GitHub Username: TheUserFormerlyKnownAsBendix

Type

Description

Type is a minimal Word processor for people who want to do just that: type.
It takes away all the unnecessary complexity and functions of conventional Word processors, which - in most cases - make for terrible User Experience on mobile devices.

Intended User

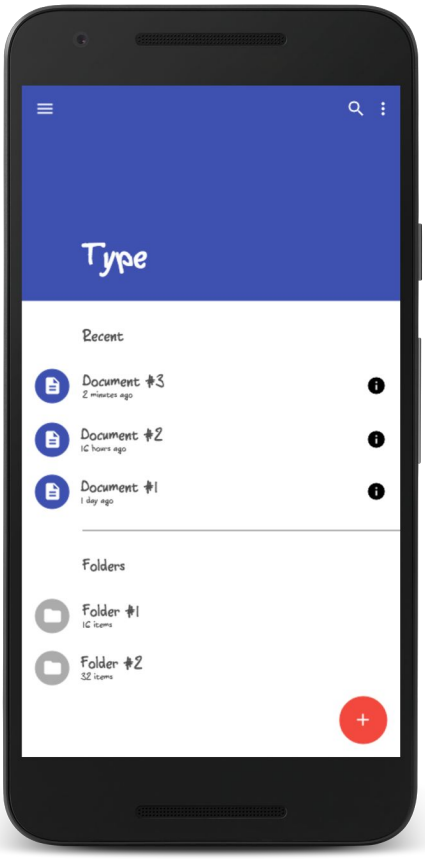
The target audience of Type are people - mainly students - who need to do basic word processing on their mobile devices.

Features

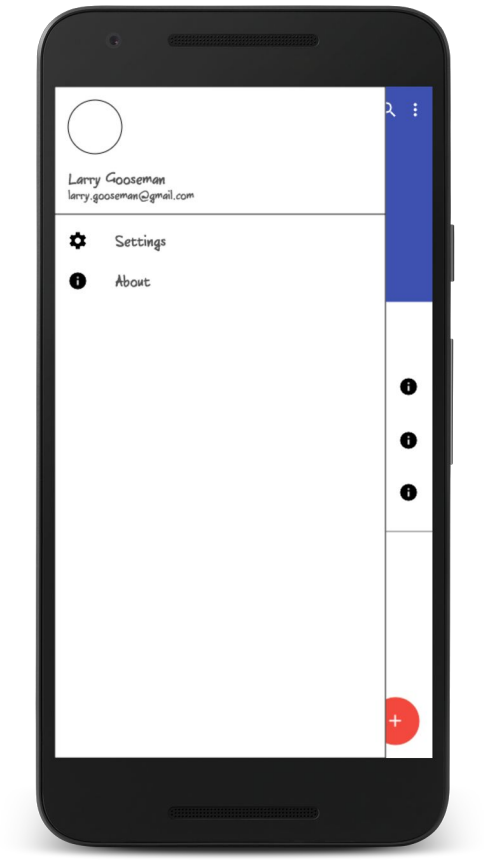
- Allows the user to create a new document with just one click
- Allows the user to assemble a document using different kinds of text blocks (e.g. title, subtitle, paragraph, ...)
- Provides basic text formatting options, such as text color and indentation
- Automatically stores the documents on Google Drive
- If enabled - saves GPS information whenever a document is created and edited to provide location-based quick access

User Interface Mocks

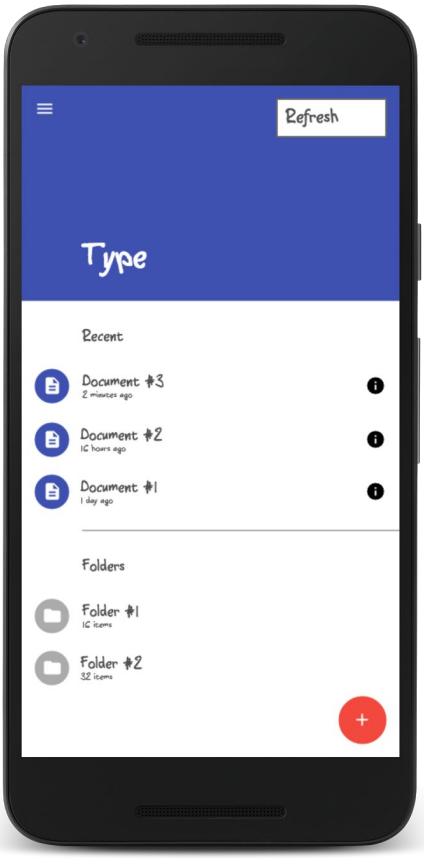
Start Screen



When Type is started, the User is greeted by the Start Screen. On this screen, the User finds recently created and edited files as well as a simple file browser.
By clicking the FAB, a new document is created and Type takes the User to the Document Edit Screen.



On the Start Screen, one can also access a Navigation Drawer containing account information and two list items (Settings, About)



With a click on the menu item “Refresh”, the list of files and folders is synchronized with Google Drive.

