# Business Document

## Project Title

Find Nearby Banks

## Objective

To provide users with a simple application that helps them locate banks within a 10-mile radius of a given ZIP code using Google Maps APIs.

## Business Problem

Many users need a quick and efficient way to find nearby banks for tasks such as withdrawing cash, opening accounts, or getting financial support. Manually searching through websites or using generic maps apps can be time-consuming and inconsistent.

## Proposed Solution

Build a modular microservices-based Spring Boot application that:  
- Accepts a ZIP code via a REST API  
- Uses Google Maps APIs to geocode the ZIP into coordinates  
- Searches for nearby places of type "bank" within a 10-mile radius  
- Returns the bank name and address to the user

## User Flow

1. User Input: User submits a ZIP code through a web client or Postman.  
2. Bank Service: The primary service handles the request and sends it to the Location Service.  
3. Location Service: This service calls Google APIs to:  
 - Convert ZIP code to coordinates (Geocoding API)  
 - Find nearby banks (Places API)  
4. Response: The list of nearby banks is returned to the user in a simple JSON format.

## Key Benefits

- Easy to use  
- Modular architecture for scalability  
- Uses reliable, real-time data from Google  
- Can be enhanced for ATMs, hospitals, etc.