Muhammad Bilal Ahmed

Lahore, Pakistan.

Phn.no: +92 307 4586940   **Email:** bilalakhlaq211@gmail.com   **GitHub:** http://www.github.com/BilalWattu521/

LinkedIn: http://www.linkedin.com/in/muhammad-bilal-ahmed-735369295/

Education

University of Engineering & Technology, Lahore   Dec. 2022 – Oct. 2026

Bachelor of Science in Computer Science   *Lahore, Pakistan*

Relevant Coursework

- Data Structures & Algorithms
- Algorithms Analysis
- Operating Systems
- Computer Architecture
- Database Management System
- Theory of Automata
- Object Oriented Programming (C++)

Projects

Currency Convertor App | *Dart & Flutter, Visual Studio Code & Android Studio*   **June 2024**
- **Developed** a **Currency Converter App** using **Flutter**: Implemented a **functional UI** to convert USD to PKR, showcasing skills in **user interface design**, **input handling**, and **basic calculations**.
- **Utilized Flutter Framework** and **Dart Language**: Gained hands-on experience with **core Flutter functionalities**, including **widget creation**, **state management**, and **event handling**.
- **Demonstrated Fixed Conversion Rate Integration**: Implemented a **static conversion rate** (1 USD = 280 PKR) to lay the groundwork for future enhancements involving **dynamic rates** and **real-time data integration**.

Weather App | *Dart & Flutter, Visual Studio Code & Android Studio*   **July 2024**
- **Developed** a **real-time Weather App** using **Flutter**, integrating a **third-party API** to provide accurate, up-to-date **weather information** for users.
- **Implemented API integration** for **dynamic data retrieval**, ensuring users receive **current weather conditions** with a focus on **reliability and performance**.
- **Designed and delivered** a **user-centric interface**, prioritizing **intuitive navigation** and a **clean layout** for an enhanced **user experience**.
- **Engineered robust error-handling mechanisms**, proactively managing potential issues during **API calls** and improving overall **app stability**.

Shopping App | *Dart & Flutter, Visual Studio Code & Android Studio*   **August 2024**
- **Engineered** a **high-performance Shopping App** in **Flutter**, featuring **advanced brand filtering** for top brands like **Nike**, **Jordan**, and **Adidas**, ensuring a **personalized user experience**.
- **Optimized search functionality** with a **powerful, real-time search engine**, allowing users to **instantly locate products** by name or keyword.
- **Implemented efficient cart management** using **Provider** for **state management**, enabling users to **seamlessly add, view, and remove items**.
- **Designed** a **fully responsive UI/UX** with a focus on **intuitive navigation** and **cross-device compatibility**, enhancing overall **user engagement**.
- **Strengthened expertise** in **state management** and **UI/UX best practices**, overcoming complex challenges in **real-time data filtering** and **search features**.

Restaurant Management System | *C++, Dev C++*   **March 2023**
- **Allows customers** to **book tables online**, with **automated confirmation** and **cancellation features**.
- **Facilitates seamless order placement, modification, and fulfillment**, integrating with **kitchen display systems** for efficient **food preparation**.
- **Implements role-based access control**, **data encryption**, and **audit logs** to **safeguard sensitive information** and maintain **compliance**.

Online Movie Ticket Booking System | *C++, Microsoft Visual Studio*   **July 2023**
- **Developed** an **online movie ticket booking system** using **C++** and the **Microsoft Visual Studio Code IDE** to simulate common functionalities of **booking movie tickets**.
- **Implemented features** such as **booking tickets**, **viewing available movies**, **selecting seats**, and **generating tickets** within the application's **backend**.
- **Utilized Object-Oriented Programming** principles like **inheritance** to create different **movie categories**.

Calculator App | x86 *Assembly Language, emu8086*   **December 2023**
- **Developed** a **calculator application** using **x86 Assembly Language** and **emu8086 emulator** to perform **arithmetic operations**.
- **Implemented functionality** to **process user input** within the application's **backend**, allowing users to **enter numbers and operators**.
- **Utilized assembly language instructions** to perform **arithmetic calculations** based on the user's input, generating **subtotal prices** or results accordingly.
- **Utilized emu8086's interface** to create a **user-friendly UI** for the application, enabling users to **interact with different functions** seamlessly.

Medical Store Management System | *C Language, Terminal Shell (Linux)*   **April 2024**
- **Developed** a **Medical Store Management System** using **C programming** in a **Linux terminal shell**, efficiently managing **medicine inventory** and **sales processes**.
- **Implemented features** such as **adding, deleting, and searching for medicines**, as well as **seamless purchasing** for customers.
- **Achieved improved inventory management** and **streamlined sales processes**. Future enhancements may include **integrating with external databases** for **data persistence** and implementing **advanced reporting capabilities** for better **insights**.

Technical Skills

Programming Languages:
- C / C++
- Dart
- Flutter
- HTML / CSS
- SQL

Developer Tools:
- Android Studio
- Dev C++
- Microsoft Visual Studio
- Microsoft SQL Server
- Visual Studio Code
- Terminal Shell (Linux)