

Naukri FastForward Privilege Report Generation App

by

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App Demonstration during presentation of Result and Analysis



Introduction

- The FastForward team of naukri.com generates a report for a paid users.
- It contains statistical data that helps the user to understand the current job market trends, and competition at his/her level.
- This report is generated manually for each user so it takes a large amount of time and labour.
- The report is generated monthly so it does not have daily-updated statistics.



Motivation

- The project automates the entire report generation process, saving time and labour..
- It provides the user with report generation facility in form of an app that runs on Android, IOS, and Web.
- It will allow the user to generate the report at their will any number of times with updated trends within seconds.
- This app will gather data from various sources and display it to a user.
- This app will also act as an advertising point for other Naukri services.

Methodology



Aspect	Flutter	React-Native
What is it?	Portable UI Toolkit	Framework
Official release	December 2018	March 2015
Created by	Google	Facebook
Free and open source	Yes	Yes
Programming language	Dart	JavaScript
Popularity	136K stars	101K stars
Hot Reload	Yes	Yes
Native performance	Great	Great
UI	Looks same on all	Looks adjust according to platform
Sharing code	All platforms	Mainly IOS & Android
Top apps made with this	Musical, Google Ads, My BMW	Instagram, Facebook, Skype

Methodology



Aspect	Flutter	React-Native
Time-to-market	Very fast	Fast
Effort	Less	More
Stability	Stable	Stable
Maintenance	Easy to maintain	Lots of dependency issues
Competitive advantage	<ul style="list-style-type: none">• Rich Widget Library• Rapidly growing community• Excellent documentation	<ul style="list-style-type: none">• Many successful market players• Mature, vast community• Easy to learn
When it is not used	<ul style="list-style-type: none">• App needs 3D Touch• App design is platform specific• App requires multiple OS interaction	<ul style="list-style-type: none">• App needs to handle background tasks• Require Bluetooth communication



Methodology

Why we chose Flutter?

- We are creating a new application with fastest development speed possible.
- Flutter provides built-in support of responsive UI along with large library of predefined widgets optimized for performance.
- There are library available for creating graphs and charts as well as PDFs.
- We can event draw out any custom widgets using different mathematical curves.
- Its dependencies are auto-managed, and can be upgraded easily



Implementation

Data Flow in the Application

State Management

1. Ephemeral State

- Ephemeral state (sometimes called UI state or local state) is the state one can neatly contain in a single widget.
- Other parts of the widget tree seldom need to access this kind of state. There is no need to serialize it, and it doesn't change in complex ways.
- In other words, there is no need to use state management techniques on this kind of state. All one need is a StatefulWidget.



Implementation

2. App State

- State that is not ephemeral, that you want to share across many parts of one's app, and that you want to keep between user sessions, is what we call application state (sometimes also called shared state)
- For managing app state, one will want to research one's options. One's choice depends on the complexity and nature of one's app, one's team's previous experience, and many other aspects.



Implementation

Classes & Widget for State Management

1. ChangeNotifier Class

- ChangeNotifier is a simple class included in the Flutter SDK which provides change notification to its listeners.
- In other words, if something is a ChangeNotifier, you can subscribe to its changes.

2. ChangeNotifierProvider Widget

- ChangeNotifierProvider is the widget that provides an instance of a ChangeNotifier to its descendants.



Implementation

3. Consumer Widget

- Consumer is the widget that allows its descendent to subscribe and listen to the events of ChangeNotifier Object.

