Flutter Code Review Guidelines

> A comprehensive guide for maintaining code quality and consistency in Flutter projects.

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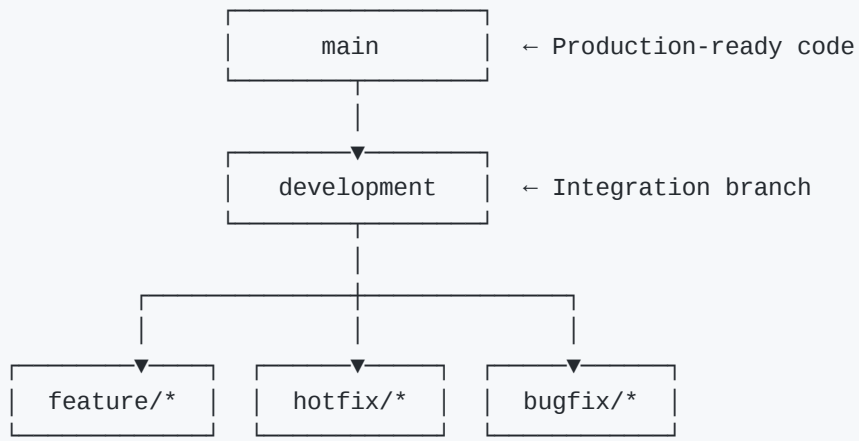
Branch Naming Convention

Branch Structure Overview

Our repository follows a structured branching strategy to maintain code quality and streamline the development workflow.



Main Branches

Branch	Purpose	Protected
`main`	Production-ready code. Only receives merges from `development` after thorough testing.	✅
`development`	Integration branch for features. All feature branches merge here first.	✅

Supporting Branches

Type	Pattern	Description	Example
Feature	`feature/PRJ-XX`	New features or enhancements	`feature/PRJ-01`
Hotfix	`hotfix/PRJ-XX`	Critical production fixes	`hotfix/PRJ-01`
Bugfix	`bugfix/PRJ-XX`	Non-critical bug fixes	`bugfix/PRJ-01`

Naming Rules

✅ Do	❌ Don't
`feature/PRJ-123`	`feature/new-feature`
`hotfix/PRJ-456`	`hotfix/fix-bug`
`feature/PRJ-01`	`Feature/PRJ-01`
Use lowercase	Use UPPERCASE or MixedCase
Reference ticket numbers	Use vague descriptions

Branch Workflow

```
gitGraph
    commit id: "Initial"
    branch development
    checkout development
    commit id: "Dev Setup"
    branch feature/PRJ-01
    checkout feature/PRJ-01
    commit id: "Feature Work"
    commit id: "Feature Complete"
    checkout development
    merge feature/PRJ-01
    checkout main
    merge development tag: "v1.0.0"
    branch hotfix/PRJ-02
    checkout hotfix/PRJ-02
    commit id: "Critical Fix"
    checkout main
    merge hotfix/PRJ-02 tag: "v1.0.1"
    checkout development
    merge main
```

Quick Reference

> **Remember**: Always create branches from `development` for features and from `main` for hotfixes.

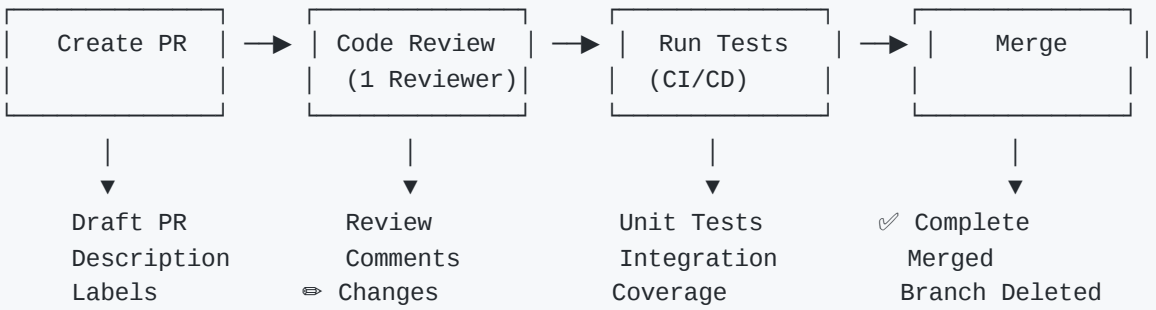
Action	Command
Create feature branch	`git checkout -b feature/PRJ-XX development`

