Code Review Checklist and Summary

# Code review summary

Date of Review:

Reviewed By:

Author of Changes:

# Step 1: Analyze the codebase using AI tools

Provide a brief description of what the code update is intended to do

## Step 1A: High-level codebase summary

Provide a concise description of the codebase as a whole. This should include the purpose of the system, its main components, and how they interact.

## Step 1B: Explanation of complex function

Use this section to explain any particularly complex or critical function in the codebase. Break down its purpose, logic, and any nuances that are important for understanding how it works

## Step 1C: New code snippet

Include here a representative or newly added piece of code relevant to the review. Be sure to add commentary or annotations as necessary to explain its purpose

# Step 2: Review and explain a complex function with AI assistance

List the files, classes, or modules that were reviewed or referenced. Also, provide a clear, step-by-step, beginner-friendly explanation of the selected complex function.

*(Note: The file names provided are for illustration purposes only. Be sure to replace them with examples from your project.)*

- /auth/login.js  
- /models/User.cs  
- LoginController.cs

# Step 3: Generate a new code snippet to address a feature request

|  |  |  |
| --- | --- | --- |
| Category | Yes / No / N/A | Comments |
| Follows style guide / naming conventions |  |  |
| Code is modular and reusable |  |  |
| Comments and documentation are appropriate |  |  |
| No unused variables or dead code |  |  |
| Logic is clear and correct |  |  |
| Security best practices followed |  |  |
| Error handling implemented appropriately |  |  |
| Test coverage exists / was updated |  |  |
| Performance implications considered |  |  |
| Backward compatibility preserved |  |  |

# Step 4: Update technical documentation using AI tools

Use this space to provide any notes, feedback, or follow-up action items

Example: "Consider refactoring the nested loops for readability."  
"Please add unit tests for the new password validation logic."

# Step 5: Standardize the documentation template with AI recommendations

# Write a brief note summarizing the improvements you made based on the AI feedback.

☐ Approved  
☐ Approved with minor changes  
☐ Needs major revisions  
☐ Rejected

# Sign-offs

|  |  |  |  |
| --- | --- | --- | --- |
| Reviewer name | Role | Signature / Initials | Date |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |