GitHub Username: prashant-techjini

Top News

Description

This app displays the top news from multiple sources. User can select the source and view top news items from the specific source. One has to visit multiple websites and apps to get wide range of news articles. This app tries to solve this problem and presents news articles from different sources in a single app. There are currently 70+ news sources available in this application and the list is likely to grow. This application is powered by https://newsapi.org/ APIs.

Intended User

This app is for people who want to stay updated with important news around the world.

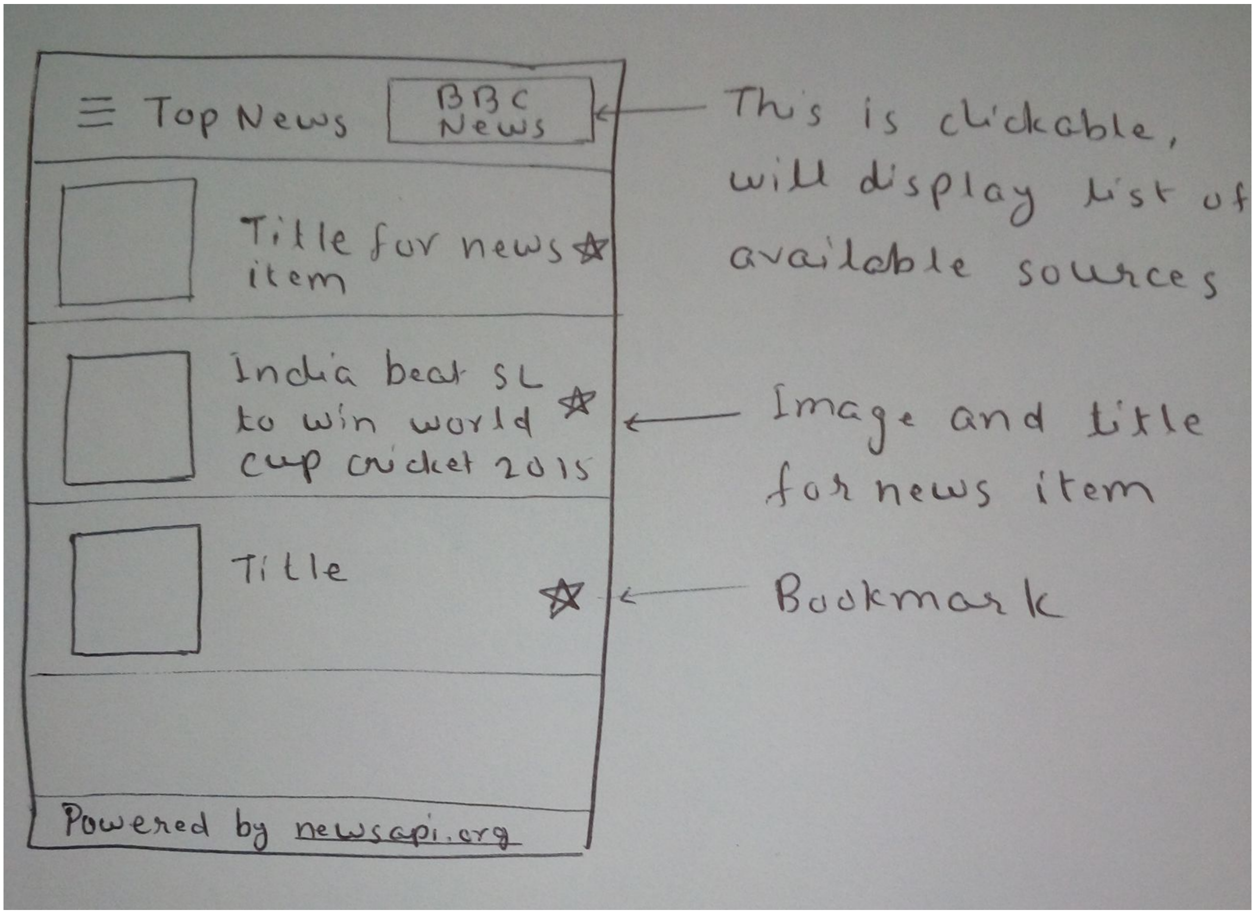
Features

- Displays news items.
- Top news from multiple sources around the world.
- Provides option to bookmark news items.

User Interface Mocks

These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Photoshop or Balsamiq.

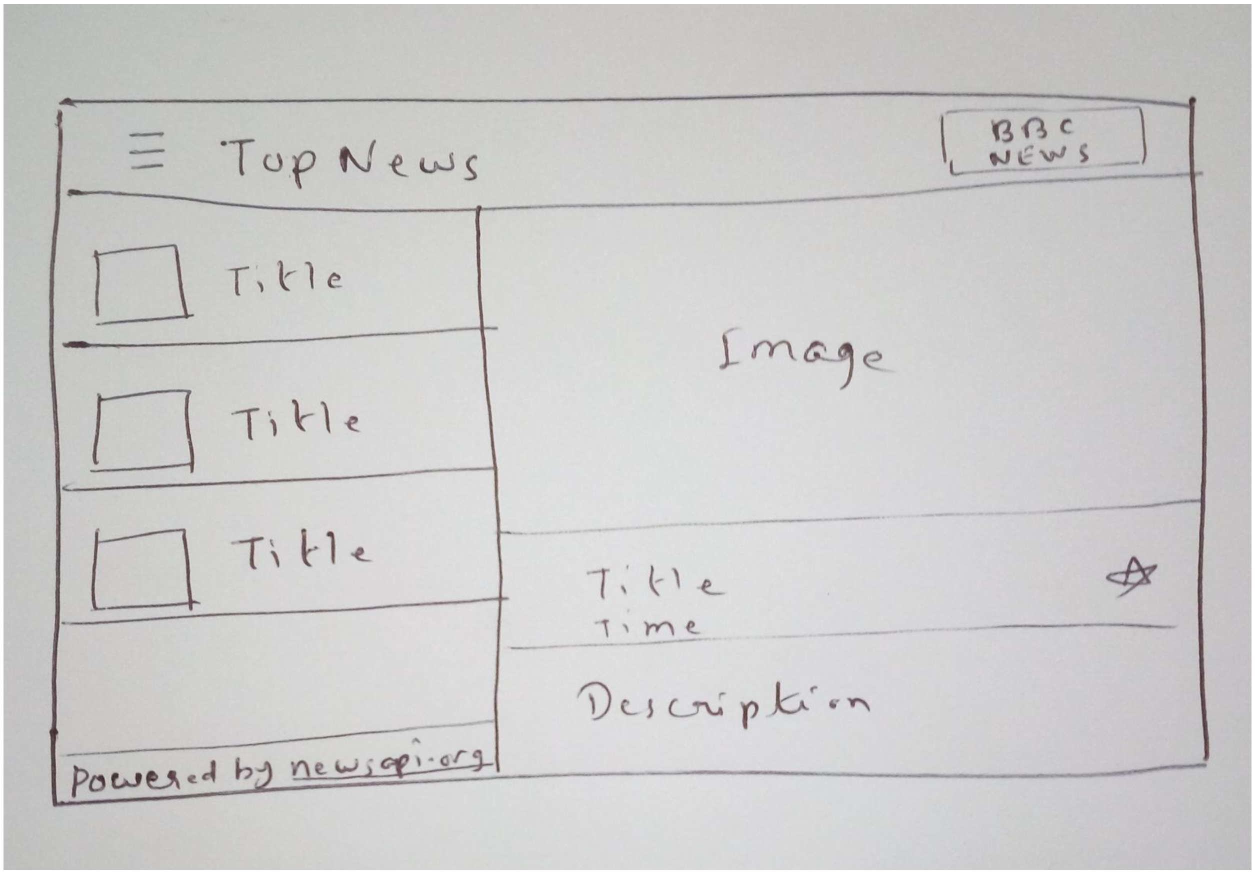
Screen 1: News List


Top News
BBC News
Title for news item
India beat SL to win world cup cricket 2015
Title
Powered by newsapi.org
This is clickable, will display list of available sources
Image and title for news item
Bookmark

This screen will display the news list retrieved from selected news source. Selected news source will be displayed in tool bar. User can click on the news source to select a different source. When user selects a different news source, news list will get updated.

Each row will consist of a thumbnail image and title for news item.

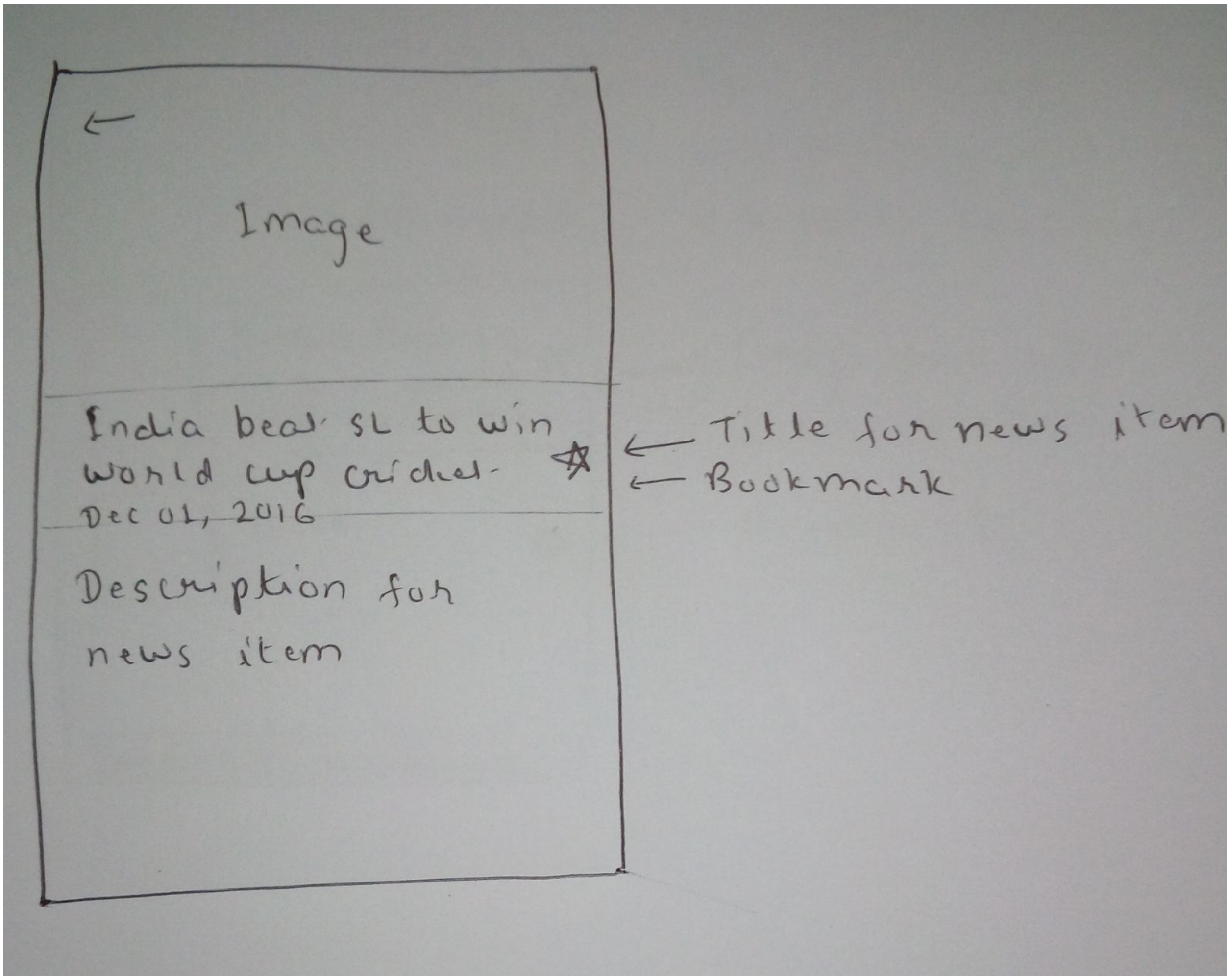
User has the option to bookmark a news item, so that it can be accessed later in Bookmarks section.



