

## **Framework and Architecture Style Assignment**

**Identify any three software frameworks from the web and identify the architecture style on it.**

### **1. Laravel**

Laravel is a PHP-based web framework that is largely based on the MVC architecture. It can be said as a web application framework that is expressive and beautiful in its syntax. A Laravel framework allow developers to build their projects in a more simple way with fast routine engine. It provides powerful dependency injection container, multiple backends for session and cache storage, database agnostic schema migrations, robust background job processing and real-time event broadcasting. Laravel was created to make it easier for developers to get started on PHP projects. Laravel offers a rich set of functionalities which incorporates the basic features of PHP frameworks like CodeIgniter, Yii and other programming languages like Ruby on Rails. Besides, there are a lot of built in packages in Laravel which makes developers to build their project easily.

**Architecture style: Model-View-Controller**

### **2. Spring Framework**

The Spring Framework (Spring) is an open-source application framework that provides infrastructure support for developing Java applications. One of the most popular Java Enterprise Edition (Java EE) frameworks, Spring helps developers create high performing applications using plain old Java objects (POJOs). Spring Framework provides a comprehensive programming and configuration model for modern Java-based enterprise applications. Development team who decides to use Spring Framework can focus on application-level business logic without any worries about specific deployment environments as Spring focuses on the “plumbing” of enterprise applications. Spring framework is working on layered architecture whereby it contains three layers which are presentation layer, business login layer and data access layer.

**Architecture style: Layered architecture**

### **3. Django**

Justification:

In Django, Python is used as the programming language. Django uses MVC style where its architecture is made up of model, view and controller. Model is the data layer, view is the presentation layer and controller is the business login layer. This framework is used by well-known companies including Google, YouTube, and Instagram. Django brags about having several functionalities, including messaging and authentication, in its batteries-included feature. It adheres to both the DRY pattern and the Convention Over Configuration design. In Django, security is crucial. Django either implements security protections in the framework itself, including restricting code execution in the template layer, or it gives developers the methods and resources they need to create safe websites.

**Architecture style: Model-View-Controller**