

[Description](#)

[Intended User](#)

[Features](#)

[User Interface Mocks](#)

[Screen 1](#)

[Screen 2](#)

[Screen 3](#)

[Screen 4 Tablet](#)

[Screen 5 Setting](#)

[Screen 6 Widget](#)

[Key Considerations](#)

[How will your app handle data persistence?](#)

[Describe any corner cases in the UX.](#)

[Describe any libraries you'll be using and share your reasoning for including them.](#)

[Describe how you will implement Google Play Services.](#)

[Next Steps: Required Tasks](#)

[Task 1: Project Setup](#)

[Task 2: Implement UI for Each Activity and Fragment](#)

[Task 3: Create layouts and values in resources for different screens sizes](#)

[Task 4: Creating the App Settings Layout](#)

[Task 5: Creating the App Widget layout](#)

[Task 6 Implement Google Play Services](#)

[Task 7: Get data from Google Drive and Device Storage](#)

[Task 8: Data inclusion](#)

[Task 9: Handle Error Cases](#)

[Task 10: Core platform development](#)

**GitHub Username:** [ibrahimhss](#)

<https://github.com/ibrahimhss>

## Teleprompter App

### Description

Teleprompter, as in classic teleprompter, allows the users to easily read any text file by displaying it as a scrolling script, in front of a camera or a group of people...etc.

In order to help the user achieve a good presentation, this app ensures the flexibility of saving any file the user wants from and to the device or the cloud.

There are many options the user can freely choose from like resizing fonts ,changing colors, using the app in landscape mode and adjusting the script scrolling speed the way it suits them.

## Intended User

Students  
Book readers  
Youtubers  
Presenters

## Features

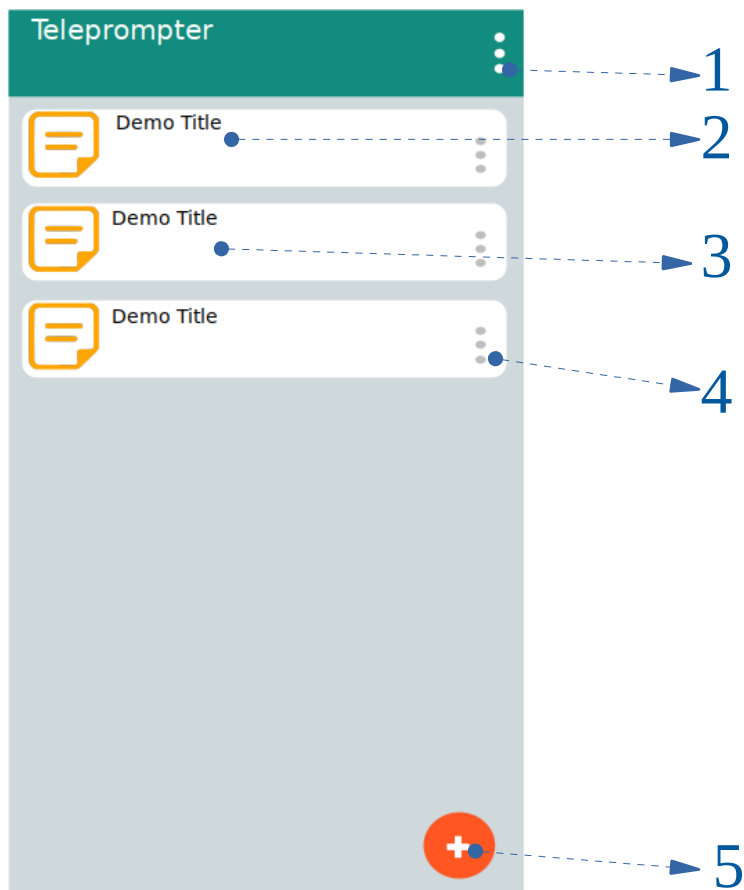
- Java programming language
- App Developed on Android Studio IDE version 3.1
- Provides three script creation mechanisms: manually typing, device storage and from google drive.
- Displays two screens in phones devices:
  - The first screen contains the functionalities of adding scripts, showing a list of saved scripts and a settings button on the top side of the screen.
  - On the second screen, the script that was selected from the list of available scripts is shown, with the ability to modify the script's color ,font size, scrolling speed and other general settings.
- Displays one screen in Tablet devices:
  - One screen directly controlling for all Views display on screen.

# User Interface Mocks

Link: <https://xd.adobe.com/view/71d4265e-9469-40da-5661-cebfc6212e47-07e5/?fullscreen&hints=off>

This is a simple graphical presentation of the application's general idea. It was designed using Adobe XD software. It displays the app's basic layout and animation.

## **Screen 1**



first screen in phone devices with simple view has:

1-Main menu has general settings.

2-Items that have script inside it.

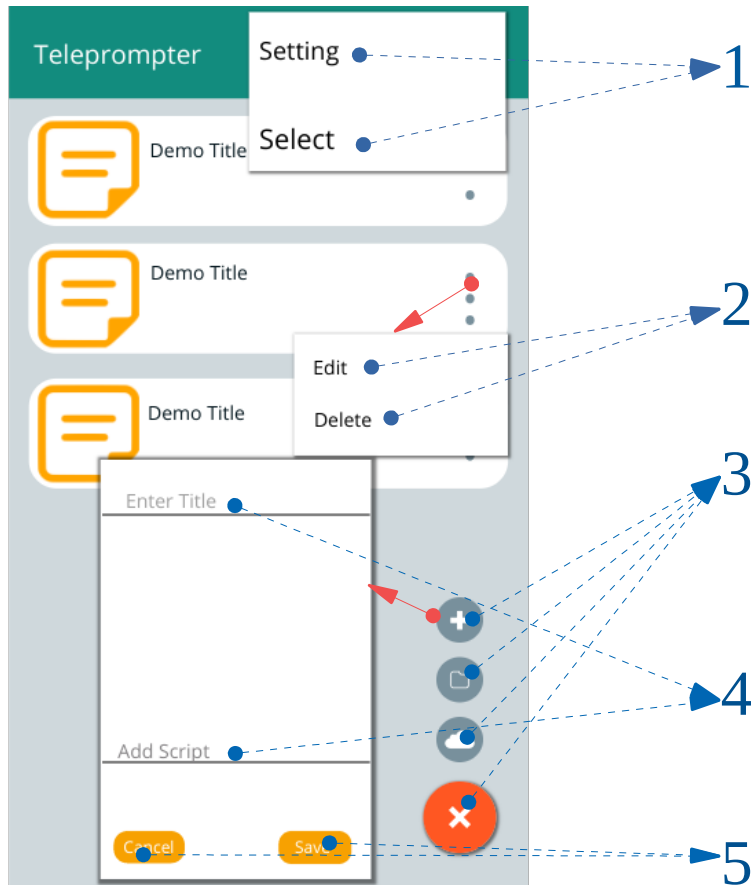
3-The title of the text entered by the person with the entire text The title is. displayed for easy access to the text.

4-Options to edit and remove script.

5-This item to add new script.

## Screen 2

Main screen in phone devices after clicked on it



Here all items as shown in the picture are as follows:

1 -Pop up shape has Setting to go to main setting & Select to select all item to delete all easily.

2 -When click on 3 points on item in list another pop up shape has Edit to edit script inside current item & Delete to delete it.

3 -The orange ring shape opens 3 circles above as shown. Options are added to the new text either manually that take the + sign. Open the window to add new text or the other two circles to add the text from the internal memory of the device or the Internet from the cloud storage.

