Project Description (Corporate Internet Banking)

SMU tBank is a bespoke digital banking platform that we use to support multiple Financial Technology courses at SMU. The platform have reached the maximum capacity on the current SMU tBank infrastructure, and the performance of the system is degrading which affects student lab exercises. A previous IS484 team has already migrated the SMU tBank backend services from TIBCO BusinessWorks (hosted on AWS) to OutSystems low code application platform. OutSystems is a much more robust and scalable technology platform. This project is to **migrate the current SMU tBank Corporate Internet Banking frontend UI from Vue.js to OutSystems**. Work product from this project will also be used by **Narwhal Financial Systems (NarFin)**, an SMU spin off company.

Coordinator

Professor Alan Megargel

Deliverables

Migrate (re-develop) the current SMU tBank Corporate Internet Banking frontend UI from Vue.js to OutSystems, including the following components:

Existing features (to be migrated):

- Dashboard view of customer accounts and statistics
- Drill down view of deposit and loan accounts
- Fund transfers: setup beneficiaries, transfer funds, bill payments, setup standing instructions
- Setup notification preferences, balance/transaction trigger alert
- Payments – upload payment instructions for interbank clearing and settlement

New features:

- Upload corporate financial statements, extract financials using NLP models.
- Generate credit score based on financial ratios.
- Apply for corporate loans.
- Manage existing loans, e.g., partial/full loan repayments.
- Setup schedule and rules for cash concentration.
- Trade Finance – Letter of Credit, Bill of Lading, Bill of Exchange, Factoring/Bill Discounting.

A previous IS484 team has already migrated the required SMU tBank backend services to OutSystems. My team and I worked on improving the existing banking features and developing new features in OutSystems according to the API documentation provided.

My Project Contributions

- Frontend Web Development with OutSystems, Agile, Scrum and Software Development Lifecycle (SDLC) principles and methodologies for features below:
    - Beneficiaries
    - Standing Instructions
    - Bill Payment
    - Direct Debit Authorization
- Conducted User Acceptance Testing (UAT) sessions under individual user settings and classroom group settings with more than 10 students to gather user feedback to improve efficiency, user-friendliness and functionality
    - Ensuring the system meets business and user requirements
- Note down project meeting minutes as the role of a Scribe