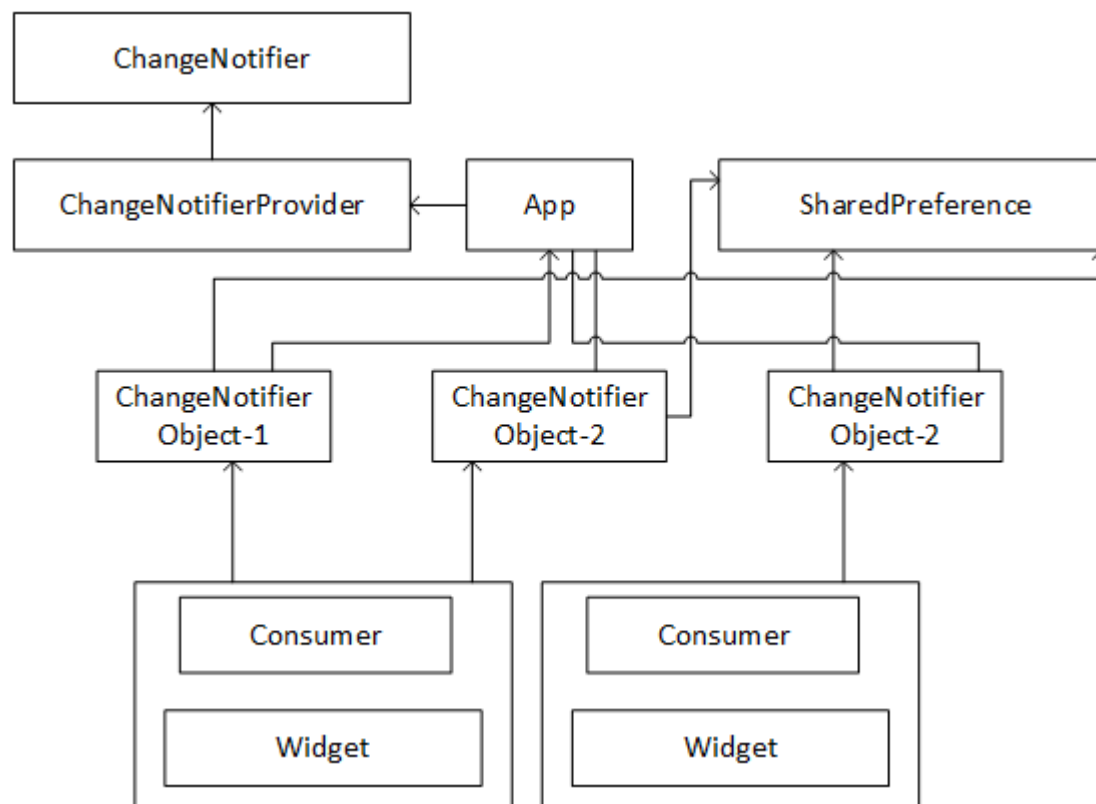
4. SharedPreferences Class

- Wraps platform-specific persistent storage for simple data.
- Data may be persisted to disk asynchronously, and there is no guarantee that writes will be persisted to disk after returning.



Methodology

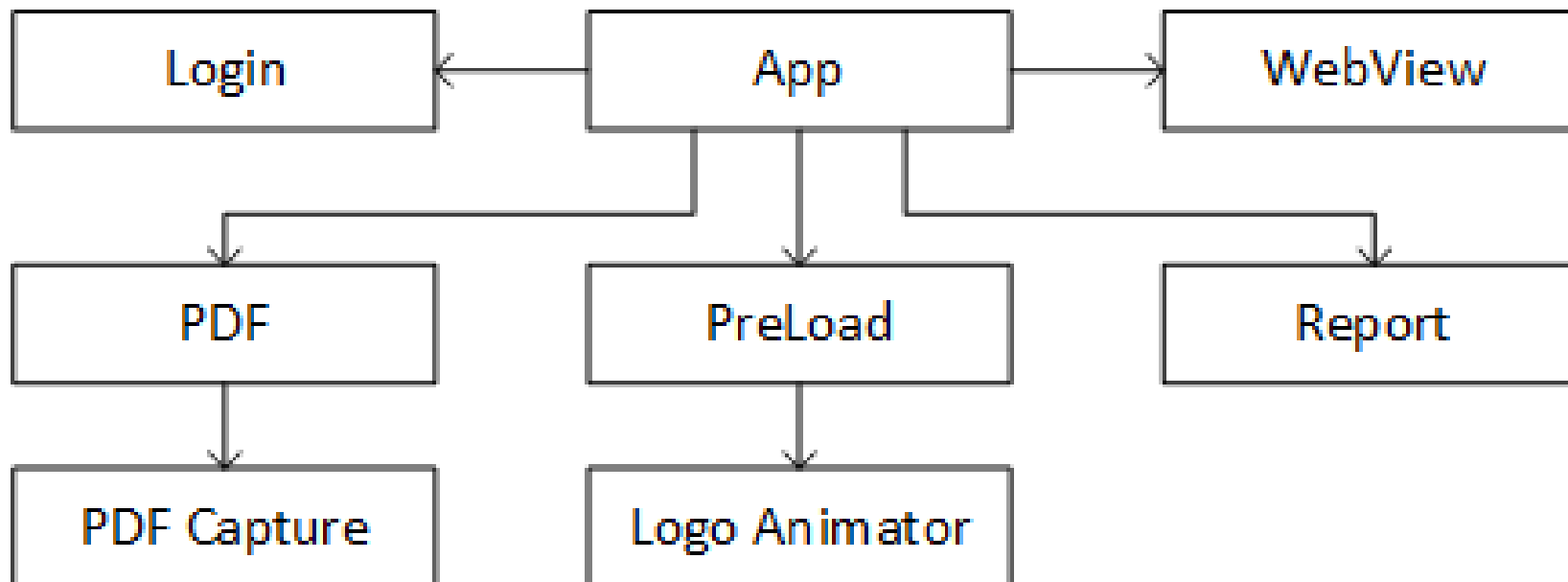
How State is managed in the application?