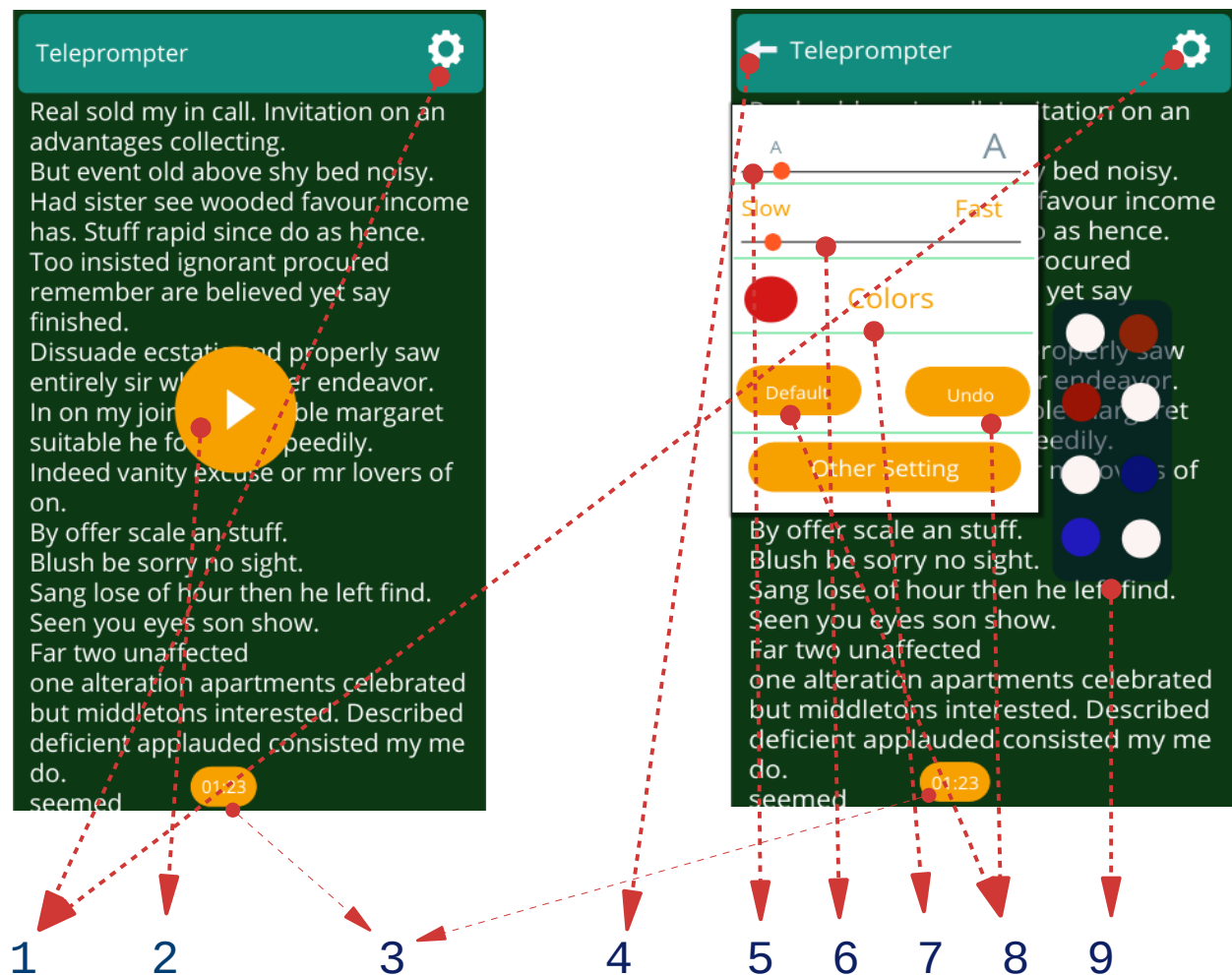
4 -Window contains two text additions first one in the top to add title second one in the bottom to add the text that user want to be displayed.

