



CS 305 Module Two Written Assignment

1. Areas of Security

After reviewing the VAPFD and the week, one quiz the three items of concern when developing a web application with the spring framework are:

1. Input Validation
2. API
3. Encapsulation

2. Areas of Security Justification

While I believe the areas listed on the VAPFD are essential, the course prioritizes the three I have listed. While input validation jumps out at you as necessary, it is tough to implement that with poor code quality or errors in your code. Also, a clear definition and solid design are important for a RESTful API. However, if the API gives out data that is not sufficiently encrypted, it becomes a very efficient security problem.

Encapsulation is also on the list the course picked, but to me, that is more than security. That is just a good software design for maintainability. This brings us back to code quality and code errors.

Ultimately, I would have picked all seven areas every time since I do not see how they can live in isolation. (While not mentioned, if you have a client-server configuration for your software, you have to review the area, so unless this is only running on one machine, it will be client-server).

3. Code Review Summary

- The project contained three classes
- None of the classes perform any input validation
- The code does not execute, and as such, it is hard to trace
- Code provides no comment (or even a simple readme file); therefore it is impossible to determine if API is correct
- Code seems to be encapsulated

4. Mitigation Plan

- Add code comments and docstrings
- Validate input