This layout is used for tablets. It will have the news list and description for selected news item displayed on same screen.

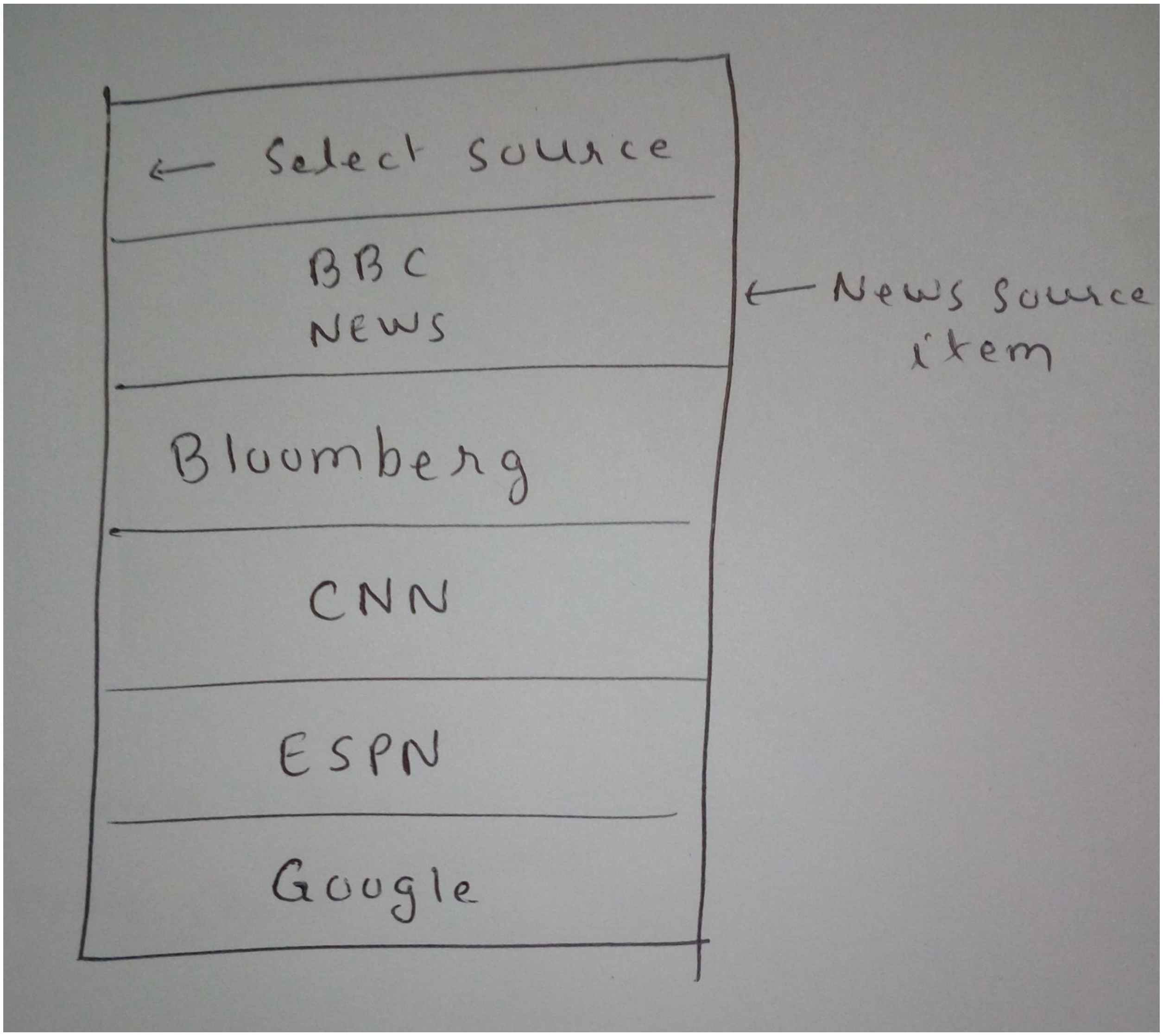
There will be padding on left and right of image to maintain aspect ratio of image in description part.

Screen 2: News detail


←
Image
India beat SL to win world cup cricket.
☆
Dec 01, 2016
Description for news item
← Title for news item
← Bookmark

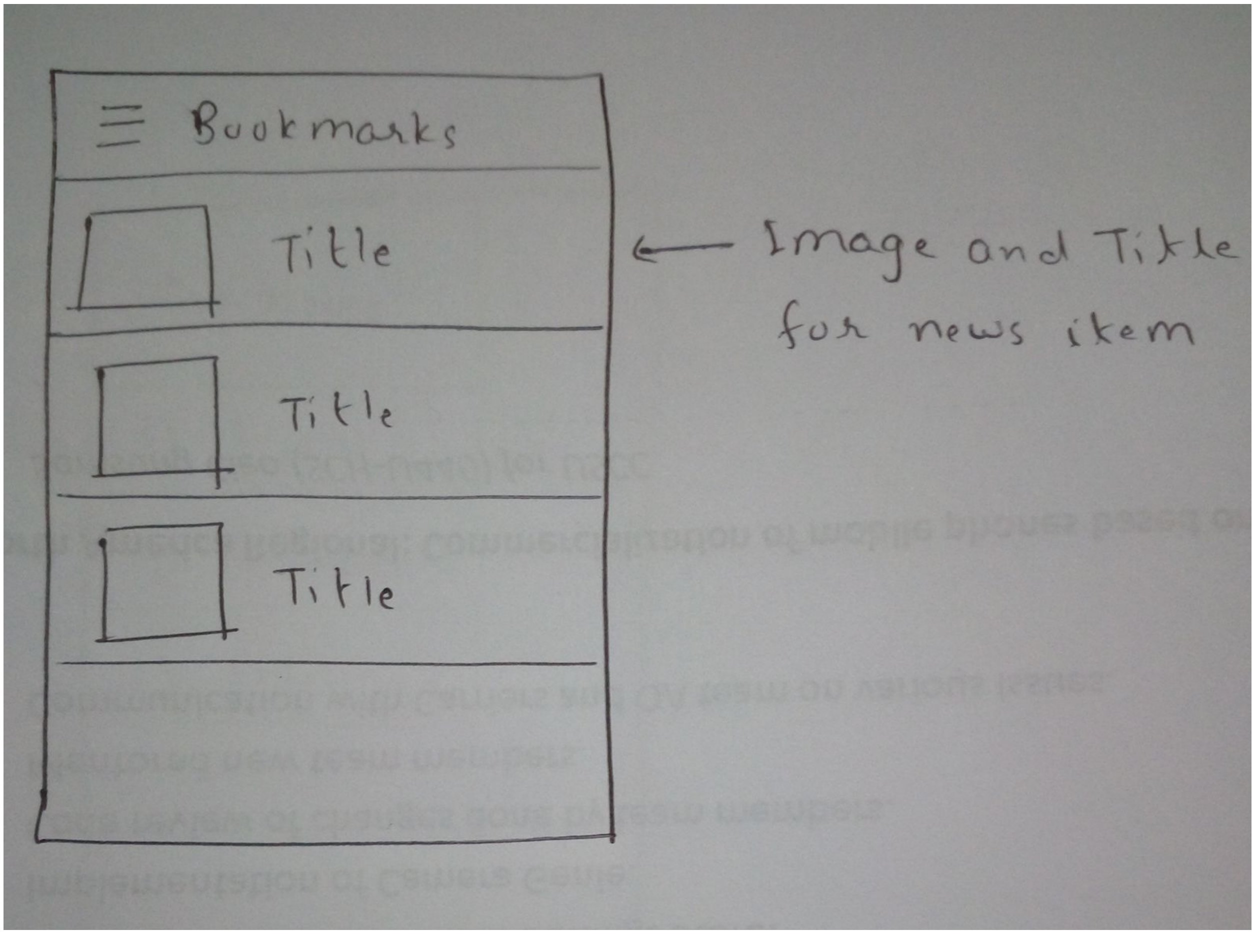
This screen will display detailed view for selected news item. It will consist of image, title, time, description and option to bookmark. Back icon color is dynamic and is picked from news item image using Palette class.