5 -Two items to save added contents or close window

when click on item in list will go to second Screen

### Screen 3

#### Second screen in phone devices :



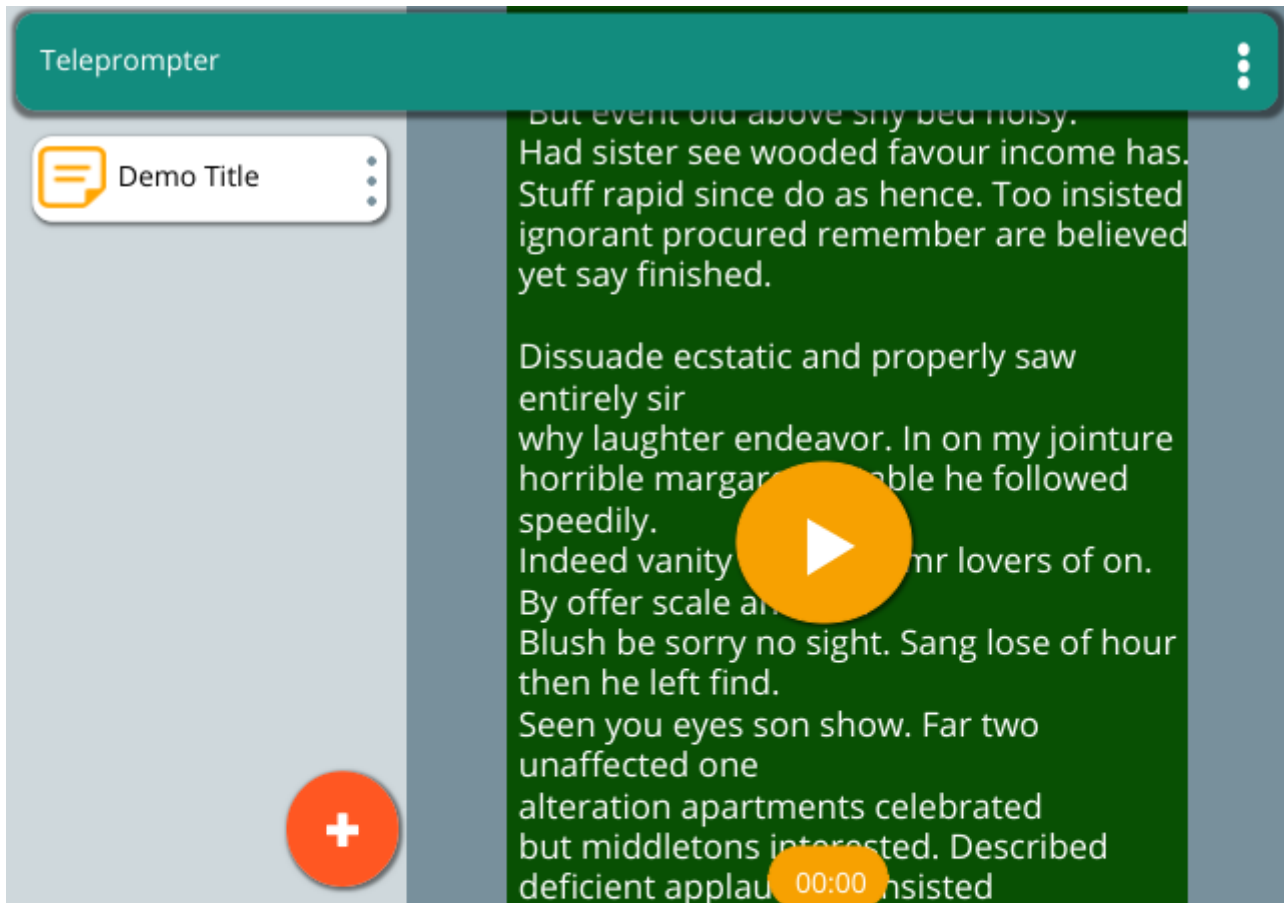
Here all items in second screen as shown in the picture are as follows:

