Team Members:

Ajay Kumar Bolla AjayKumar_Bolla@student.uml.edu
Andrew Mejia Bernal Andres_MejiaBernal@student.uml.edu
Danhua LI Danhua_Li@student.uml.edu
Fnu Ashika FNU_Ashika@student.uml.edu

Project Company Sponsor Team:

Hicham Naciri Hicham.Naciri@ebtc.com
Carolyn Mansour Carolyn.Mansour@ebtc.com
Eric Pearson Eric.Pearson@ebtc.com
Enterprise Bank IS Management Team

Company Information:

Enterprise Bank is a community bank headquartered in Lowell, MA that serves businesses, nonprofits, and individuals in the New England area. The bank provides a range of financial services, including checking accounts, loans, and mobile banking.

Project Overview:

This project is designed to assist in the building of Enterprise Bank's API and middleware strategies to unlock additional functionality and improve scalability. The project will entail researching industry trends such as digital transformation and open banking to ensure solutions to be aligned with the current and future landscapes of the banking industry in a holistic manner. This approach should yield improvements in efficiency and help streamline operations, ultimately resulting in an improved customer experience.

Project Objectives & Scope:

Identify API vendors/partners who work with the banking industry: Working with the Enterprise Bank IS team, identify a list of vendors who provide API managed services for the banking industry and conduct and document scripted interviews with these vendors as potential candidates to help support the bank's future API strategy.

Conduct and document scripted interviews for industry insights: Establish an interview process to gather and document insights and recommendations from other banks that are leveraging the Fiserv Open Banking solution, Communicator Open.

Compare approaches: Evaluate different approaches for API, data and middleware strategies, including researching and facilitating demonstrations of solution providers like MuleSoft, Snowflake and Denodo, and looking at Integration Platforms-as-a-Service (IpaaS) to identify the most suitable options for Enterprise Bank.

Assess scalability and performance: Inventory and catalog the integrations used by the bank's Branch Administration team between the Fiserv Business Process Manager account opening solution and the bank's on-premises Fiserv Premier Core Banking solution. Assess this inventory against the API's available and published in the Fiserv Open Banking Developer's portal to identify gaps and lead to a decision of whether to move forward with licensing of Fiserv's Communicator Open solution.

Project Data & Other Resources:

1. Enterprise Banking Core Banking Vision.
2. Enterprise Bank Fiserv Solutions and Integrations Map.
3. Fiserv Open Banking/Communicator Open Presentation, Fiserv Developer's portal and its available APIs.
4. Enterprise Bank Business Process Manager solution integration inventory.
5. Vendor-specific information and presentations. (Enterprise Bank to provide contact points)
   a. PORTX (API solution provider) jake.berman@portx.io
   b. Core10 (API solution provider) - https://core10.io/
   c. API (API solution provider) steve.scott@apipeople.com
   d. MuleSoft (Middleware solution) – gdoherty@salesforce.com
   e. Denodo (Middleware/data virtualization layer solution) – contact TBD.
   f. Snowflake (data solution) – contact TBD.
6. ABA article on API Strategy and Middleware.
7. Enterprise Bank list of banks/contacts running Communicator Open.
   a. fourthCapital – Debbie Dunkerson (615-780-6032): Premier bank using Q2 with real time integration via Communicator Open. https://fourthcapital.com
   b. Bank of New Hampshire – Tabitha Gerry (603-527-5227): Has BPM integration with Entrust Cloud. Hosted bank for all except reporting tool. **Do not have** Communicator Open. https://bnh.bank
   c. Androscoggin Bank – Peg Anderson (207-376-3545): No info re: Communicator Open. (FYI, this group has not yet been contacted by EB). https://www.androscogginbank.com

Constraints:

1. Limited window of availability for ad-hoc meetings. (3pm – 6pm EST) [Critical meeting to be scheduled in advance].
2. Hard deadlines on deliverables.
3. Time spent engaging with vendors.
4. Limited availability of internal resources for technical implementation and ongoing management of middleware solutions.
5. Insufficient internal expertise in middleware technologies, potentially requiring additional training or reliance on external specialists.

6. Adherence to strict data security and privacy regulations that could impact the sharing and handling of customer data through middleware platforms.
7. Other banks' willingness to discuss Fiserv Communicator Open solution implementation.