Action	Command
Create hotfix branch	`git checkout -b hotfix/PRJ-XX main`
Push branch	`git push -u origin feature/PRJ-XX`

Pull/Merge Request Guidelines

Overview

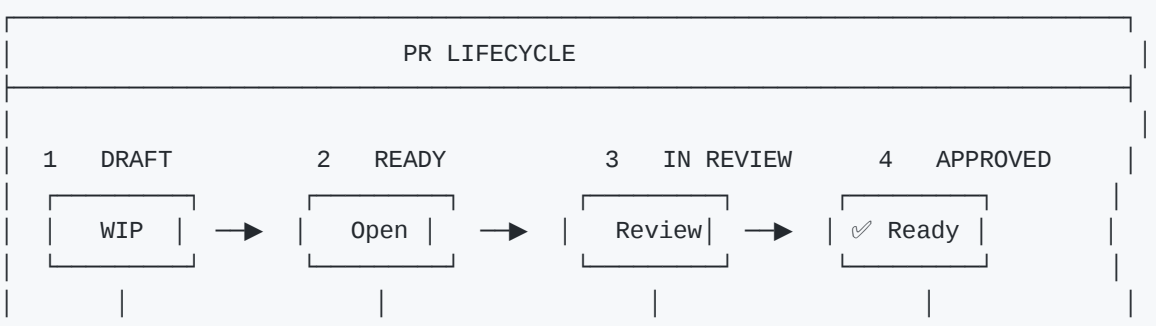
All code changes must go through a formal Pull Request (PR) / Merge Request (MR) process before being merged into protected branches.

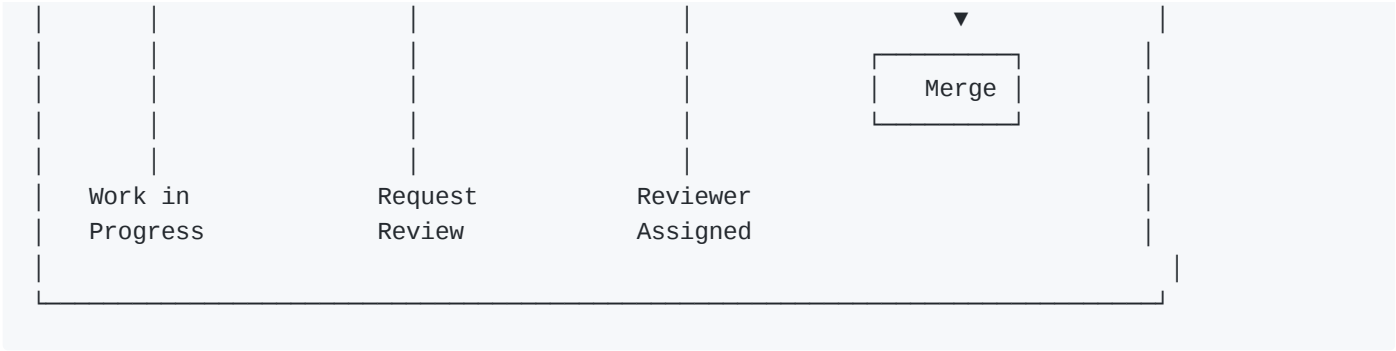


PR Requirements Checklist

Requirement	Description	Mandatory
Reviewer	Minimum **1 reviewer** must approve the PR	✅
Description	Clear description of changes and purpose	✅
Linked Issue	Reference to related ticket (PRJ-XX)	✅
Unit Tests	Tests must pass (project-dependent)	⚙
Code Review	All review comments must be resolved	✅
No Conflicts	Branch must be up-to-date with target	✅

Review Process Flow





Reviewer Responsibilities

Task	Description
Code Quality	Check for clean, readable, and maintainable code
Architecture	Ensure changes align with project architecture
Bug Detection	Identify potential bugs or edge cases
Documentation	Verify code is properly documented
Test Coverage	Confirm adequate test coverage for changes
Style Guide	Ensure code follows Flutter/Dart style guidelines

Unit Testing Requirements

> ⚙ Unit test requirements are **project-dependent**. Configure based on your project's needs.

