technology, Mesra

IMSc. in Mathematics and Computing

· City Montessori School, Lucknow

Senior Secondary, ISC

• City Montessori School, Lucknow

Secondary, ICSE

2022-Present CGPA: 9.07

2022

Percentage: 95.5

2020

Percentage: 98.6

PROJECTS

• MyPixelTalks

GitHub Repository

- Tools & technologies used: Dart, Flutter, Cloudinary, Firebase and Firebase Cloud Messaging.
- An **Android Application** connecting users remotely for 1-to-1 chatting and media exchange.
- Started as a learning experience for real-time messaging.
- Database operations are managed using **Firestore** and **Firebase**.
- Push Notifications are handled through FCM Tokens.
- A 1-to-1 chat system allows direct interaction between users.
- Media uploads are handled using Cloudinary.

• LudoArena 2025

GitHub Repository

- Tools & technologies used: Flutter, Dart, Bloc, WebSockets, Express.js, Node.js, MongoDB, Mongoose
- Designed and developed a real-time multiplayer Android Application Ludo with turn-based gameplay using WebSockets.
- Implemented a custom game logic on the backend to manage player actions, dice rolls, and piece movements.
- Developed a **WebSocket-based signaling system** for real-time communication between players, ensuring minimal latency with a <1% failure rate.
- Utilized MongoDB to persist game sessions, player states, and match history efficiently.
- Structured the Flutter frontend with Bloc state management to ensure smooth UI updates and game state synchronization.
- Handled **game room management**, allowing dynamic creation, joining, and exiting of game rooms with automatic session handling.
- Designed RESTful APIs for managing game state, user actions, and analytics.

TECHNICAL SKILLS AND INTERESTS

- Languages: C, C++, Java(OOPS), JavaScript, Dart, SQL
- Developer Tools: Git, GitHub
- Technologies: MongoDB, Flutter, Express, Mongoose, Firebase
- Soft Skills: Problem Solving, Critical Thinking, Communication, Team Work, Leadership
- Coursework: Object-Oriented Programming, Database Management System, Operating Systems, Data Structures, Design and Analysis of Algorithms, MATLAB

Profiles

• LeetCode: ThunderSpear21 (Max Rating: 1736)

300+ Problems

• Codeforces: ThunderSpear (Max Rating: 1447, Specialist)

200+ Problems

ACHIEVEMENTS

- Codeforces: Round 1027 (Div. 3) Achieved a Global Rank of 1782 out of 41,000 participants.
- Secured 3rd position among 100+ students in IET recruitment coding contest.

Positions of Responsibility

• IET - Student branch, BIT Mesra

Jan 2024 - Present

Member, Tech Team