PERSONAL PROJECTS

Web Development Projects

- **1. My Portfolio:** A website showcasing your projects and skills, created using HTML, CSS, and JavaScript, allowing you to present your work to potential employers or clients.
- **2. Get Nutritious Nutritionist:** A WordPress website hosted on Hostinger, providing users with nutritional guidance, diet plans, and healthy recipes.
- **3. Baketown Bakery Shop:** Another WordPress website hosted on Mukhost, featuring an online bakery shop with a variety of baked goods available for purchase.
- **4. University CGPA Calculator:** A web-based tool developed using HTML, CSS, and JavaScript, allowing students to calculate their cumulative grade point average.
- **5. Books Store:** A React-based web application integrated with Google API, enabling users to search and browse a wide range of books and make purchases.

Mobile App Development

- 1. Introducing EasyRider (FYP): a pioneering urban mobility app crafted with Flutter and cutting-edge tech. Seamlessly book rides, optimize routes, and receive real-time updates for an unparalleled experience. Prioritizing safety, it offers female-only rides and secure OTP authentication. Leveraging Firebase, AWS, and Google Cloud, EasyRider delivers efficiency and reliability. With intuitive UI, admin dashboard, and Postman integration, it sets a new standard in urban transportation.
- 2. Notes App: A mobile app built with Flutter Dart and Firebase, facilitating users to create, organize, and sync notes across multiple devices.
- **3. Fuel Delivery System App:** A mobile app developed with Flutter Dart and Firebase, enabling users to order fuel delivery to their location conveniently.

Desktop Application Development

- **1. Hand Distance Measurement with Normal Webcam + Game:** A Python project utilizing OpenCV to measure hand distances using a webcam, with an added interactive game component.
- **2. Course Management System:** A desktop application built with WPF, C#, and MS SQL, designed to manage courses, students, and grades efficiently within an educational institution.
- **3. The Book Hub:** An advanced desktop application developed with C# and MS SQL, providing comprehensive features for managing books, authors, and libraries.
- **4. University CGPA Calculator:** An advanced Windows-based application developed using C# and MS SQL, specifically designed for calculating and managing CGPA (Cumulative Grade Point Average) for students in universities. This application offers features tailored for Spring 2022 Advance Level coursework, ensuring accurate grading and performance evaluation.
- **5. University Management System:** A Windows-based application developed with C#, MS SQL, and tailored specifically for university administration tasks such as student enrollment and staff management.
- **6. Book Hub:** Another Windows-based application developed with C# and MS SQL, focused on book management and library operations.

Console Based Applications

- **1. Banking & ATM Management System:** A C++ console application designed for managing banking operations and ATM transactions, incorporating principles of object-oriented programming and data structures.
- **2. Hospital Management System:** A console-based application developed in C++ with features for managing patient records, appointments, and medical inventory within a hospital setting.
- **3. ATM Machine:** A console-based application written in Assembly Language to simulate an ATM machine interface for performing basic banking transactions.
- **4. Movie Recommended System:** A console-based application programmed in C++ to recommend movies based on user preferences and ratings.
- **5. K-Nearest Neighbor (KNN):** A C++ console application implementing the K-nearest neighbor algorithm for classification and regression tasks in machine learning.
- **6. Sentiment Analysis:** A C++ console application employing file handling techniques to perform sentiment analysis on text data, categorizing it as positive, negative, or neutral.
- **7. Snake Game:** A classic console-based game implemented in C++, where players control a snake to eat food and grow longer while avoiding collision with the walls or its own tail.

Research Publications & Documentations

- 1. Research Paper: A published research paper on "Virtual Machine in Cloud Computing" authored by Muhammad Abdur-Rehman, Musab Rizwan, Danial Khalid, and Abdullah Shahzad, featured in the Journal of Computer Vision Research in 2022.
- 2. The Software Requirements Specification (SRS) document: The Book Hub project, created in Spring 2022, outlines the project's purpose and scope. It includes an overview of the software, system requirements, and user interface design. Functional features and non-functional requirements are detailed to guide development. Diagrams may be included to visually represent system architecture. This document serves as a blueprint for development, ensuring clarity and guiding the software creation process.
- 3. EasyRider's documentation sets a gold standard for clarity and comprehensiveness (FYP). It encompasses system, user, API, and code documentation, ensuring seamless understanding, maintenance, and future development. With detailed explanations and examples, developers can easily navigate and extend the application's functionality. This documentation serves as a valuable resource for onboarding new team members and facilitating collaboration. EasyRider's commitment to thorough documentation reflects its dedication to excellence and long-term sustainability.