Project Type	Test Requirement	Coverage Target
Enterprise	Mandatory for all PRs	≥ 80%
Standard App	Required for business logic	≥ 60%
MVP/Prototype	Recommended for critical paths	≥ 40%

CI/CD Pipeline Steps

```
# Example CI Pipeline
stages:
  - analyze       #   Static analysis (flutter analyze)
  - test          #   Unit & Widget tests
  - build         #   Build verification
  - coverage      #   Coverage report (optional)
```

Step	Command	Required
Analyze	`flutter analyze`	✓
Test	`flutter test`	⚙ Project-dependent

Step	Command	Required
Coverage	`flutter test --coverage`	⚙ Project-dependent
Build	`flutter build`	✅

PR Title Format

Type	Format	Example
Feature	`[PRJ-XX] feat: description`	`[PRJ-01] feat: add user authentication`
Bug Fix	`[PRJ-XX] fix: description`	`[PRJ-02] fix: resolve login crash`
Hotfix	`[PRJ-XX] hotfix: description`	`[PRJ-03] hotfix: critical payment bug`
Refactor	`[PRJ-XX] refactor: description`	`[PRJ-04] refactor: optimize api calls`

Merge Rules

Target Branch	Source Branch	Approval Required	Tests Required
`development`	`feature/*`	1 Reviewer ✅	⚙ Project-dependent
`development`	`bugfix/*`	1 Reviewer ✅	⚙ Project-dependent
`main`	`development`	1 Reviewer ✅	✅ All tests must pass
`main`	`hotfix/*`	1 Reviewer ✅	✅ All tests must pass

Best Practices

> **Tips for Effective PRs**

✅ Do	✖ Don't
Keep PRs small and focused	Create massive PRs with unrelated changes
Write clear, descriptive titles	Use vague titles like "fixes" or "updates"
Respond to review comments promptly	Ignore or dismiss feedback
Self-review before requesting review	Submit without checking your own code
Update PR description if scope changes	Leave outdated descriptions
Delete branch after merge	Leave stale branches in repository

Commit Message Guidelines

Overview

Commit messages are a critical part of project documentation. They help team members understand the history and purpose of changes. Well-written commit messages make debugging, reviewing, and collaboration much easier.

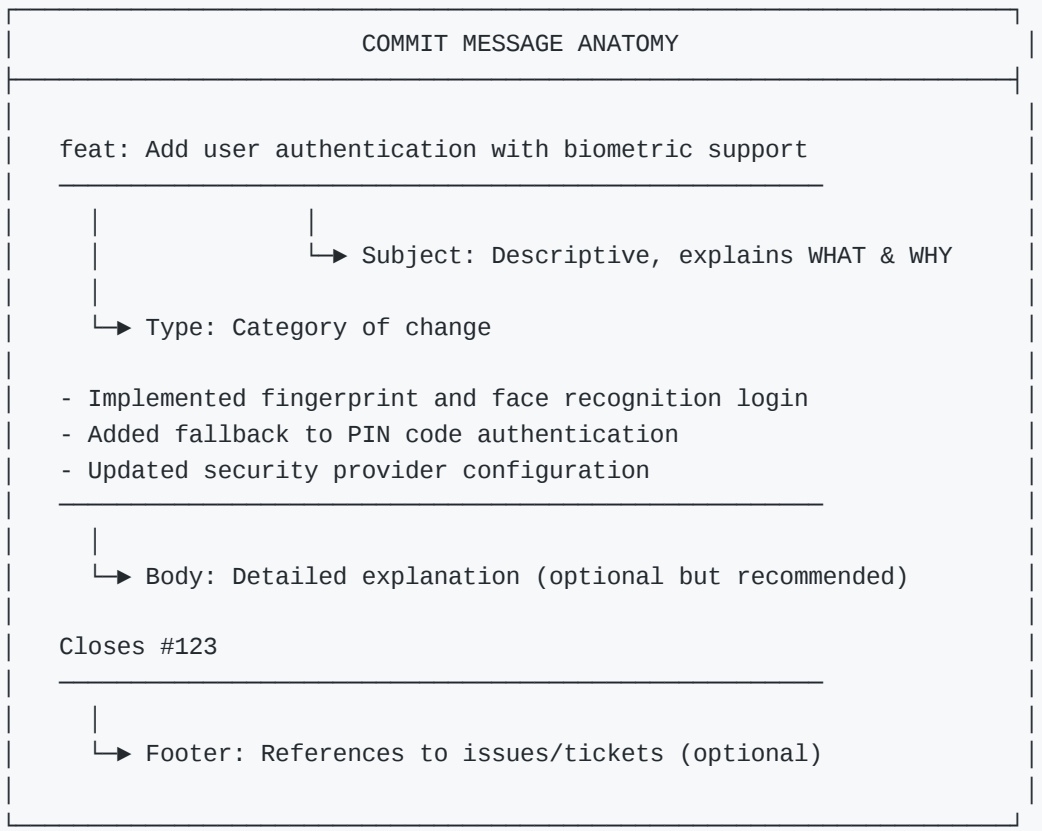
> **Language**: Both **English** and **Turkish** are acceptable for commit messages.