- 1-This icon of setting to open sliding window to edit scrolling text.
  - 2-Icon start play auto scrolling movement text or stop auto scrolling.
  - 3-A timer starts with the start of the automatic text movement.
  - 4-Return back to the first screen.
- The contents of the sliding window containing the editing tools of the display
- 5-To increase or decrease the size of text displayed.
  - 6-To increase the speed of the display or reduce it as needed.
  - 7- Colors setting Displays a table of pairs of colors as in the number 9.
  - 8-To undo an adjustment that has been changed or reverted to the first basic setting.
  - 9-The other window that will appear when user click the color settings to select two colors one of them to change background color and the other to change text color and have been

distributed to be opposite to each other so the user does not feel confused when choosing the appropriate colors and also the user can undo the color if he doesn't like his choice

## Screen 4 Tablet:

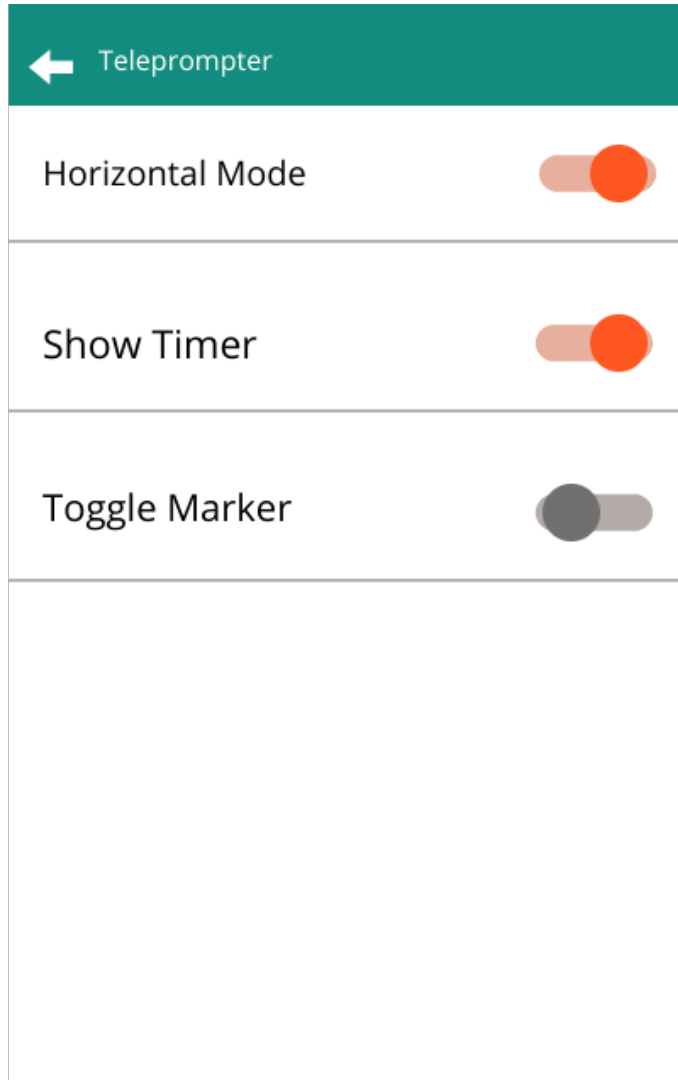
In Tablet all details appears at the first screen



All the details in the display of the tablet as in the upper picture is very similar to the work in the display of phones difference only that everything in the display of the tab in one screen to know the details of each part See the display of the phone screen above

## Screen 5 Setting :

In Setting Screen for phone and tablet



Here all the general settings of the application were selected to set the elements to not show or show some of the additional options for the display. The first option is to make the display always on the horizontal display. The second option displays the time it takes to display the text. The last option is to set some shadows and define the reading area.

