Tayyaba Zubaid

Contact

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Tayyaba Zubaid - LinkedIn

Tayyaba Zubaid - Github

About Me

Computer Science undergraduate at Qarshi University with hands-on experience in building responsive web applications, interactive dashboards, and algorithm-driven systems. Skilled in HTML, CSS, JavaScript, C++, and Java, with practical exposure to UI/UX design, object-oriented programming, real-time data handling, and graph-based algorithms. Passionate about solving real-world problems through clean design and efficient logic, and eager to grow through challenging, real-world opportunities.

Skills

- **Programming Languages:** C++, Java, Python, JavaScript
- **Web Technologies:** HTML5, CSS3, Responsive Web Design
- **Frameworks & Libraries:** Java Swing
- **Data Structures & Algorithms:** Arrays, Linked Lists, Trees, Graphs, Dijkstra's Algorithm, Segment Tree
- **Object-Oriented Programming:** OOP principles, Design Patterns (Observer)
- **Tools & Platforms:** Git, GitHub, VS Code

Education

Matric 2020 - 2022
Rana Grammar School, Lahore
Science Group

Intermediate 2022 - 2024
Punjab Group of Colleges
FSc Pre-Engineering

Bachelor's in Computer Science 2024 - Present
Qarshi University
Expected Graduation: 2028

Projects

Deenify - An Islamic Website Design

- **Developed a mobile-responsive web application** using HTML5 and CSS3, focusing on clean layouts, proper spacing, and a mobile-first user interface.
- **Implemented multi-page navigation** by linking modular pages (Home, About, Features, FAQs, Contact) to improve usability and maintainability.
- **Organized and presented feature-based content** in a structured, user-friendly design to enhance readability and accessibility on small screens.

FinTrack - An Investment Dashboard

- **Developed a comprehensive financial dashboard** using Java Swing, engineering an interactive UI with dynamic graphs, custom table renderers, and a modular navigation system to track and visualize market data, investment portfolios, and profit/loss calculations.
- **Implemented core application logic** using Object-Oriented principles, including an observer design pattern to ensure real-time data synchronization between UI panels and building a robust profit/loss calculator with multi-currency support.

Pokemon Info Card - A Pokemon Encyclopedia

- **Developed a dynamic Pokémon encyclopedia** using JavaScript and PokeAPI, featuring real-time data fetching for 1,000+ entries and a custom-built local image repository for optimized performance.
- **Designed a responsive, themed UI/UX** with advanced navigation features, including generation-based filtering, interactive stat visualizations, and seamless pagination to enhance user engagement.
- **Engineered robust search and filtering systems** to provide an intuitive user experience, ensuring consistent branding and high-resolution visual delivery across all application modules.

Disaster Evacuation Path Planner - A Console-Based Dashboard

- **Developed a Real-Time Evacuation Planner:** Engineered a C++ system using Dijkstra's Algorithm and Dynamic Graphs to calculate optimal safety routes during simulated urban disasters.
- **Optimized Risk Management:** Implemented a Segment Tree to process environmental hazard data with O(log N) efficiency, enabling instantaneous path recalculation as disaster conditions evolved.
- **Simulated Complex Crisis Scenarios:** Modeled infrastructure failures and flood events to validate system responsiveness, aligning technical implementation with SDG 11 (Sustainable Cities).

Certificates

- Introduction to Programming with Python and Java - Specialization Course by Penn Engineering and Coursera
- Intro to Web Development - by AKTI
- Work Smarter with Microsoft Excel - by Microsoft and Coursera