Commit Message Structure

```
<type>: <subject>

<body (optional but recommended)>

<footer (optional)>
```



Commit Types

Type	Emoji	Description	Example
`feat`	✨	New feature or functionality	`feat: Add dark mode toggle`
`fix`		Bug fix	`fix: Resolve null pointer in user service`
`docs`		Documentation changes	`docs: Update API documentation`
`style`		Code style (formatting, semicolons, etc.)	`style: Format code with dart formatter`

Type	Emoji	Description	Example
`refactor`	♻	Code refactoring (no feature/fix)	`refactor: Simplify authentication logic`
`test`		Adding or modifying tests	`test: Add unit tests for cart service`
`chore`		Build process or auxiliary tool changes	`chore: Update dependencies`
`perf`	⚡	Performance improvements	`perf: Optimize image loading`
`ci`		CI/CD configuration changes	`ci: Add Flutter analyze step`

Message Length Requirements

Part	Minimum	Maximum	Required
Subject	15 characters	72 characters	✅
Body	-	-	Recommended
Footer	-	-	⚙ Optional

> ⚠ **Important**: Commit messages that are too short or vague will be **rejected** during code review.

Good vs Bad Examples

✖ Bad Commit Messages (TOO SHORT / VAGUE)

Bad Message	Problem
`fix`	No description at all
`update`	What was updated?
`changes`	What changes?
`bug fix`	Which bug? Where?
`wip`	Work in progress is not a valid commit
`asdf`	Meaningless
`done`	What is done?
`test`	What test?

✅ Good Commit Messages (DESCRIPTIVE)

English Examples:

```
feat: Add biometric authentication for secure login

- Implemented fingerprint recognition using local_auth package
- Added FaceID support for iOS devices
- Created fallback mechanism for devices without biometric support
- Updated user preferences to store biometric settings

Closes PRJ-123
```

```
fix: Resolve crash when navigating back from payment screen

The app was crashing due to disposed controller being accessed
after the widget was removed from the tree. Added proper lifecycle
management and null checks to prevent this issue.

Fixes PRJ-456
```

```
refactor: Simplify state management in product listing

- Migrated from StatefulWidget to Riverpod providers
- Reduced widget rebuilds by 40%
- Extracted business logic into separate service class
```

Turkish Examples (Türkçe Örnekler):

```
feat: Kullanıcı profil sayfasına fotoğraf yükleme özelliği eklendi

- Galeriden ve kameradan fotoğraf seçimi implementasyonu yapıldı
- Fotoğraf sıkıştırma ve boyutlandırma işlemleri eklendi
- Firebase Storage entegrasyonu tamamlandı

PRJ-789
```

```
fix: Sepet sayfasında ürün silme işlemindeki hata giderildi

Ürün silindiğinde toplam fiyat güncellenmiyordu. State yönetimi
düzeltilerek anlık güncelleme sağlandı.

PRJ-321
```

Commit Message Rules

Rule	✅ Do	❌ Don't
Be Descriptive	`feat: Add user profile photo upload with cropping`	`feat: photo`

Rule	✔ Do	✖ Don't
Explain Why	`fix: Prevent memory leak by disposing animation controller`	`fix: memory`
Use Present Tense	`Add feature` / `Fix bug`	`Added feature` / `Fixed bug`
Capitalize First Letter	`feat: Add new button`	`feat: add new button`
No Period at End	`feat: Add login screen`	`feat: Add login screen.`
Reference Tickets	`Closes PRJ-123`	No reference to related work
One Logical Change	One commit per logical change	Multiple unrelated changes

Minimum Information Checklist

Every commit message should answer these questions:

Question	Required
WHAT was changed?	✔
WHY was it changed?	✔
WHICH ticket/issue is related?	Recommended
⚠ **IMPACT** - Does it break anything?	⚙ If applicable