## Screen 6 Widget :



A simplified form of the widget will display the main list of texts and when user click on one of the elements move to the display of the selected text



# Key Considerations

## How will your app handle data persistence?

- This app uses a Content Provider to store the data, that will be displayed, in a Sq-lite database. An AsyncTaskLoader allows java classes access to the data by fetching it from the Content Provider.

## Describe any edge or corner cases in the UX.

- When there's no internet connection, the app should display a dialog asking the user to check for internet connection, and offers them the possibility of using scripts saved on local storage if they want to use the app offline.
- If the device's default storage space is not enough to save a script, the app should display a dialog asking the user to choose a different storage location (SD card).
- When the user runs the app, a dialog appears suggesting to switch off incoming calls automatically, if the user denies, incoming calls should not be displayed on the main screen. Instead, they can appear in the notification bar.
- If the user scrolls the script rapidly, a dialog shows up asking them to slow down.
- If the user choose the wrong type of file to display as a script (pictures, sounds...) the app denies the operation and explains the reason through a dialog.

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

- ButterKnife to bind all views in the app.
- Roundedimageview: to make a list of rounded images and display circular colors.
- Materialedittext: to be used in in data adding dialogs for visual polish purposes.

## Describe how you will implement Google Play Services or other external services.

- Add firebase crashlytics to track possible errors that may occur with the user.
- Add Google Analytics service to allow tracking the number of app downloads as well as active users.
- Google Drive Android API
- Add Admob service to integrate ads in the app

## Next Steps: Required Tasks

### Task 1: Project Setup

- Use Java programming language
- Build app on latest version of android studio IDE.
- Design app on adobe xd
- Make layout designs for all screens
- Test layout on emulator.
- Build java classes BaseActivity , and HomeActivity with required fragments.
- Add some sample data to test display.
- Add a Content provider and all the necessary tools.
- Add AsyncTaskLoader

### Task 2: Implement UI for Each Activity and Fragment

- Build UI for ListContentActivity using CoordinatorLayout with AppBarLayout , CollapsingToolbarLayout , Toolbar and FrameLayout.
- Build UI for DisplayActivity using custom Toolbar , DrawerLayout , NavigationView etc.
- Build UI for ListContentsFragment.

### Task 3: Create layouts and values in resources for different screens sizes

- Create layout sw-600dp for ListContentActivity and DisplayActivity.
- Create values\dimen for width,height,elevation and margin of views in sw600dp,sw700dp,sw800dp screen sizes.
- Testing display in all screen sizes on Tablets and phones.
- Implement Tablet case in java .

## **Task 4: Creating The App Settings**

- Build UI for SettingActivity with its SettingFragment.
- Implement preferences in java classes.

## **Task 5: Creating the App Widget layout**

- Build UI for Widget in xml file
- Implement Widget in java classes
- Access data in listView of widget
- Create onClick callbacks for each item in the list to handle different click events.

## **Task 6: Implement Google Play Services**

- Build UI for Admob
- Implement Admob in java Classes
- Analyze possible use cases
- Implement Analytics

## **Task 6: Get data from Google Drive and Device Storage**

- Create API Key from Google Drive APIs Site
- Display data from Google Drive
- Get data from device storage and display it

## **Task 7: Data inclusion**

- Insert data manually by EditText or from local storage or Google Drive
- Send data to Sq-lit using Content Provider
- Use loaders to receive data from content provider

## Task 8: Handle Error Cases

- Analyze the display mode between different screen sizes and create a suitable scenario
- Test edit ,add and delete in recyclerView items.
- Test Scrolling Text in all cases in Tablet , phone devices and after rotation to avoid possible errors which can occur.
- If there was no typed text or address do not insert.
- In case of no internet connection display error message.
- detect data not showing and displaying error messages.

## Task 9: Core platform development

- Enable RTL support
  - Include the most frequently used languages in the strings.xml file (localization)
-