Muhammad Aazain Irfan

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TECHNICAL SKILLS

Python, Java, C#, C, HTML/CSS, JavaScript, APIs, JSON, Data Structures and Algorithms, Object Oriented Programming, Git, GitHub

CERTIFICATIONS/ACHIEVEMENTS

Mentor by Mentor Collective: [August 2022-present]

- **Guiding over 8 students to be successful in their introductory programming courses** *by introducing them* to effective study techniques, also conducting weekly meetings to review their progress, ensuring optimal learning experiences and course alignment.

IBM full stack developer certification:

- Working towards the **IBM Full Stack Software Developer Professional Certificate**, an intensive program focused on **practical full-stack development skills including Cloud Native methodologies, front-end technologies (HTML, CSS, JavaScript, React), back-end *development (Node.js, Python, Django), and deployment tools (Docker, Kubernetes, Microservices).***

Scholarships:

- International Recognition Award (Merit Based Scholarship).
- Recipient of Departmental Richard Tapia Diversity in Computer Science Scholarship

EDUCATION

James Madison University - Class of '25 **Harrisonburg, VA**

B.S in Computer Science *2022-2025*

PROJECTS

Catch Up, a Social Media Aggregation Web App Ongoing Project

- Collaborating with a colleague in engineering CatchUp, a social media aggregation platform that will be capable of displaying content from various Social media platforms such as TikTok, Instagram and YouTube into a unified interface.
- Aims to enhance user experience by eliminating the need for multiple Social media apps.
- Project utilizes various APIs such as: **Instagram Graph API, TikTok Display and YouTube Data API** to fetch and display user generated content on our platform.
- Focuses on creating a user-friendly front-end interface using **HTML, CSS and Java Script and React** for efficient navigation within the app.

Healthy Lifestyle Empowering Personal Health Management Sophomore Year

- Collaborated with a partner to design "Healthy Lifestyle," A web app that comprises features such as BMI calculation, stress checking, age prediction, and calorie tracker to monitor wellness of JMU community.
- Resolved challenges in **UI/UX design and data handling**, enhancing user engagement.
- Leveraged technologies such as **HTML, CSS, JavaScript to enhance user-centric design and integrated APIs such as Canvas API.**
- Received over **100 positive reviews** from academic community on the app's effectiveness.
- Project honed my skills in **frontend development and collaborative software engineering**

Asteroid Game (Eclipse, Java): Sophomore Year

- Created an Asteroid Game in **Java with** an interactive GUI for dynamic gameplay, involving a ship navigating in space among asteroids.
- Gameplay included strategic asteroid destruction via bullets, earning points for high scores.
- **Implemented 26 distinct classes (e.g., asteroids, ships, bullets) using interfaces and ENUMS for flexibility and maintainability of code**
- Overcame challenges in collision detection, gameplay balance, and code optimization.
- Resulted in the delivery of a polished gaming experience, enhancing technical **Java skills, Eclipse proficiency, and OOP understanding**

Virtual Assistant (C#, Microsoft speech recognition API) Sophomore Year

- Developed an interactive Virtual Assistant using **C# and the Microsoft Speech Recognition API**, allowing voice command recognition and execution.
- Engineered the application to handle specific voice commands for user interactions and to execute system commands, such as opening web and desktop applications.
- Refined skills in **C# programming, API integration, and understanding of speech recognition technologies**