Screen 3: News source list



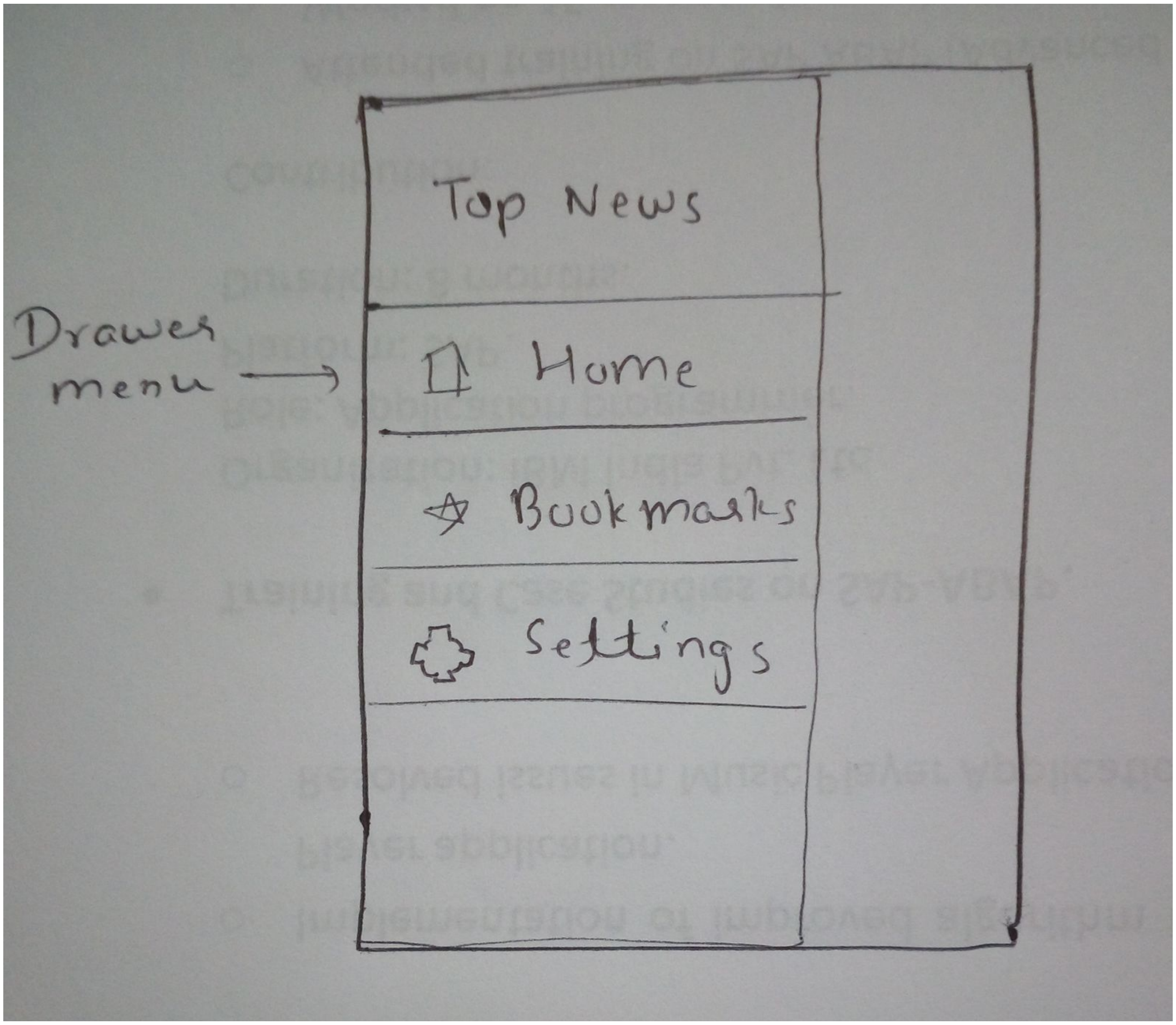
This screen will display list of available news sources. User can click on a source to select.