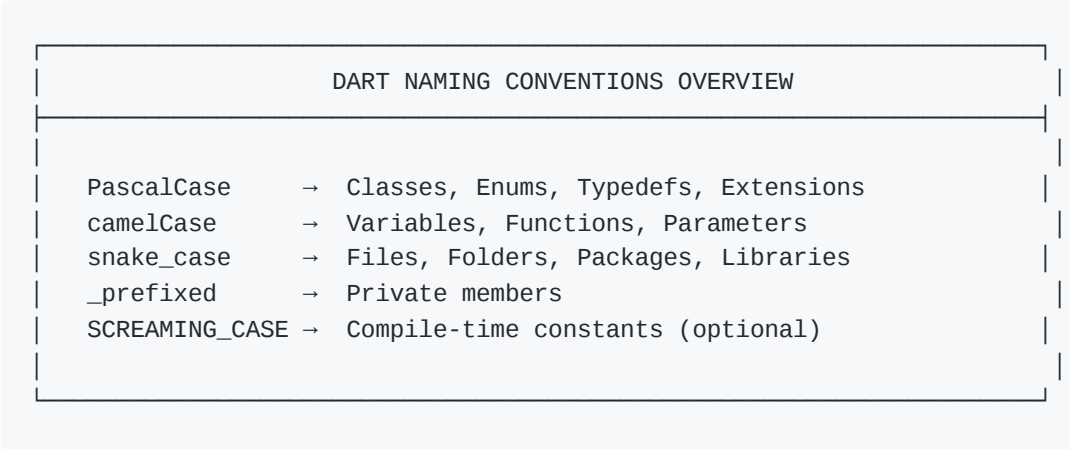
Quick Reference Card

```
┌──────────────────────────────────────────────────────────┐
│                COMMIT MESSAGE CHECKLIST                  │
├──────────────────────────────────────────────────────────┤
│                                                          │
│  ☐ Type prefix used (feat/fix/docs/style/refactor/test)  │
│  ☐ Subject is descriptive (minimum 15 characters)        │
│  ☐ Explains WHAT was changed                             │
│  ☐ Explains WHY it was changed                           │
│  ☐ References related ticket (PRJ-XX)                    │
│  ☐ Written in present tense                              │
│  ☐ First letter capitalized                              │
│  ☐ No period at the end of subject                       │
│  ☐ Body added for complex changes                        │
│                                                          │
└──────────────────────────────────────────────────────────┘
```

Naming Conventions

Overview

Consistent naming conventions are essential for code readability and maintainability. This section covers Dart and Flutter specific naming rules that every team member must follow.



Naming Styles Reference

Style	Usage	Example
`PascalCase`	Classes, Enums, Typedefs, Extensions, Mixins	`UserProfile`, `AuthState`
`camelCase`	Variables, Functions, Methods, Parameters	`userName`, `fetchData()`
`snake_case`	Files, Directories, Packages, Libraries	`user_profile.dart`
`_camelCase`	Private members	`_privateMethod()`, `_counter`
`SCREAMING_SNAKE_CASE`	Compile-time constants (optional)	`MAX_RETRY_COUNT`

Files & Directories

> All file and directory names should use `snake_case`

Type	Convention	✅ Good	❌ Bad
Dart files	`snake_case.dart`	`user_profile.dart`	`UserProfile.dart`, `userProfile.dart`
Directories	`snake_case`	`user_management/`	`UserManagement/`, `userManagement/`
Test files	`*_test.dart`	`user_service_test.dart`	`UserServiceTest.dart`

Type	Convention	✅ Good	❌ Bad
Generated files	`*.g.dart`, `*.freezed.dart`	`user.g.dart`	`User.g.dart`

Flutter Project Structure Example

```
lib/
├── core/
│   ├── constants/
│   │   ├── app_colors.dart         ✅ snake_case
│   │   ├── app_strings.dart        ✅ snake_case
│   │   └── api_endpoints.dart      ✅ snake_case
│   ├── utils/
│   │   ├── date_formatter.dart     ✅ snake_case
│   │   └── validators.dart         ✅ snake_case
│   └── extensions/
│       ├── string_extensions.dart  ✅ snake_case
│       └── context_extensions.dart ✅ snake_case
├── features/
│   └── authentication/
│       ├── data/
│       │   ├── models/
│       │   │   └── user_model.dart         ✅ snake_case
│       │   └── repositories/
│       │       └── auth_repository.dart    ✅ snake_case
│       ├── domain/
│       │   └── entities/
│       │       └── user_entity.dart        ✅ snake_case
│       └── presentation/
│           ├── screens/
│           │   └── login_screen.dart       ✅ snake_case
│           ├── widgets/
│           │   └── login_form.dart         ✅ snake_case
│           └── providers/
│               └── auth_provider.dart      ✅ snake_case
└── main.dart
```

Classes

> Use `PascalCase` for all class names

```dart
// ✅ GOOD - PascalCase
class UserProfile {}
class AuthenticationService {}
class ShoppingCartItem {}
class HttpClientException {}

// ❌ BAD
class userProfile {}        // camelCase - wrong
class User_Profile {}       // snake_case - wrong
```

```
class USERPROFILE {}        // UPPERCASE - wrong
class Userprofile {}        // Not properly capitalized
```

