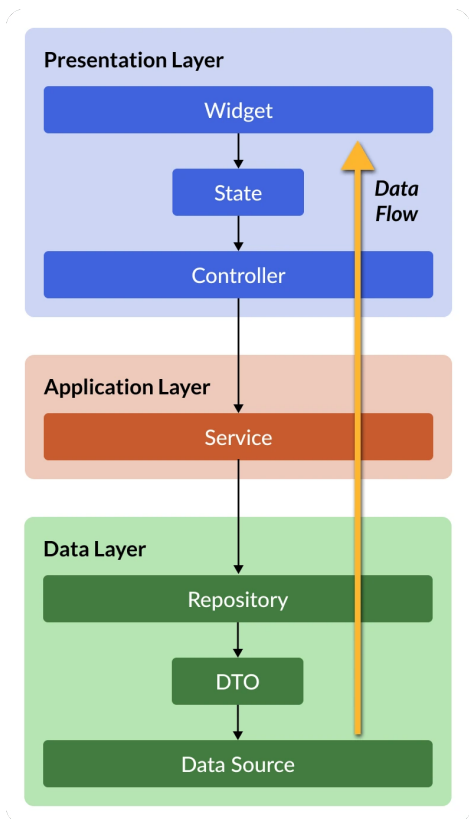
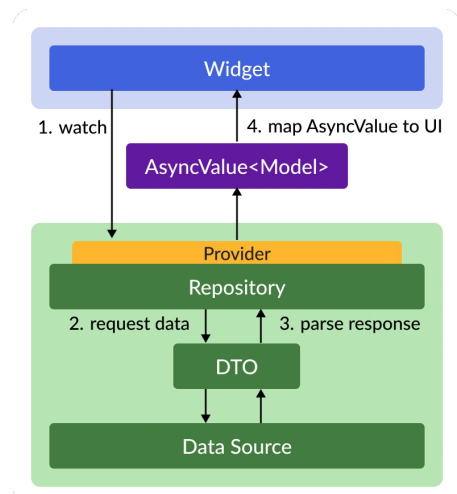


CLEAN CODE ARCHITECTURE USING RIVERPOD PROVIDER

Unidirectional data flow from the data layer



Simplified architecture when fetching data.



The process to fetch the API Data using riverpod in the clean code architecture

1. The widget watches a **FutureProvider**, which in turn calls a repository method that will retrieve the data
2. The repository fetches the data from the data source
3. Once a response is received, it is parsed and returned from the repository (and the attached **FutureProvider**, which also caches the data)
4. The widget receives the data as an **AsyncValue<Model>** and maps it to the UI

Layers in Clean Code Architecture

Presentation layer is responsible for handling user interface logic.

- Includes widgets, providers, and UI components.
- Should be kept as thin as possible, delegating business logic to other layers.

Domain layer contains the business logic and rules of the application.

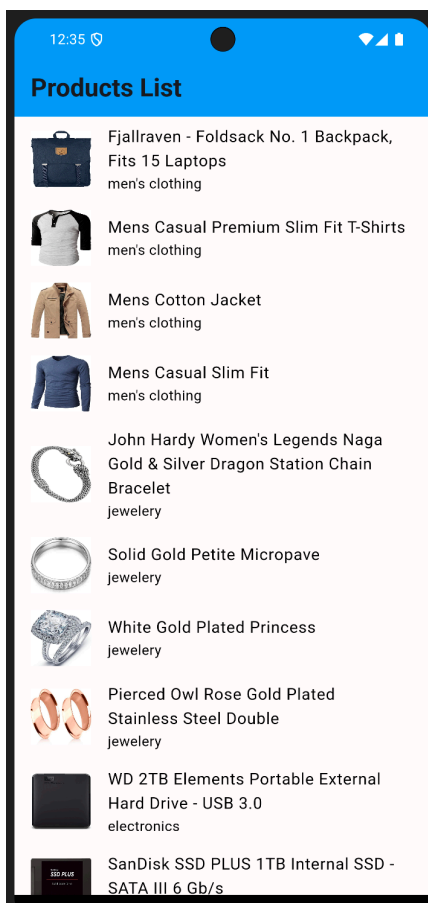
- Independent of any UI framework or external dependencies.
- Creating the data models using the Freezed plugins for JSON serialisation.
- Defines entities and repositories.

Data layer handles data access and storage.

- Includes databases, API calls, and local storage.
- Repositories are implemented here to fetch and store data.
- Created the riverpod providers to interacting with the data models

Products Application

Products List Screen.



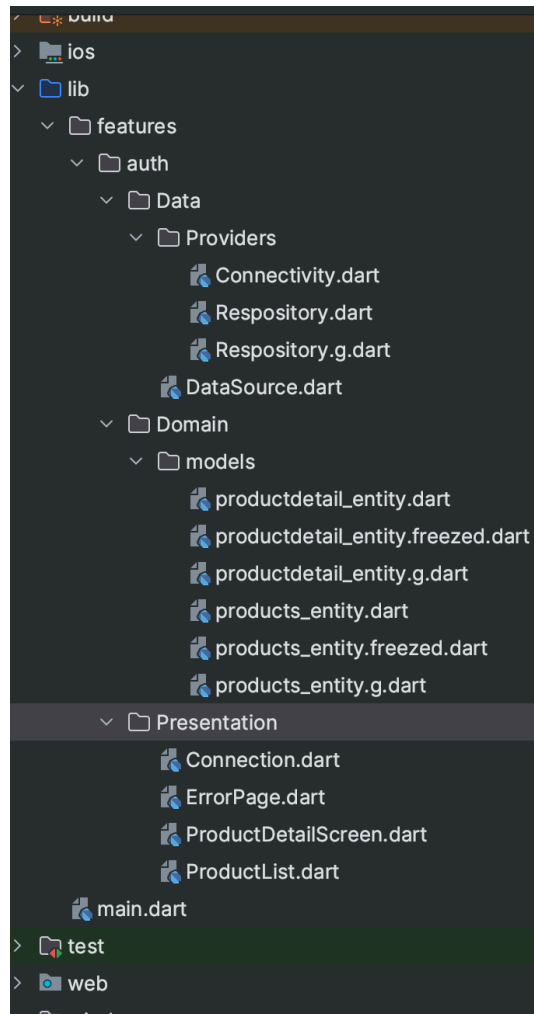
Product Detail Screen



*Error Screen
(if internet connection gets lost)*



Weather application folders:



Configuration.

```
# Use with the CupertinoIcons class for iOS style icons.
cupertino_icons: ^1.0.6
flutter_riverpod: ^2.5.1
riverpod_annotation: ^2.3.5
http: ^1.2.1
freezed_annotation: ^2.4.1
json_annotation: ^4.8.1
go_router: ^13.2.1

dev_dependencies:
  flutter_test:
    sdk: flutter

# The "flutter_lints" package below contains a set of recommended
# lint rules for Flutter projects. The lint set provided by the
# package is activated in the `analysis_options.yaml` file located at the
# root of the project. See that file for information about deactivating
# rules and activating additional ones.
flutter_lints: ^3.0.0
riverpod_generator: ^2.4.0
build_runner: ^2.4.8
custom_lint: ^0.6.4
riverpod_lint: ^2.3.10
freezed: ^2.4.7
json_serializable: ^6.7.1
```

