# MRA Tax Payer App Challenge

## Introduction

This document outlines the steps taken to develop the taxpayers app challenge. For this challenge I used the Model-View-Controller (MVC). The MVC is a well known implementation for a lot of systems. It is used by most industry used frameworks like laravel. MVC is an architectural pattern that separates an application into three main logical components: the model, the view, and the controller. Each of these components are built to handle specific development aspects of an application. MVC is one of the most frequently used industry-standard web development frameworks to create scalable and extensible projects.

## Model

The Model component corresponds to all the data-related logic that the user works with. This can represent either the data that is being transferred between the View and Controller components or any other business logic-related data. For example, a Tax Payer object will retrieve the customer information from the database or api, manipulate it and update its data back to the database or use it to render data.

The system has used the following models

* Login Model
* Logout Model
* Taxpayers Model

## View

The View component is used for all the UI logic of the application. For example, the Home view includes all the UI that displays users, update or delete.

I have used the following views

* Layouts - for repetitive components
* Home
* Login

## Controller

Controllers act as an interface between Model and View components to process all the business logic and incoming requests, manipulate data using the Model component and interact with the Views to render the final output. For example, the Taxpayer controller handles all the interactions and inputs from the Taxpayer Views and updates the database using the Taxpayer Model. The same controller will be used to view the Taxpayer data.

Security

I have used validations and route “guards” to facilitate the authentication/ authorization process. The purpose of “guards” is to authenticate users for each request they make.