Widget Classes

```
// ✅ GOOD - Descriptive widget names with suffix
class LoginScreen extends StatefulWidget {}
class UserProfileCard extends StatelessWidget {}
class CustomElevatedButton extends StatelessWidget {}
class ProductListTile extends StatelessWidget {}
class ShimmerLoadingWidget extends StatelessWidget {}

// ❌ BAD - Vague or improper names
class Login extends StatefulWidget {}         // Too vague
class Card1 extends StatelessWidget {}        // Numbered names
class MyWidget extends StatelessWidget {}     // Non-descriptive
class userCard extends StatelessWidget {}     // camelCase
```

Model Classes

```
// ✅ GOOD - Clear model naming
class UserModel {
  final String id;
  final String firstName;
  final String lastName;
  final String emailAddress;
  final DateTime createdAt;

  const UserModel({
    required this.id,
    required this.firstName,
    required this.lastName,
    required this.emailAddress,
    required this.createdAt,
  });
}

class ProductResponseDto {
  final List<ProductModel> products;
  final PaginationMeta meta;

  const ProductResponseDto({
    required this.products,
    required this.meta,
  });
}

// ❌ BAD
class User_Model {}          // snake_case
class usermodel {}           // lowercase
class UserDTO {}             // Abbreviation should be 'Dto'
```

Variables & Properties

> Use `camelCase` for all variables and properties

```
// ✅ GOOD - Descriptive camelCase
String userName = 'John';
int itemCount = 0;
bool isLoggedIn = false;
double totalPrice = 99.99;
List<String> selectedItems = [];
Map<String, dynamic> userPreferences = {};

// ✅ GOOD - Boolean naming (use is/has/can/should prefix)
bool isVisible = true;
bool hasPermission = false;
bool canEdit = true;
bool shouldRefresh = false;
bool isLoadingData = false;

// ❌ BAD
String UserName = 'John';       // PascalCase
int item_count = 0;             // snake_case
bool logged_in = false;         // snake_case
String s = 'John';              // Too short, non-descriptive
int x = 0;                      // Single letter variable
bool flag = true;               // Vague boolean name
```

Private Members

```
class UserService {
  // ✅ GOOD - Private members with underscore prefix
  final String _apiKey;
  int _retryCount = 0;
  bool _isInitialized = false;
  final List<String> _cachedUsers = [];

  // ✅ GOOD - Private methods
  void _initializeService() {}
  Future<void> _fetchFromCache() async {}
  bool _validateInput(String input) => input.isNotEmpty;

  // ❌ BAD
  String __apiKey;              // Double underscore
  int privateCount = 0;         // Missing underscore for private
}
```

⚡ Functions & Methods

> Use `camelCase` for all functions and methods

```dart
// ✅ GOOD - Verb-based, descriptive names
Future<User> fetchUserById(String userId) async {}
void updateUserProfile(UserProfile profile) {}
bool validateEmailAddress(String email) {}
List<Product> filterProductsByCategory(String category) {}
String formatCurrencyValue(double amount) {}
Future<void> saveToLocalStorage(String key, dynamic value) async {}

// ✅ GOOD - Async methods with clear intent
Future<List<Order>> loadUserOrders() async {}
Future<void> syncDataWithServer() async {}
Future<bool> checkNetworkConnectivity() async {}

// ✅ GOOD - Boolean returning methods
bool isValidPhoneNumber(String phone) {}
bool hasRequiredPermissions() {}
bool canUserAccessFeature(String featureId) {}

// ❌ BAD
void DoSomething() {}           // PascalCase
void fetch_user() {}            // snake_case
void f() {}                     // Too short
void data() {}                  // Noun instead of verb
void process() {}               // Too vague
Future<void> user() async {}    // Noun, unclear intent
```

Getters & Setters

```dart
class ShoppingCart {
  final List<CartItem> _items = [];

  // ✅ GOOD - Descriptive getters
  int get itemCount => _items.length;
  double get totalPrice => _items.fold(0, (sum, item) => sum + item.price);
  bool get isEmpty => _items.isEmpty;
  bool get hasDiscountApplied => _discountCode != null;
  List<CartItem> get items => List.unmodifiable(_items);

  String? _discountCode;

  // ✅ GOOD - Setters with validation
  set discountCode(String? code) {
    if (code == null || code.length >= 4) {
      _discountCode = code;
    }
  }

  // ❌ BAD
  int get GetCount => _items.length;  // PascalCase getter
  int get cnt => _items.length;       // Abbreviated
}
```