Assumptions:

1. The chosen middleware vendors will be available for consultations, demonstrations, and technical support as needed during the evaluation and implementation phases.
2. The banks running Communicator Open are willing to speak with us about their implementation.

Research / background sources:

1. **Industries best practices on API strategies:** Research and collect information on industry-recommended best practices for API strategies to guide the development process.

2. **Interviews with other banks:** Conduct interviews with representatives from other banks that are leveraging vendors for middleware solutions. These interviews will provide valuable insights and recommendations for our project.

3. **Industry case studies on middleware impact:** Review case studies focusing on the impact of middleware solutions in the banking industry to better understand the benefits and potential challenges.

Approach:

Phase 1: Gather Requirements & Research

1. Meet with Enterprise Bank's Information Systems (IS) team to discuss and gather business and technical requirements.
2. Conduct preliminary research on industry best practices, API strategies, and middleware solutions. Create an analytic report on this.
3. Collect inventory of Business Process Manager integrations.
4. Engage banks for interviews.
   a. Enterprise Bank to provide list of banks
   b. Karen to introduce UML team.
5. Engage CRM group (Denise to provide KT session).

Phase 2: Establish Interview SOP

1. Schedule meeting with Enterprise Bank and UML teams to gather requirements and desired insights for bank interviews.

2. Generate interview templates that shall be used for all bank and vendor interviews to ensure consistency.
   a. UML team to take lead on developing templates based on conversation with Enterprise Bank team.
3. Schedule interviews with other banks for gathering insights and recommendations.
4. Meet with Fiserv Open Banking Demonstration and solution demos (Monday Sept 18th 4pm).

Phase 3: Data Collection and Analysis

1. Extract insights from data collected from interviews. Present findings to Enterprise Bank team.
2. Gap analysis (BPM/Fiserv)
   a. Collect information related to Enterprise Bank's existing API infrastructure and middleware solutions.
   b. Perform initial data analysis, comparing different API and middleware approaches.

Phase 4: Vendor Evaluation and Interviews

1. Identify and shortlist potential vendors for middleware solutions based on gathered requirements and bank interviews.
2. Conduct interviews with shortlisted vendors for in-depth understanding and assessment.
3. Present findings to Enterprise Bank and make recommendations for vendor selection.
4. Generate RFP (Request for Proposal) for vendor.

Project Milestones / Final Proposal Submission

Sept 01	**Milestone 1:** Meeting with sponsors and determine project scope, goals and data availability.
SEP 30 – Oct 06	**Milestone 2:** Present insights from bank interviews to Enterprise Bank team.
Oct 09 - Nov 03	**Milestone 3:** Gap analysis presentation to Enterprise Bank.
Nov 06 – Dec 01	**Milestone 4:** 1. Present vendor insights & recommendation 2. Generate RFP for vendors. 3. Prepare Final Project Presentation.

Dec 04 – Dec 08	**Milestone 5:** Submit all Project Deliverable with approvals from Sponsor and Faculty Mentor.

Deliverables:

Deliverables to Enterprise Bank and UML:

1. Create template for interviews with banks.
2. Create template for interview with vendors.
3. Bank and vendor interview insights presentation.
4. Gap analysis presentation to Enterprise Bank.
5. Create request for proposal for vendors.
6. Create data visualization comparing vendors:
   a. Overview
   b. Technical Capabilities
   c. Market Share
   d. Cost
   e. Reviews
   f. Other Metrics

Responsibilities of each team member:

Andrew Mejia Bernal - Communication / Technical Architecture, Gap Analysis, Data visualization and final presentation to school and the client.

Fnu Ashika - Communication / Technical Architecture, Gap Analysis, Data visualization and final presentation to school and the client.

Ajay Kumar Bolla – Creation & Documentation of interview templates of bank and vendors, Data Visualization and final presentation to school and the client.

Danhua LI – Creation & Documentation of interview templates of bank and vendors, Data Visualization and final presentation to school and the client.

Sponsor Comments: _Looking forward to a great partnership with UML on this key initiative._

Sign: _Hicham Zaari_

My Comments: _____
A great exciting project on understanding banking software industry focusing on API and middleware. Once data is collected from various sources use descriptive analytics to show current state of affairs and try some prescritive analytics for recommendations and insights.

Sign: _L. F. Motiwalla_