# CS 305 Module Two Written Assignment Template

## Instructions

Replace the bracketed text with the relevant information in your own words. If you choose to include images or supporting materials, make certain to insert them in all the relevant locations in the document.

## Areas of Security

Based off the given scenario, and with past knowledge of the architecture of website applications, I would recommend the following aspects: APIs, Input Validation, and Code Quality.

APIs, Input Validation, and Code Quality are incredibly crucial for software applications.

## Areas of Security Justification

* APIs serve as a vital connection between different components, such as the database. Without the use of APIs, gathering information becomes challenging. In the given scenario, the Spring Framework would benefit immensely from APIs for proper functionality.
* When working on a specific project like this, Input Validation becomes indispensable. If the project involves the use of APIs, it is vital to ensure that input validation is implemented so that the data provided properly aligns with the required format and returns the correct results.
* Code Quality is also becoming increasingly important. Depending on the way a project is programmed, the functionality changes. Poor code quality can lead to inefficiencies such as excessive memory usage or inaccurate results.

## Code Review Summary

It is worth noting several concerns that have come to light. One red flag that is evident from the pom.xml file is that it indicates it has been running with an old version. While it may seem like a minor issue, it is important to consider working in the latest version of the framework to ensure minimal issues.

The primary rationale behind using the latest frameworks usually fixes any vulnerabilities that could have been present in the earlier versions. When using an outdated version, you run the risk of being susceptible to said vulnerabilities. Outside of running into problems, you would have to use outside resources to mitigate them. With, it is incredibly important to prioritize the most up-to-date framework version. This approach ensures that you can take advantage of the latest security enhancements and mitigate potential vulnerabilities that could impede the project’s progress.

## Mitigation Plan

While commonly addressing the project’s errors is a main concern, the primary focus should be working with the latest version of the framework. As mentioned earlier, working with the current version not only saves time and money, but also safeguards the project from potential issues arising from using an outdated framework. When staying up to date, you can mitigate any existing or future problems that can arise when working with the new framework.