

Mohammad Zain Sarfraz

✉ mohammadzainsarfraz@gmail.com ☎ 6137124588 🌐 in/mohammadzainsarfraz

EDUCATION

Diploma in Computer Engineering Technology | 3.89 | Algonquin College | Ottawa, Ontario, Canada

- Graduated with honors.

CERTIFICATIONS

- **AWS Certified Solutions Architect - Associate | Amazon | 2024**
- **Certified In Cybersecurity (CC) | ISC2 | 2024**
- **Introduction to Git | Hyperskill | 2024**
- **Responsive Web Design | freeCodeCamp | 2023**

SKILLS

Front End: HTML, CSS, JavaScript, Angular, React, Tailwind, Bootstrap
Back End: Java, C#, JavaScript, TypeScript
Databases: MySQL, PostgreSQL, MongoDB, H2
Cloud: AWS, Cloudflare, Vercel
Tools: Git, GitHub, Atlassian-JIRA

EXPERIENCE

Front End Developer (Lead) | HTML, CSS, Typescript, Angular, Ionic | Caremada | September 2022 - April 2023

- Designed and implemented a calendar page, a user chat page and driver tracker page.
- Broke down pages into components and delegated them to my team.
- Worked with API team to adapt the API for the new pages.
- Improved the applications “style” to meet accessibility requirements to cater to the user base.
- Integrated the google map API to track drivers.

Full-Stack Web Application | HTML, CSS, JavaScript, C#, .NET, MySQL | FirePools | July 2023 - September 2023

- Crafted responsive interfaces with HTML, Bootstrap 5, and JavaScript for user-friendly interactions.
- Constructed robust C# back-end, enabling seamless front-end and data layer communication.
- Utilized Entity Framework Core for MySQL data layer, optimizing access via repository pattern.
- Integrated Google's ReCAPTCHA API for user registration security.

Rental Service Back End | Java, MySQL | Freelance | October 2023 - November 2023

- Developed a Java application that allows staff to list vehicles and vehicle manufacturers, and allows customers to view vehicle information, rent vehicles, and return vehicles.
- Implemented user authentication, verifying account existence and password correctness and distinguishing between customer and manager accounts.
- Utilized MySQL database for persistent data storage.
- Implemented a robust data layer to facilitate interaction with the database, ensuring seamless data retrieval and manipulation within the application.

Ticket Booking Service REST API | Java, Spring, MySQL | Freelance | December 2023 - January 2024

- Developed endpoints to facilitate a ticket booking system, providing functionalities to retrieve available seats, hall statistics, book seats, and process refunds.
- Configured MySQL data layer to store seat and booking information, ensuring data integrity and consistency.
- Ensured robust error handling and ticket validation mechanisms to enhance the reliability and security of the service.

ACADEMIC PROJECTS

Library Web Application | C#, .NET, Azure

- Application where users can view a libraries inventory and request to rent books.
- The user can search for books by name, by date, by author, by language, by genre and by ISBN.
- All book data is stored in the Azure SQL cloud database. No local storage of any kind.
- The application logic on the backend was made according to .NET's MVC model.
- The frontend was generated automatically using .NET's scaffolding functionality.
- Demonstrated use of data structures, OOP, sorting/searching algorithms, SQL queries, Azure Cloud, .Net framework

University Record System | Java, PostgreSQL

- Program that stores and manages information about the students and teachers in the school.
- Tracks which courses a student is taking and their grades for that course
- It can then use that information to calculate their grades and their GPA.
- Allows students to select courses and see their grades and GPA, allows teachers to select courses and add grades for students.
- Demonstrated use of data structures, OOP, searching algorithms and JDBC.

Security Door Keycard System | C, QNX

- C script running on the QNX Neutrino operating system to simulate a keycard security door.
- The script reads the swiped card and verifies if the card is valid.
- An unlock interrupt is sent to the door if the card is valid, a warning is fired if it is invalid.
- Demonstrated knowledge of multithreading, multi-process, inter-process communication and interrupts.

Card Memory Game | React, TypeScript, HTML, CSS

- Game where user needs to select all the cards one at a time without selecting the same card twice.
- Demonstrates use of react hooks, state managements and data fetching from server.

Resume Creator | React, TypeScript, HTML, CSS

- Web application where the user can enter all their information into a form and then receive a formatted resume.
- Demonstrates the ability to fetch data from the user and reactively display it. (event handlers and state management)

Calculator | JavaScript, HTML, CSS

- Calculator which supports addition, subtraction, multiplication and division. Decimal number calculations are supported.
- Demonstrates the ability to fetch user inputs, process using JavaScript and output result by manipulating the DOM.

Etch a sketch | JavaScript, HTML, CSS

- Program which allows user to draw on the screen using their mouse. The user can also resize the canvas.
- Demonstrates the ability to fetch user input, process using JavaScript and output result by manipulating the DOM.

Rock Paper Scissors | JavaScript, HTML, CSS

- Program where the user can play rock paper scissors against an AI.
- Demonstrates the ability to fetch user inputs, process using JavaScript and output result by manipulating the DOM.