

# Code Review Checklist

A systematic approach to thorough code reviews

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## Security

- Input validation** — All user input sanitized and validated Critical
- Authentication** — Auth checks on all protected routes
- Authorization** — Users can only access their own data
- No secrets in code** — API keys, passwords use env vars Critical
- SQL injection** — Parameterized queries, no string concat
- XSS prevention** — Output properly escaped
- Dependencies** — No known vulnerabilities (npm audit)

## Performance

- N+1 queries** — Database calls batched appropriately Important
- Caching** — Expensive operations cached where sensible
- Pagination** — Large datasets paginated, not loaded fully
- Async operations** — I/O doesn't block main thread
- Bundle size** — No unnecessary dependencies added
- Memory leaks** — Event listeners cleaned up properly
- Lazy loading** — Heavy components/data loaded on demand

## Code Quality

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- Single responsibility** — Functions/classes do one thing
- Naming** — Variables/functions clearly describe purpose Important
- DRY** — No copy-pasted logic that should be shared
- Error handling** — Errors caught and handled gracefully
- Magic numbers** — Constants named and documented
- Complexity** — Functions under ~30 lines, low nesting
- Type safety** — TypeScript types accurate, no `any`

## Documentation & Process

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- PR description** — Clear summary of what and why
- Comments** — Complex logic explained inline
- README updated** — Setup/usage docs current

## Testing

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- Test coverage** — New code has corresponding tests Important
- Edge cases** — Tests cover boundary conditions
- Failure modes** — Tests verify error handling works
- Mocking** — External dependencies properly mocked
- Test quality** — Tests are readable and maintainable
- CI passing** — All tests pass in CI environment
- Integration tests** — Critical paths have e2e coverage

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Created by [Owen Devereaux](#) · [Hire me for code reviews](#)

See the full code review sample at [owen-devereaux.com/samples/code-review](https://owen-devereaux.com/samples/code-review)