**Movie Magic Documentation**

## Overview

**Movie Magic** is a Flutter-based mobile application that allows users to browse a list of movies and actors using data fetched from the TMDB API. The app supports user authentication via email/password and Google Sign-In. It functions both online and offline, ensuring seamless usability even with limited internet access.

## Key Features

### ****Movie & Actor Listings****

* Fetches and displays a list of movies and actors from the TMDB API.

### ****User Authentication****

* Register using email and password.
* Sign in with email and password.
* Sign in with Google.

### ****Offline Support****

* Caches movie and actor data for offline access.

### ****State Management****

* Uses get\_it and injectable for dependency injection and state management.

### ****User-Friendly UI****

* Intuitive design with smooth navigation.
* Search functionality for movies and actors.

## Project Structure

lib/

│── main.dart # Entry point

│── core/ # Core functionalities

│ ├── services/ # Handles API requests, Firebase, and local database operations

│ │ ├── firebase\_services/ # Handles all requests to firebase

│ │ ├── api\_services/ # For Remote API calls

│ │ ├── database\_services/ # For local database calls

│ │ ├── base\_service.dart # A class to handle all HTTP calls

│ ├── models/ # Data models

│ ├── di/ # Dependency injection setup using get\_it and injectable

│ ├── utils/ # Helper functions, constants, and utility functions

│ ├── state/ # Shared state management in the app

│── presentation/ # UI and user interaction

│ ├── screens/ # UI screens for movies, actors, and authentication

│ │ ├── screen.dart

│ │ ├── screen\_controller.dart

│ │ ├── screen\_state.dart

│ ├── components/ # Reusable UI components

## Issues & Bugs Encountered

### ****1. Offline Image Sync Issues****

* **Issue:** Some images were not being loaded during offline.
* **Solution:** Had to remove CachedNetworkImage library and create my custom image caching mechanism.

## Future Enhancements

* Implement dark mode.
* Add user profile management.
* Improve offline caching with better expiration handling.

## Conclusion

**Movie Magic** provides a seamless movie browsing experience with authentication, offline support, and a clean architecture using get\_it and injectable. The app effectively manages state and network connectivity while offering a smooth user experience.