

DUMISANI BROWN KAUNDA

FULL STACK SOFTWARE DEVELOPER

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I hold a MSc in Computer Science and IT, obtained from JAIN University, India and a Bachelor's degree in Information and Communication Technology (ICT) obtained from Mzuzu University, Malawi. I am a client-focused software developer with over four years of professional experience. I have a proven track record in managing and supporting the design and development of both web and mobile applications working as a team leader in a group of 6 other developers. My expertise spans the entire software development life cycle, from requirement gathering and feasibility studies to deployment and maintenance. I have also been responsible for developing and maintaining software development policies and standards within a banking environment.

One of the projects I am most proud of is the Core Banking System Migration at NBS Bank PLC, transitioning from T24 to the Oracle Flexcube System. As the technical lead on this project, I was responsible for developing the complex integration of all Flexcube Interfaces APIs to ensure seamless communication with banking services. I designed the logic for posting transactions, which included handling billers such as MRA, DRTSS, ESCOM, and all waterboard payments, as well as validating and creating accounts, and fetching and uploading forex rates. Additionally, I worked on APIs to create bulk standing orders, transfer bulk account classes, transfer bulk account branches, and close multiple accounts simultaneously. A notable project I worked on was developing a forex rates application that broadcasts daily forex rates across all branches and bureaus, providing customers with up-to-date information as they enter the branches.

TECHSTACK

Languages: C#, JavaScript (React Framework), **Environments:** Windows and Linux
PHP, Microsoft SQL Server, MongoDB, Python,
HTML, CSS, MySQL

Source Version Control: Bitbucket and [GitHub](https://github.com) **Architecture:** Microservices

Cloud Platforms: Amazon Web Services and **Tools:** Visual Studio/Code, Figma, Adobe Illustrator
Google Cloud Platform and Adobe Photoshop, Postman, Microsoft Products

Frameworks: React.js, Node.js, jQuery, Code **Services:** Oracle Flexcube Systems (FCUBS), T24
Ignitor and Express.js Core Banking system, API (REST and Soap)

CAREER SUMMARY

Software Developer – NBS Bank PLC, Blantyre, Malawi

October 2019 – Present

Entered the banking sector to develop high-quality, user-friendly applications and software tools for customers throughout Malawi. Responsible for analyzing problems, designing solutions, developing software, debugging, testing, maintaining software, documenting processes, fixing bugs, and providing systems support. Continuously collaborating with both external and internal clients to ensure that software projects align with business requirements.

- Developing bespoke, complex web applications that enabled the organizations to register on our platforms easily while securing our environment.
- Participating in every step of the software development process including estimate, development, test plans, rollout plans, documentation, and team presentation.
- Responsible for the development, design and implementation of new or modified software products or ongoing business projects. involved in liaising with the system architect to ensure software projects meet requirements.
- Developing and maintaining software according to the development policies, standards and software changes aligned with best practices, emerging trends and cyber security threats
- Recommending list of the tools, frameworks, hardware, software, and other IT elements needed to deliver planned projects, to help in the development of the ICT Budget.
- Integrating over 20 service providers APIs to the Core Banking system to allow customers payments to be processed on the banks platforms (in branch and mobile platform).
- Discussing the project requirements and the proposed solution with the immediate supervisor.
- Improving system quality by identifying issues and common patterns, to recommend best standard operating procedures.
- Participating in project feasibility meetings and articulating the architectural designs of the proposed systems.
- Recommending on the best tools, frameworks, hardware, software, and other IT elements needed to deliver planned projects and to achieve functional objectives of the Bank and investigating current systems and points out risk that might occur.

Key Achievements

- Reduced operational costs by automating manual systems done in different sections in the bank.
- Cut customers' complaints by 76% by identifying and rectifying errors within applications.
- Increased productivity in personnel to focus more on their work than having a load of tickets to work on
- Played a key role in growing revenue by 40% by the payments made by customers through accessing the service providers.
- Increased critical system availability in most sections of the department of IT.
- Revamped legacy applications to enhance and make them more user-friendly which contributed to an 82% reduction in negative reviews.

Technologies used: JavaScript, HTML, C# (ASP.NET Core and ASP.NET Framework), React JS, Microsoft SQL Server, PHP, jQuery, Windows Servers, IIS, Xampp, Code Ignitor and Docker.

Sample Personal React Project: [Dumisani Brown Kaunda Portfolio](#) and more on [GitHub Profile](#)

Recruited to join an entrepreneur hub, responsible for building and maintaining the organisations website.

- Administering and maintaining the organisation’s website which brought more members to the website.
- Educating the community with digital skills under a program called Media Information and Literacy Education (MILE) through the hub.
- Designing over 50 plus artworks to market the services rendered by the hub.
- Liaising with members and other program officers to provide accurate educations support.
- Developing modules that were used to educate the community.
- Incorporating newsletters on the website to enhance customer engagements.
- Altering the organisation website to increase performance and implemented SEO techniques to retain customer to the website.

Key Achievements

- Created online presence and retained over 50 plus members to the site.
- Improved the reachability of the hub to recognised by outside companies.
- Over 100 plus members joined the hub after seeing adverts well-articulated on the website.
- Trained over 50 members with digital skills.

