# Code Review Topics

When conducting a final project code review, it's essential to assess the quality, functionality, and maintainability of the codebase. Here are some questions you can ask during a code review:

1. What was the main purpose of the project?
2. Did we meet the goal and purpose of the project?
3. What packages (nuget) were used?
4. What was a challenge encountered in the development of the project?
5. \*\*Is the code clean and well-structured?\*\*
   1. Are the code files organized logically?
   2. Is the code modular and follows the principles of good software design?
   3. Are there any code smells or anti-patterns?
6. \*\*Does the code follow coding standards and best practices?\*\*
   1. Are naming conventions consistent and meaningful?
   2. Is the code properly formatted and indented?
   3. Are there appropriate comments and documentation where necessary?
7. \*\*Are there any potential security vulnerabilities?\*\*
   1. Are user inputs properly validated and sanitized?
   2. Are there any SQL injection or cross-site scripting (XSS) vulnerabilities?
   3. Are authentication and authorization mechanisms implemented correctly?
8. \*\*Does the code handle errors and exceptions effectively?\*\*
   1. Are there appropriate error handling mechanisms in place?
   2. Is logging implemented to track errors and provide debugging information?
9. \*\*Is the code efficient and optimized?\*\*
   1. Are there any performance bottlenecks or resource leaks?
   2. Are there any redundant or inefficient operations that can be improved?
10. \*\*Does the code implement the desired functionality?\*\*
    1. Does it meet the requirements and specifications outlined in the project?
    2. Are there any missing features or functionality that should be addressed?
11. \*\*Are there appropriate test cases and test coverage?\*\*
    1. Are unit tests, integration tests, or other types of tests in place?
    2. Do the tests adequately cover the codebase to ensure reliable behavior?
12. \*\*Is the code maintainable and extensible?\*\*
    1. Is the code structured in a way that makes it easy to understand and modify?
    2. Are there opportunities for code reuse and minimizing duplication?
13. \*\*Are there any performance or scalability concerns?\*\*
    1. Will the code be able to handle larger datasets or increased user load?
    2. Are there any potential performance optimizations that can be made?
14. \*\*Are there any dependencies or third-party libraries with potential issues?\*\*
    1. Are the dependencies up to date and free from known vulnerabilities?
    2. Are the licenses of third-party libraries compatible with project requirements?