# Software Architecture

# Commerce Bank Project

Version 1

Team 1

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## 1.1     Purpose

This document provides a comprehensive view into the architecture of the Commerce Budgeting project. This is accomplished by looking at the different aspects of the project from multiple views. Its intention is to convey why the architecture decisions that were made were made.

## 1.2     Scope

This Software Architecture Document conveys the architecture overview of the Commerce Budgeting project. It is formed directly from the decisions and implementations of the project directly.

## 1.3     Definitions

- Client – Commerce Bank for which the project is being created

- Software Architecture Document – The document at hand which contains all of the architecture overview for the project

- Project – The web application being commissioned by the client, Commerce Bank

- Database – References the SQL 2012 database used for the project

## 1.4       2.1 Architecture Constraints

1.  The application must be usable in the standard desktop format
2.  The application must be mobile comptatible
3.  The application will be usable by all current client customers
4.  The application will be within the .Net framework
5.  The application will use SQL Server 2012
6.  The application must be developed with an intuitive design
7.  The application must direct the user on what they are doing
8.  The application must be able to access the user's spending data

## 2.2Architecture Goals

1.  Application must be able to integrate into the client's current system with minimal changes to the application itself
2.  Application must provide the client's customers with a streamlined ability to budget their financial purposes over a period of time
3.  Application   must be simple enough for most users while able to hold the attention of more advanced users
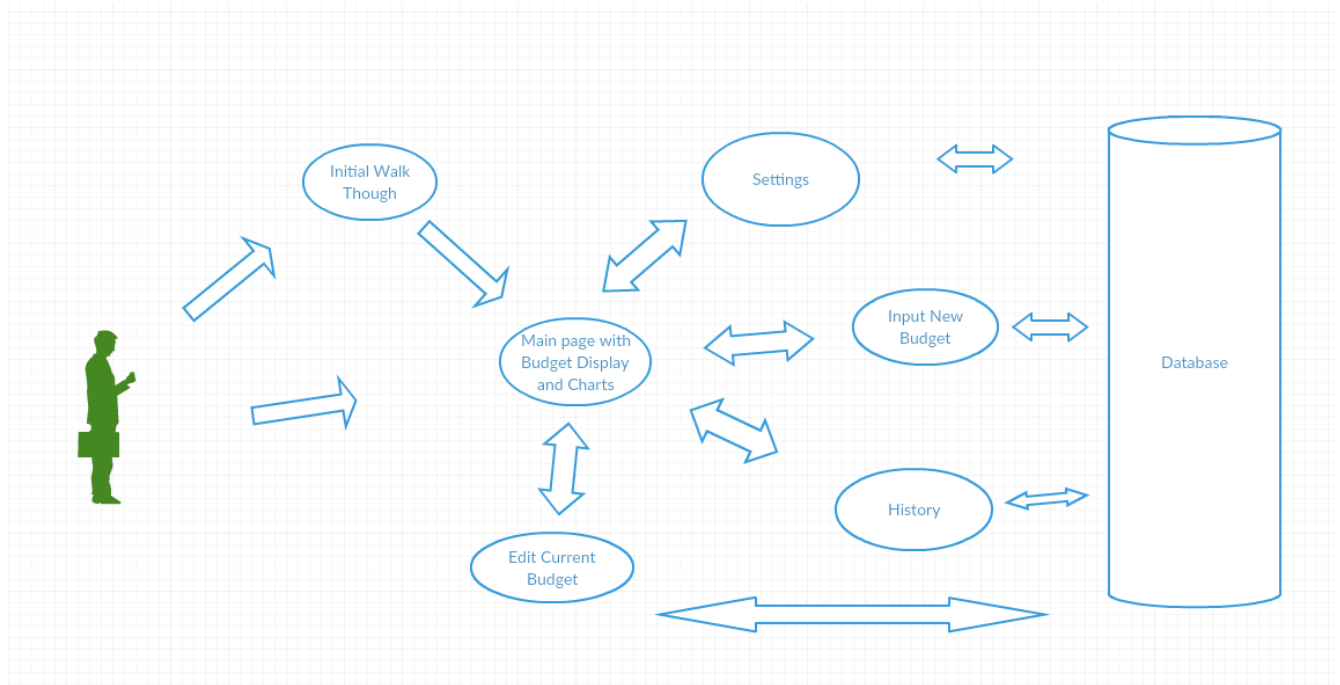
## 3.1 Use Case List

The use cases for this project are as follows:

- First time visit walk through

- Returning visit main page

- Input new budget

- Edit current budget

- History

- Settings

These use cases are initiated by the user and interaction with the budget application and the database. The first time the user accesses the application they are directed through the first time walk through case. From there the user uses the main page as the primary point to interact with the other use cases.

This is an exhaustive list of all the use cases currently within the project. Section 3.2 displays a model overview of how these use cases interact with each other and access the database.

## 3.2 Architecture Top View

## 3.3 Use Case Descriptions

3.2.1           First Time Visit Walk Through – This case introduces the user to the application on the first visit. It will ask basic questions to help make suggestions for budgeting and then move the user to the main page


3.2.2           Returning Visit Main Page – This is the main point of interaction for the user once the first time visit walk through is over or the user is returning to the application. This case shows the current or last budgets data complete in tabular form, pie chart, and bar graph. This is the main page to direct to the edit, input, settings, and history cases.


3.2.3           Input New budget – This case can be accessed from the main page. This allows the user to input a new budget if they don't have a current budget. It also makes a suggestion based on their input from the first time visit walk through


3.2.4           Edit Current Budget – This case allows the user to edit the current budget if something were to change during the budget time frame or if a mistake was made. It is accessed from the main page and returns to the main page once completed


3.2.5           History – This case is accessed from the main page and returns to the main page once complete. It allows the user to see all past budgets and delete them if deemed necessary


3.2.6           Settings – This case is accessed from the main page and returns to the main page once complete. It allows the user to opt in or out of email and sms text notifications. Further settings could potentially be added to customize main page data display.