Document Screen

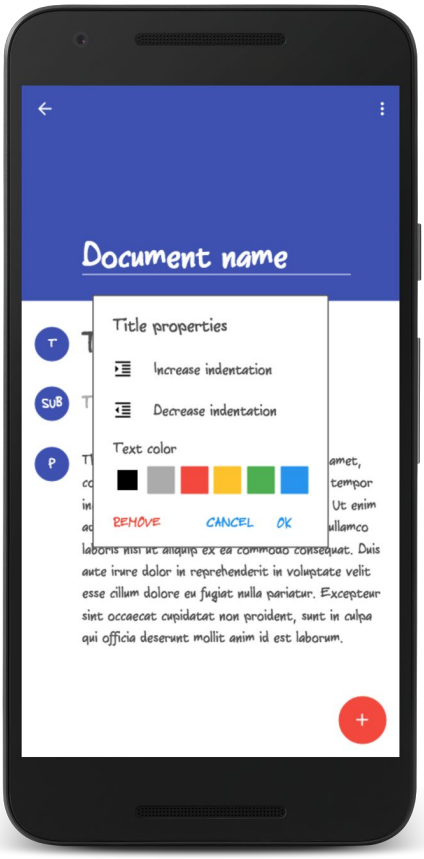
The Document Screen simply displays the selected document by the User on the Start Screen.
Clicking the FAB takes the user to the Document Edit Screen.

The “Details” menu item on the Document Screen takes the user to the Detail Screen.

Document Edit Screen

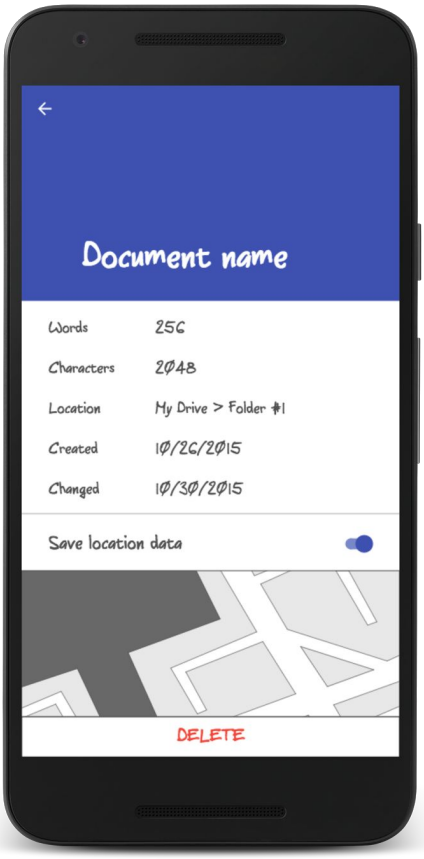
The Document Edit Screen allows the User to add new items and edit existing ones.

A click on the FAB opens a dialog prompting the User to select a new item to add to the document.



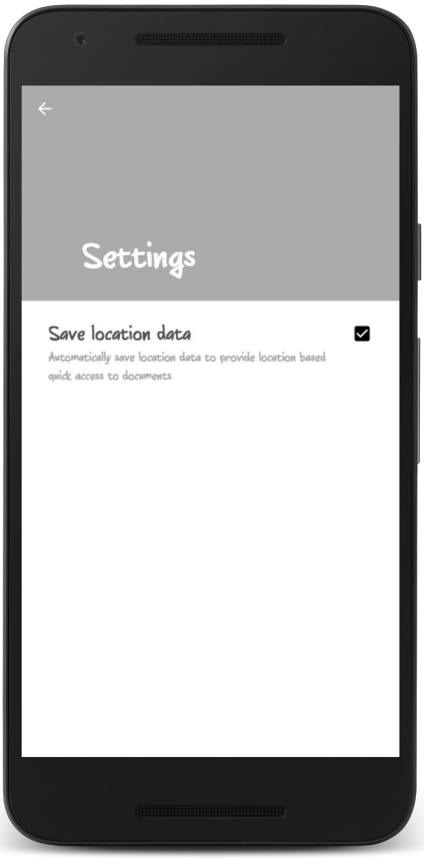
A click on the primary list controls of an item opens a dialog allowing the User to edit its properties. The available options are indentation, text color and the removal of the item.

Document Detail Screen



The Document Detail Screen is reached by either selecting the respective Menu Item on the Document Screen or Document Edit Screen, as well as by clicking on the (secondary action) info button of document list items on the Start Screen.
This screen contains several details about the document, such as word and character count, timestamps and the location of the document on Google Drive.
It also gives the User the option to disable the saving of location data. If disabled, any GPS data stored in the document is deleted permanently.
As the name gives away, by clicking the delete button, the document is removed from Google Drive.

Settings Screen



Since Type does not require a lot of permissions, the only option available to the User is to disable the saving of GPS data.

About Screen

The About Screen contains the Launcher Icon, version number and licensing information.

Key Considerations

How will your app handle data persistence?

Documents will be saved to and loaded from Google Drive via the Android Drive API.
App settings are stored in the SharedPreferences.

Describe any corner cases in the UX.

All the changes a user makes to a document are automatically stored to prevent data loss due to accidental closing of the app.
Whenever the app is resumed, the state is recovered to allow for fast editing.

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

1. Support Library (AppCompat, Design, CardView, RecyclerView)
   The Support Library will be used to assure that the User Experience is the same on all devices.
2. Google Play Services Library
   The Play Services Library will be used to allow the user to log in to the app with their Google account. It will also be used to access the Maps API.

Next Steps: Required Tasks

Task 1: Project Setup

- Install the latest version of Android Studio
- Download the latest version of The Android SDK
- Include libraries via Gradle

Task 2: Implement UI for Each Activity and Fragment

- Build UI for all Activities mentioned above
- Create Adapters and Views needed to populate RecyclerViews
- Populate RecyclerViews with hard-coded sample data
- Implement workflow (e.g. switching between Activities, Dialogs)

Task 3: Implement Google Play Services and data binding

- Implement sign in via Google
- Add Map View to the Detail Screen
- Replace sample data with real data and make it persistent using the Drive API

Task 4: Handle configuration changes and Lifecycle events

Restore app state on resume and configuration changes

Task 5: Extensive testing

Test the app on several devices and fix occuring bugs.
Repeat this step until the app is stable on every device.