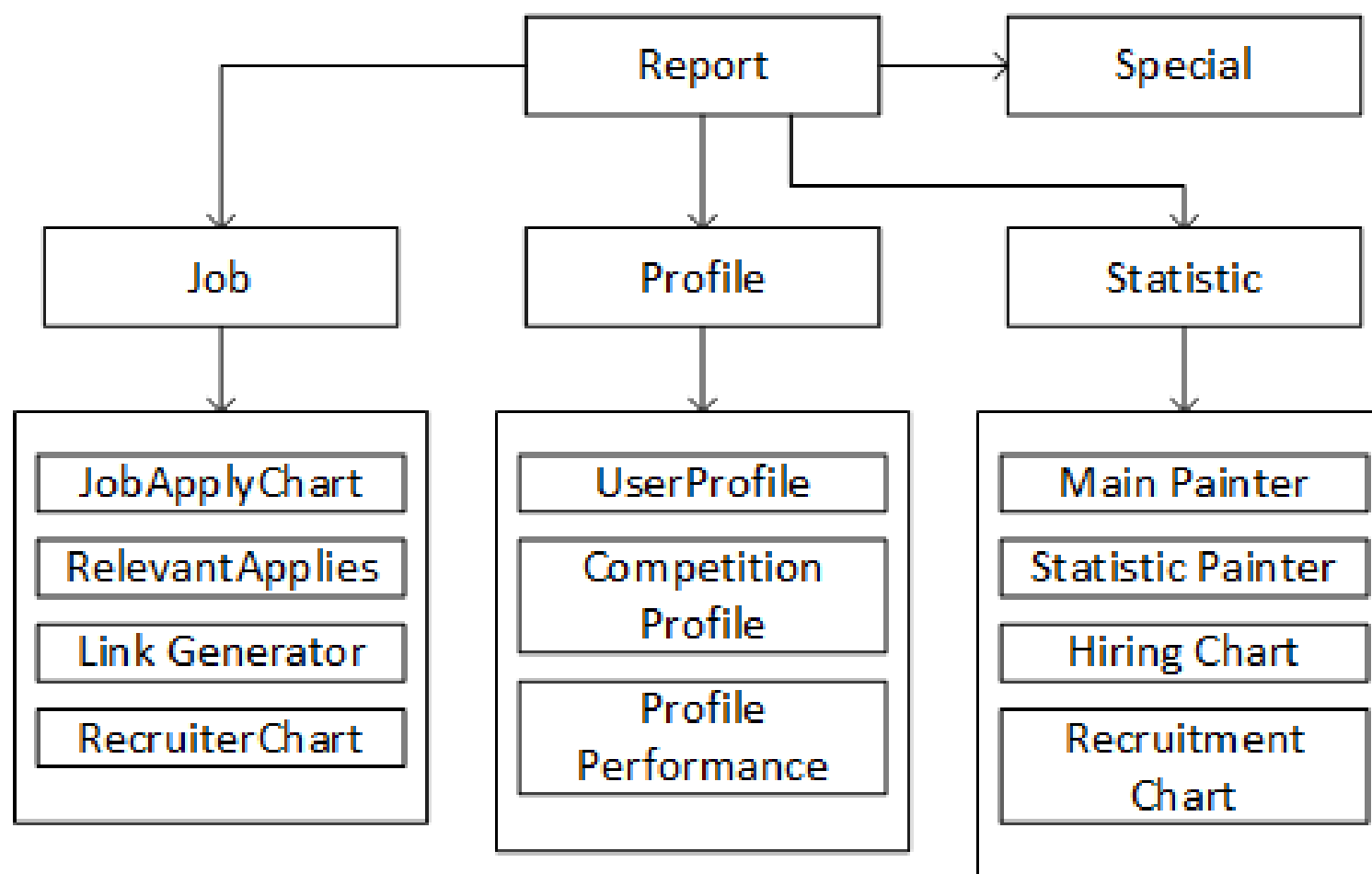
Implementation

Components in the Application





Implementation





Implementation

Explanation

- App Component has Navigation Controller which controls the navigation of screens-Login, PDF, Preload, Report, and WebView.
- Report has BottomNavigation Controller which controls the tabs-Job, Profile, Special, and Statistic
- Report also has a controller for Sidebar(Sidebar Component not shown in diagram)



Result and Analysis

- We have created the Graphical User Interface of the application strategically so that users can view important statistics at first.
- There are warning present in the application that is due to null-safety of flutter.
- We can assure you that it will not affect the performance and user experience.
- Our application may experience a few bugs as it is still in the testing phase, which will be solved gradually with updates.



Conclusion

- We have created an application that is capable of running across three platforms- Android, IOS, and Web.
- We have tried our best to create a Graphical User Interface with the highest possible optimization and smallest response time possible.
- We have packed the application with a lot of statistical data to help them in finding their dream job.
- We have developed a PDF engine for creating a beautiful PDF of all the statistics shown in the application.



Future Work

- In Future, we will be adding more statistical data to the application when it will be available.
- We will be enhancing the PDF engine to create a more beautiful and realistic PDF.
- We are currently working on the integration of the Do-Select platform with our app to provide skill and aptitude tests for users.
- It will be soon released in an upcoming feature update.