Enums

> Use `PascalCase` for enum names and `camelCase` for values

```
// ✅ GOOD - PascalCase enum, camelCase values
enum UserRole {
  admin,
  moderator,
  editor,
  viewer,
  guest,
}

enum OrderStatus {
  pending,
  processing,
  shipped,
  delivered,
  cancelled,
  refunded,
}

enum AuthenticationState {
  initial,
  loading,
  authenticated,
  unauthenticated,
  error,
}

// ✅ GOOD - Enhanced enums with properties
enum PaymentMethod {
  creditCard('Credit Card', Icons.credit_card),
  debitCard('Debit Card', Icons.payment),
  bankTransfer('Bank Transfer', Icons.account_balance),
  digitalWallet('Digital Wallet', Icons.wallet);

  final String displayName;
  final IconData icon;

  const PaymentMethod(this.displayName, this.icon);
}

// ❌ BAD
enum user_role { Admin, Moderator }   // snake_case enum, PascalCase values
enum ORDERSTATUS { PENDING }          // SCREAMING_CASE
enum orderStatus { Pending }          // camelCase enum
```

Constants

> Use `camelCase` for constants (Dart style guide recommendation)

```dart
// ✅ GOOD - Dart recommended style (camelCase)
const int maxRetryAttempts = 3;
const double defaultPadding = 16.0;
const String apiBaseUrl = 'https://api.example.com';
const Duration connectionTimeout = Duration(seconds: 30);

// ✅ GOOD - Constant class/group
class AppConstants {
  AppConstants._(); // Private constructor

  static const int maxImageSize = 5 * 1024 * 1024; // 5MB
  static const int maxUsernameLength = 30;
  static const int minPasswordLength = 8;
  static const String defaultLocale = 'en_US';
}

class ApiEndpoints {
  ApiEndpoints._();

  static const String baseUrl = 'https://api.example.com/v1';
  static const String users = '$baseUrl/users';
  static const String products = '$baseUrl/products';
  static const String orders = '$baseUrl/orders';
}

// ✅ ACCEPTABLE - SCREAMING_SNAKE_CASE for compile-time constants
// (Some teams prefer this for better visibility)
const int MAX_RETRY_ATTEMPTS = 3;
const String API_BASE_URL = 'https://api.example.com';

// ❌ BAD
const int MaxRetryAttempts = 3;   // PascalCase
const int max_retry = 3;          // snake_case with abbreviation
```

Theme Constants

```dart
// ✅ GOOD - Organized color constants
class AppColors {
  AppColors._();

  // Primary colors
  static const Color primaryBlue = Color(0xFF2196F3);
  static const Color primaryDark = Color(0xFF1976D2);
  static const Color primaryLight = Color(0xFFBBDEFB);

  // Semantic colors
  static const Color successGreen = Color(0xFF4CAF50);
  static const Color errorRed = Color(0xFFF44336);
  static const Color warningOrange = Color(0xFFFF9800);
  static const Color infoBlue = Color(0xFF2196F3);

  // Neutral colors
  static const Color textPrimary = Color(0xFF212121);
  static const Color textSecondary = Color(0xFF757575);
  static const Color backgroundLight = Color(0xFFFAFAFA);
```

```
  static const Color dividerColor = Color(0xFFBDBDBD);
}

class AppTextStyles {
  AppTextStyles._();

  static const TextStyle headlineLarge = TextStyle(
    fontSize: 32,
    fontWeight: FontWeight.bold,
    letterSpacing: -0.5,
  );

  static const TextStyle bodyMedium = TextStyle(
    fontSize: 14,
    fontWeight: FontWeight.normal,
    height: 1.5,
  );
}
```

