Tazuddin's Software Engineering Portfolio

- **Name**: Taz Uddin
- **Role**: Back-End Focused Full-Stack Software Engineer
- **Experience**: 8+ years in enterprise web application development
- **Specialties**: SaaS platforms, ERP, EIMS, Reporting Systems, FinTech, AI, Cloud Native

1. Introduction

I am a passionate software engineer with a track record of developing robust, high-performance systems tailored to meet business goals. I specialize in designing clean architectures, and building scalable applications focusing on quality and efficiency.

2. Client Testimonial

"Taz worked as a senior developer and project manager for us, developing complex features for our web application. His English communications skills are among the best we ever worked with on Upwork since 2009. He takes the ownership of the task and develops, properly tests and works with other team members to meet the deadlines. We absolutely recommend him for your next projects."- Alireza A. | Senior Manager of Web Application, NovotechSoftware

"Taz worked in an important project we had with KAZ Software, his last employer, where he contributed in designing and working on both the backend and frontend, implemented SSO with Azure AD, and built an interactive dashboard with charts and data export features. He also worked on optimizing database performance, since it was a Reporting Application based on very heavy transactional System. I recommend his work and wish him the very best."- M Ruhul Amin C. | IT Business Solutions Professional in M&S Domain

3. Skills

- **Languages**: C#, Go, TypeScript, JavaScript, Java
- **Frameworks & Tools**: .NET Core, xUnit, MSSQL, Docker, Angular, ABP Framework
- **Technologies**: HTML5, CSS3, Azure, SignalR, Clean Architecture, Microservices, OAuth SSO, Google Maps API, Azure, GCP, AWS, Git
- **Databases**: PostgreSQL, MySQL, SQL Server
- **Other Expertise**: Agile Software Development, Team Management, JIRA

4. Projects & Contributions

PawfecNotes (US)

- **Role:** External Software Consultant
- **Duration:** October 2024 – Present
- Integrating advanced AI Speech Recognition Services to enhance note-taking capabilities.
- Establishing connections with various veterinary platforms and service providers to improve interoperability.
- Enhancing and fixing functionalities in their Cloud EMR Companion (Browser Extension), ensuring a smoother user experience.
  Technologies: Deepgram SDK, C#, Websocket
  Impact: Automated transcription processes for faster, more accurate note-taking.

PPG.DEV (US)

- **Role:** External Software Consultant
- **Duration:** November 2024 – Present
- Designed and implemented a cloud-based email monitoring system to enable seamless tracking and analysis of email communications.
- Leveraged **Azure Functions** for scalable and serverless computing to process real-time email events.
- Integrated **Microsoft Entra ID** for secure authentication and access control, ensuring robust identity management.
- Utilized **Microsoft Graph API** and **Gmail API** for bi-directional email communication and metadata retrieval, enabling comprehensive email monitoring across platforms.
- Adopted **Google Cloud Pub/Sub** for reliable message queuing and asynchronous event handling to ensure high availability and scalability.
  Technologies: Azure Functions, Microsoft Entra ID, Microsoft Graph API, GCP, Cloud Pub/Sub, Gmail API
  Impact: Streamlined email monitoring operations, enhancing real-time tracking, security, and efficiency of email-based workflows.

Ambar Digital Hub (Canada)

- **Role:** External Software Consultant
- **Duration:** October 2024 – December 2024
- Contributed to the development of a CRM solution by working closely with the product owner to define strategic goals and deliver impactful features tailored to business needs.
- Designed and implemented a Google Maps-based route optimization feature, allowing users to calculate the most efficient routes for their operations, significantly reducing travel time and costs.
- Developed a personalized calendar feature to enhance user productivity by enabling custom scheduling, reminders, and event management directly within the CRM.
- Utilized Microservices Architecture for modular and scalable development, ensuring seamless integration with existing systems.
- Leveraged Docker to streamline deployment processes and enhance system reliability across different environments.
  Technologies: Microservices Architecture, Docker, ABP Framework, PostgreSQL
  Impact: Improved operational efficiency by enabling smarter routing and scheduling, enhancing user productivity, and delivering a robust CRM solution.