Technologies used: WordPress, Xampp, Wamp, CSS, HTML, MySQL, Adobe Photoshop, and Illustrator.

EDUCATION & TRAINING

MSc. Student in Computer Science & IT, JAIN University , Online, India	2022-Present
Bachelor’s Degree in information and communication Technology, Mzuzu University , Malawi	2015-2019
Cyber Security Certification, Certified Professional Development , Online, UK	2017
C# Intermediate: Unit Testing Dotnet (.NET) Blockchain Development, Udemy Business	2018

ADDITIONAL INFORMATION

Languages: English(fluent)

Voluntary Work: Team leader at Young Life International organization which focuses on reaching out to young adolescents about Christ and helping them grow in their faith.

Basic Skills: Good problem-solving skills, self-starter and critical thinking, leadership skills, time management and organizational skills

DEVELOPMENT STACK

Following the Microservice architecture, for backend developments, I have developed APIs in C# using Visual Studio which are loosely coupled, testable and deployable independent of the platform environment. This has enabled the organization to deliver large, complex applications frequently and reliably. I use entity framework, an object-relational mapper to work with a database using .NET objects that allows a higher level of abstraction when interacting with the data. The microservices are also built with xUnit to ensure that code is thoroughly tested and ready for production. For deployment, I use Internet Information Services (IIS) web server from Microsoft that runs on Windows systems to serve requested HTML pages or files. For frontend developments, I use React JS which simplifies complex interfaces by subdividing them into simple reusable components and PHP for maintaining legacy developments. For these, I usually deploy them to cloud on Netlify and xampp on Windows servers. I use MSSQL as a primary database to store and manipulate all data. I have also used MongoDB for smaller personal projects. For git version control, I use Git for organization, collaboration and easy backups on platforms like GitHub and Bitbucket. I have also worked with FCUBS and T24 Core Banking system webservices and integrated it with most of the applications. I have also implemented CI/CD on GitHub. I have also developed simple projects in MERN and deployed them to cloud using CI/CD.

PROJECTS COMPLETED

1. Application Programming Interface (API) Integration – Leveraging a microservice architecture, I have developed APIs that facilitate seamless payment processing for services such as waterboard, electricity, subscriptions, and bills. These APIs are integrated with T24 Core Banking Systems, covering various payment types including water payments, TV subscriptions, hospital bills, and university fees.

During the transition from T24 CBS to Oracle Flexcube Banking System (FCUBS), I developed an API to interface with FCUBS, ensuring seamless transaction processing for the relevant service providers. To enhance security and authentication, I implemented OAuth 2.0 for secure token-based authentication, used HTTPS for encrypting data in transit, and established detailed logging to track access, usage, and monitor for unusual activity or potential security breaches. I gained expertise in consuming RESTful and SOAP-based APIs from Oracle Banking platforms, which required a deep understanding of data models, endpoints, and request/response structures for services like Customer Service and Account Services. Additionally, I became proficient in working with the Oracle Banking Payments Module (OBPM) and learned how to write and optimize SQL queries to efficiently retrieve account information from Oracle databases. I also built an API to update forex rates in Oracle Banking Branch (OBBRN), FCUBS, and bureau forex rates.

2. Smart Reports (SQL Server Reporting Services) – Developed and managed a comprehensive SQL Server subsystem that enables the creation of dynamic, graphical, mobile, and printed reports using SQL Server and other data sources. This system supports a wide range of reporting needs, from detailed financial statements to operational dashboards, providing critical insights for decision-making. Additionally, I coordinate the secure

and timely distribution of these reports to third-party companies for reconciliation purposes, ensuring data integrity and confidentiality throughout the process. This role involves close collaboration with stakeholders to gather requirements, troubleshoot issues, and implement improvements, thereby enhancing the overall efficiency and effectiveness of the reporting system.

3. SMS Gateway – Developed a robust and scalable SMS gateway for FCUBS (Flexcube Universal Banking System) to facilitate the seamless delivery of transactional alerts. This gateway ensures that customers receive real-time notifications about their banking activities, regardless of the channel they are using, such as online banking, mobile apps, or ATMs. The system is designed to handle high volumes of messages efficiently and includes features like message queuing, retry mechanisms, and delivery status tracking to ensure reliability and accuracy. Additionally, it supports multiple languages and complies with regulatory requirements for secure and confidential communication.

4. UI/UX design of NBS Bank Mobile Application User Interface - Revamped the mobile application's appearance and user experience using Figma, incorporating new modern designs and made it user friendly.

5. Camunda Workflow – taking lead in working on the business automation process model to automate all processes done in the bank. This platform provides a workflow and decision automation offering process orchestration capabilities to organizations of any size.

6. Active Directory API – Active Directory (AD) is a directory service developed by Microsoft for Windows domain networks. I developed the Active Directory Login for in-house applications creating a unified login system that allows users to access multiple applications with a single set of credentials. This enhances security and simplifies user management across the organization.

7. Interface Logic for OFSAA System – The OFSAA (Oracle Financial Services Analytical Applications) System is used for customer screening and risk rating. Developing the logic for interfaces with this system involves creating the necessary code and processes to ensure that customer data is accurately screened and rated for risk, which is essential for compliance and risk management.

REFERENCES

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