Screen 4: Bookmarks



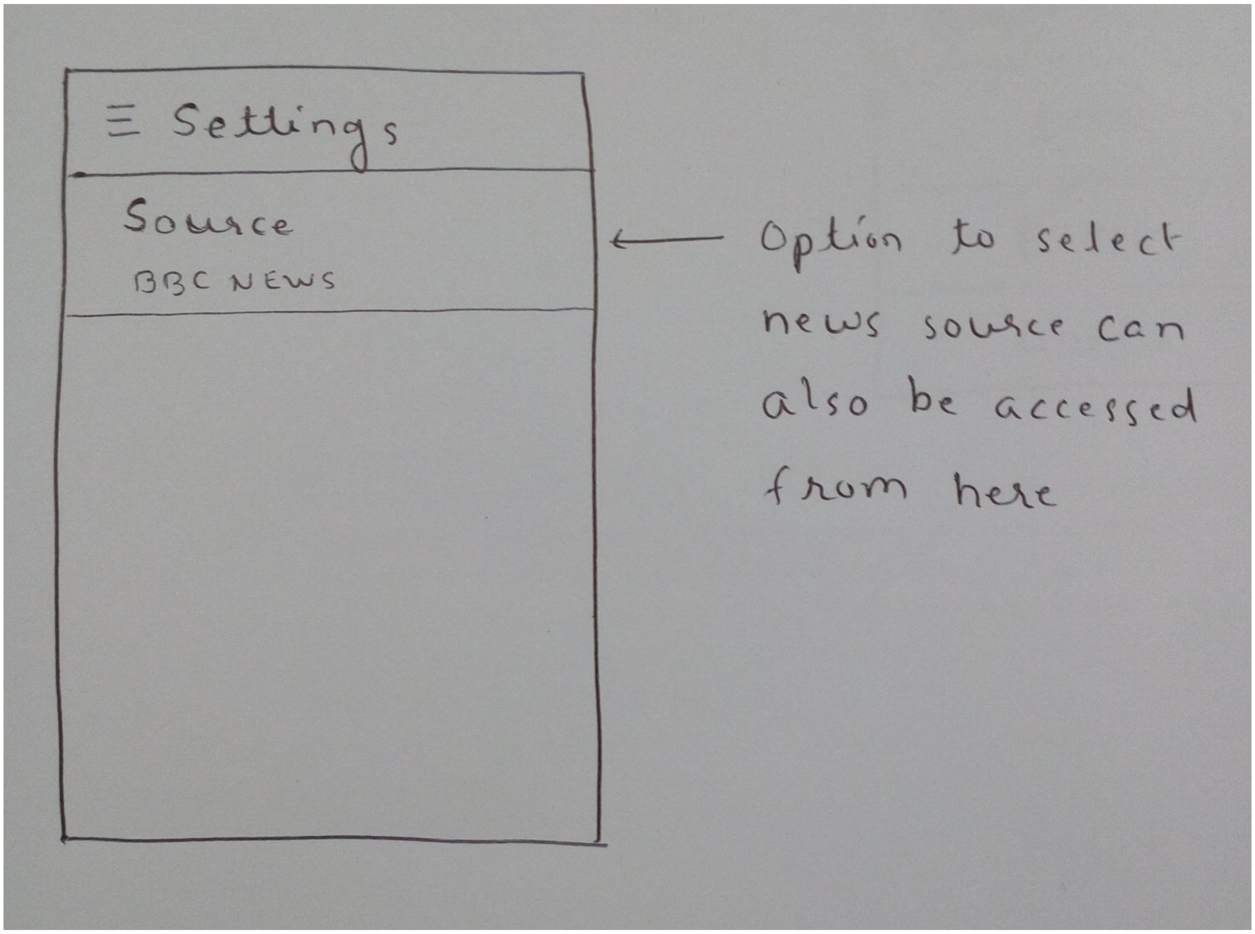
This screen will display list of bookmarked news items. UI of this screen will be similar to screen 1. Clicking on news item will launch news detail screen.