Wafi Solutions (BD)

- **Role:** Lead/Senior Software Engineer
- **Duration:** October 2023 – October 2024
- Led a team focused on geotechnical reporting using PDF-Sharp, implementing new features, fixing bugs, and ensuring robustness through unit and integration testing.
- Led the development of a SaaS platform, including real-time notifications and secure project transfer between tenants to enhance collaboration.
- Developed a project template export/import feature with backward compatibility to support seamless transitions between platform versions.
- Conducted daily Scrum meetings and maintained regular client communication to ensure project alignment with client needs.
- Reviewed and enforced coding standards and architectural guidelines to ensure high-quality code and consistent best practices across the team.
  Technologies: .NET 7, ABP Framework, xUnit, MSSQL, jQuery
  Impact: Improved productivity and delivered high-quality software solutions.

Kaz Software - Key Projects & Contributions

At Kaz Software, a renowned Bangladeshi software development firm, I had the privilege of working with prestigious international clients and global organizations, including **Japan Tobacco International (JTI)**, **UNICEF**, and the **International Bureau of Fiscal Documentation (IBFD)**. My role involved collaborating with **Netherlands**-based clients and other international stakeholders, delivering innovative software solutions tailored to diverse business needs. This global exposure allowed me to bridge local expertise with international standards, ensuring world-class results for projects that had a significant impact across industries.

- **Role:** Senior Software Engineer
- **Duration:** July 2022 – September 2023
- Led the upgrade and performance improvement efforts for an Angular-based tax research platform.
- Introduced lazy loading and modular breakdown to reduce bundle size and improve performance.
- Used Lighthouse to monitor and benchmark performance improvements, resulting in significant reduction in loading times.
- Mentored junior developers and conducted code reviews to ensure code quality and best practices.
- Guided feasibility studies and proof of concepts (POCs) to explore new features and technologies.
- Developed an API that retrieves data from the Oracle Endeca backend service, replacing original IDs with fake, alphanumeric 6-digit IDs.
- Created an ID generation module that generates unique 6-digit alphanumeric IDs for each Endeca ID.
- Implemented caching to store already generated fake IDs, reducing database queries and improving performance.
- Redesigned document comparison and data visualization features, improving usability and delivering a seamless user experience. Implemented interactive coach marks to streamline onboarding, guiding users through key functionalities with clarity and ease.
- Wrote comprehensive unit tests to ensure the functionality and reliability of the API and ID generation module.
- **Technologies:** Angular 9+, PrimeNG, Java, JUnit, Golang, MSSQL, XML/XSLT
  Impact: Enhanced system reliability by reducing database queries and improving performance. Increased junior team productivity through mentorship, code reviews, and fostering a better understanding of best practices.

Dristi Reporting Application (DRA)

- Successfully rolled out a comprehensive reporting system for **Japan Tobacco International (JTI)**, one of the largest tobacco companies.
- Designed and implemented a database splitting system based on date, resulting in significantly faster report generation.
- Developed an efficient report-writing mechanism using Open XML Spreadsheet Writer, improving data handling and processing.
- Built a responsive dashboard and data crunching system, enabling rapid data retrieval and display.
- Wrote and optimized stored procedures for critical reports, improving database performance.
- Enhanced reporting efficiency by approximately 30%, with some reports achieving up to 70% faster processing times.
- Developed a real-time notification system using SignalR, ensuring timely updates for users.
- Led team training sessions on unit testing, mentored junior team members on various development topics, and drove the implementation of key application features.
- Conducted app performance testing using JMeter, ensuring the application met quality and scalability standards before deployment to QA and production environments.
- **Technologies**: Clean Architecture, Threading, .NET Core 3.1, SQL Server, SSRS, Angular 9, Azure AD, JMeter.

