**Mohammad Seyfi Marandi – Exercise 1**

MVC stands for "Model-View-Controller" and it's a design pattern used for structuring software applications. This pattern consists of three main components, each responsible for different tasks:

1. **Model**:
   * Responsible for storing data and providing methods for retrieving and modifying it.
   * Represents the data structure and business logic of the application.
   * Operates independently of the other MVC components.
2. **View**:
   * Responsible for presenting information to the user and receiving input from them.
   * Displays information from the model to the user and forwards user inputs to the controller.
   * Changes in the view typically occur without affecting the model or controller.
3. **Controller**:
   * Responsible for processing user requests and determining operations to be performed on the data.
   * Manages the communication between the model and view; receives user requests from the view, updates the model, and then sends the new information to the view.

**Objectives of MVC:**

* Separation of concerns by decoupling business logic from user interface.
* Facilitation of code development and maintenance by dividing responsibilities among model, view, and controller.
* Increase in reliability and scalability of the application by focusing on the separation of various units.

MVC is one of the most popular design patterns in software development, and many frameworks and software platforms leverage it, including web frameworks like ASP.NET MVC, Ruby on Rails, and Django.