Screen 5: Drawer menu



This is the left drawer menu for the application.

Screen 6: Settings



Settings screen will consist of an option to select news source.

Key Considerations

How will your app handle data persistence?

SQLiteOpenHelper class will be used to create Sqlite database which will store bookmarks data. Shared Preference will also be used to store some data e.g. User selected news source.

Describe any corner cases in the UX.

News source list - Clicking on news source item will close the screen and return to previous screen. It can be accessed from 2 places - Clicking on source name on tool bar in news list screen, Settings screen.

Android material design default icons will be used wherever possible.

Describe any libraries you'll be using and share your reasoning for including them.

Picasso - to draw the news thumbnail images in list.
Retrofit - for making network calls.
RxAndroid - for performing asynchronous operations
Gson - for parsing JSON content
Android support libraries - for additional functionalities available through support libraries

Describe how you will implement Google Play Services.

Firebase Remote Config - for configuring the default news source using remote config.
Firebase Analytics - for collecting analytics data on most used news sources.

Next Steps: Required Tasks

This is the section where you can take the main features of your app (declared above) and decompose them into tangible technical tasks that you can complete incrementally until you have a finished app.

Task 1: Project Setup

- Create the project using Android Studio.
- Create the repository for the project in GitHub and commit the project files.
- Register at https://newsapi.org and obtain API key.
- Create a Firebase project for using Remote Config and Analytics.

Task 2: Implement News List screen

- UI for News List screen
- UI for drawer menu
- API integration to display list of news from default source

Task 3: Implement News Detail screen

- UI for News Detail screen
- API integration to display news detail.

Task 4: Implement News Source List screen

- UI for News Source List screen
- API integration to display list of news sources

Task 5: Bookmark functionality

- Create local database.
- Activate bookmark icon on list screen and detail screen and add bookmark to local storage.
- UI for bookmarks list screen
- Fetch the data from local storage and display.

Task 6: Settings screen

- UI for settings screen.

Task 7: Widget

- Widget will display the top news (only title) for selected news source

Task 8: Technical Task

- Content provider is implemented using Sqlite for storing and accessing bookmarks data.
- Loader should be used for reading bookmarks data from local database.
- Back icon color displayed in News detail screen is dynamic and is picked from background image using Palette class. Extracting color is done using AsyncTask so that delay is not observed on the UI.