Team Phantom – Education Management Information System (EIMS)

- Contributed to the delivery of the Education Management Information System (EIMS) for UNICEF, supporting education initiatives for Rohingya children in Bangladesh refugee camps.
- Designed and developed a Work Scheduling and Data Approval system, enabling bulk tracking, collection, and correction of data, improving end-user productivity through a web interface and export/import functionality.
- Developed a map integration showing learning center locations on Google Maps, with backend APIs to support dynamic location data.
- Led the development of user, role, and permission management systems, building both the back-end and front-end components for secure access control.
- Designed and implemented various back-end APIs to enhance system functionality and improve data management.
- **Technologies**: Clean Architecture, Design Patterns .NET Core 3.1, MySQL 8, Angular 9, Google Maps.

Next IT Limited (BD)

- **Role:** Software Engineer
- **Duration:** 2018 – July 2020
- Developed critical reporting systems and improved software performance through stored procedure optimization.
- Developed a purchase order and order sourcing system for raw materials, adding new features and enhancing existing ones across various modules.
- Created multiple reports using Crystal Reports and RDLC, including but not limited to proforma invoice reports, order status reports, challan statement reports, and plant-wise production reports.
- Improved software performance by resolving critical design issues, such as over-fetching of data.
- Enhanced overall software performance and code quality by optimizing stored procedures and refactoring poorly structured (spaghetti) code.
- Strengthened code quality and system robustness by applying appropriate design patterns, proper object orientation, and design techniques where needed.
- Conducted training sessions on various topics for new team members, helping them quickly adapt to the development environment.
- Initiated regular code reviews, advocating for clean and maintainable code practices across the team.
- Conducted On The Job training for new team members, fostering a collaborative and growth-oriented environment.
  Technologies: ASP.NET MVC 4, AngularJS, SQL Server 2008
  Impact: Enhanced system functionality and team expertise.

NTITAS IT Limited - Key Projects & Contributions

- **Role: Software Developer**
- **Duration: 2016 – 2018**
- **Micro Enterprise (Paperless Micro Credit)**: Developed a mobile application using Ionic Framework 1, built an API with Web API 2 for mobile and web portal support, and created an SPA web app for loan application reviews and approvals. Designed the database, wrote complex SQL queries, and implemented telemetry and location tracking features.
- **Scopo HR**: Developed modules for Employee Profile, Attendance Management, Leave Management, Salary Calculation, Document Upload, Admin Panel, Task Management, and Security Guard Roster Manager. Integrated ZKTeco fingerprint devices with their SDK and developed background processes. Wrote numerous stored procedures (SPs) and provided ongoing client support.
- **Scopo ERP**: Designed and implemented modules for Bill of Lading, Back to Back LC, Bank Forwarding, Export Invoices, Purchase Orders, Styles, Inventory Management, and Production Status. Managed Shipment and Requisition systems while providing continuous client support.

- **Scopo GPS Tracker**: Built an API using Web API 2 and MSSQL Server to enable GPS tracking functionalities.
- **Micro Finance Reporting Solution**: Developed a web application using ASP.NET MVC and Razor, created reports using MS Reporting Services (RDLC), and implemented an XML file parser to extract and store data from zip files into MSSQL Server. Developed an Admin module for user management and role assignments, with client support.
- **Rocket Mobile Money**: Developed key modules, including the Identity Card Printer, Disbursement, Collection, and Look Up modules. Built an XML file parser to extract and store data in MSSQL Server, while providing client support.
- **Scopo Cost Management**: Developed a web application using ASP.NET MVC, Razor, and MSSQL Server to manage costs, and created detailed reports using MS Reporting Services.
- **Technologies: ASP.NET MVC 5, RDLC, SQL Server, Ionic Framework**
  Impact: Through the development of a mobile application, an API, and a streamlined SPA web portal for loan application reviews and approvals, I significantly improved the loan application processing efficiency for a leading microfinance provider. This not only accelerated the approval cycle but also reduced manual intervention, enabling quicker decision-making and better service delivery for customers. By optimizing database performance and integrating location tracking, the solution enhanced overall operational productivity and provided a seamless user experience for both clients and internal teams.