Extensions

> Use `PascalCase` with descriptive suffix

```
// ✅ GOOD - Clear extension naming
extension StringExtensions on String {
  bool get isValidEmail {
    return RegExp(r'^[\w-\.]+@([\w-]+\.)+[\w-]{2,4}$').hasMatch(this);
  }

  String get capitalizeFirst {
    if (isEmpty) return this;
    return '${this[0].toUpperCase()}${substring(1)}';
  }

  String truncate(int maxLength) {
    if (length <= maxLength) return this;
    return '${substring(0, maxLength)}...';
  }
}

extension DateTimeExtensions on DateTime {
  String get formattedDate => '$day/$month/$year';

  String get timeAgo {
    final difference = DateTime.now().difference(this);
    if (difference.inDays > 0) return '${difference.inDays}d ago';
    if (difference.inHours > 0) return '${difference.inHours}h ago';
    return '${difference.inMinutes}m ago';
  }

  bool get isToday {
    final now = DateTime.now();
    return year == now.year && month == now.month && day == now.day;
  }
```

```dart
}

extension BuildContextExtensions on BuildContext {
  ThemeData get theme => Theme.of(this);
  TextTheme get textTheme => Theme.of(this).textTheme;
  ColorScheme get colorScheme => Theme.of(this).colorScheme;
  Size get screenSize => MediaQuery.of(this).size;

  void showSnackBar(String message) {
    ScaffoldMessenger.of(this).showSnackBar(
      SnackBar(content: Text(message)),
    );
  }
}

// ✗ BAD
extension Strings on String {}       // Too vague
extension string_ext on String {}    // snake_case
extension on String {}               // Anonymous extension (hard to reference)
```

Typedef & Type Aliases

> Use `PascalCase` for type definitions

```dart
// ✓ GOOD - Clear type aliases
typedef JsonMap = Map<String, dynamic>;
typedef VoidCallback = void Function();
typedef ValueChanged<T> = void Function(T value);
typedef AsyncValueGetter<T> = Future<T> Function();
typedef ItemBuilder<T> = Widget Function(BuildContext context, T item);

// ✓ GOOD - Function type definitions
typedef OnUserSelected = void Function(User user);
typedef OnError = void Function(String errorMessage);
typedef DataFetcher<T> = Future<T> Function(String id);
typedef Validator = String? Function(String? value);

// Usage example
class UserListWidget extends StatelessWidget {
  final OnUserSelected onUserSelected;
  final ItemBuilder<User> itemBuilder;

  const UserListWidget({
    required this.onUserSelected,
    required this.itemBuilder,
  });
}

// ✗ BAD
typedef json_map = Map<String, dynamic>;  // snake_case
typedef callback = void Function();       // camelCase
```

Complete Naming Convention Summary

Element	Convention	Example
Classes	`PascalCase`	`UserProfileService`
Widgets	`PascalCase` + Suffix	`LoginScreen`, `CustomButton`
Enums	`PascalCase`	`AuthState`
Enum Values	`camelCase`	`authenticated`, `loading`
Variables	`camelCase`	`userName`, `isLoading`
Constants	`camelCase` or `SCREAMING_CASE`	`maxRetry`, `MAX_RETRY`
Functions	`camelCase`	`fetchUserData()`
Methods	`camelCase`	`calculateTotal()`
Parameters	`camelCase`	`userId`, `onPressed`
Private Members	`_camelCase`	`_controller`, `_init()`
Files	`snake_case`	`user_service.dart`
Directories	`snake_case`	`data_sources/`
Packages	`snake_case`	`flutter_bloc`
Extensions	`PascalCase` + Extension	`StringExtensions`
Typedefs	`PascalCase`	`JsonMap`, `VoidCallback`
Mixins	`PascalCase`	`ValidationMixin`

Quick Reference Card

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┌─────────────────────────────────────────────────────────────────────────┐
│                    DART/FLUTTER NAMING CHECKLIST                        │
├─────────────────────────────────────────────────────────────────────────┤
│                                                                         │
│    FILES & FOLDERS                                                      │
│     ☐ All files use snake_case.dart                                     │
│     ☐ All directories use snake_case                                    │
│     ☐ Test files end with _test.dart                                    │
│                                                                         │
│    CLASSES & TYPES                                                      │
│     ☐ Classes use PascalCase                                            │
│     ☐ Enums use PascalCase with camelCase values                        │
│     ☐ Extensions use PascalCase with descriptive suffix                 │
│     ☐ Typedefs use PascalCase                                           │
│                                                                         │
│    VARIABLES & FUNCTIONS                                                │
│     ☐ Variables use camelCase                                           │
│     ☐ Functions/Methods use camelCase                                   │
│     ☐ Booleans have is/has/can/should prefix                            │
```

```
|     ☐ Private members have _ prefix                                    |
|                                                                        |
|    GENERAL RULES                                                       |
|     ☐ Names are descriptive and meaningful                             |
|     ☐ No single-letter variables (except loops: i, j, k)               |
|     ☐ No abbreviations unless widely known (id, url, api)              |
|     ☐ Functions start with verbs (get, set, fetch, load)               |
|                                                                        |
└────────────────────────────────────────────────────────────────────────┘
```
