

CS230 Developing Mobile Apps

Assignment 1

Email management app (20% of final grade), due Monday September 30th 2019

Description: build an app to sort and display emails (email dataset provided). You will be provided with a list of emails, The app should use RecyclerView to display the list of emails, and TextView to display individual emails (when the user taps to select email from the list). The app should also feature an app bar at the top, with a sort button and a dropdown menu that opens a settings fragment, allowing to change the sorting mechanism.

The app should support the following functionality (each piece of functionality makes up 20% of the assignment's weight)

- 1) (20%) load and display a scrollable list of emails (from the provided dataset)
- 2) (20%) select an email from the list and display the selected email in a separate Fragment (or Activity)
- 3) (20%) sort the emails by tapping button on app bar
- 4) (20%) change the sorting mechanism through a separate Settings screen implemented using Fragment (or Activity)
- 5) (20%) delete an email by initiating a 'delete email?' query by holding touch on an email in the list, and then pressing 'ok' to delete, the app should then display 'email_name deleted' Toast

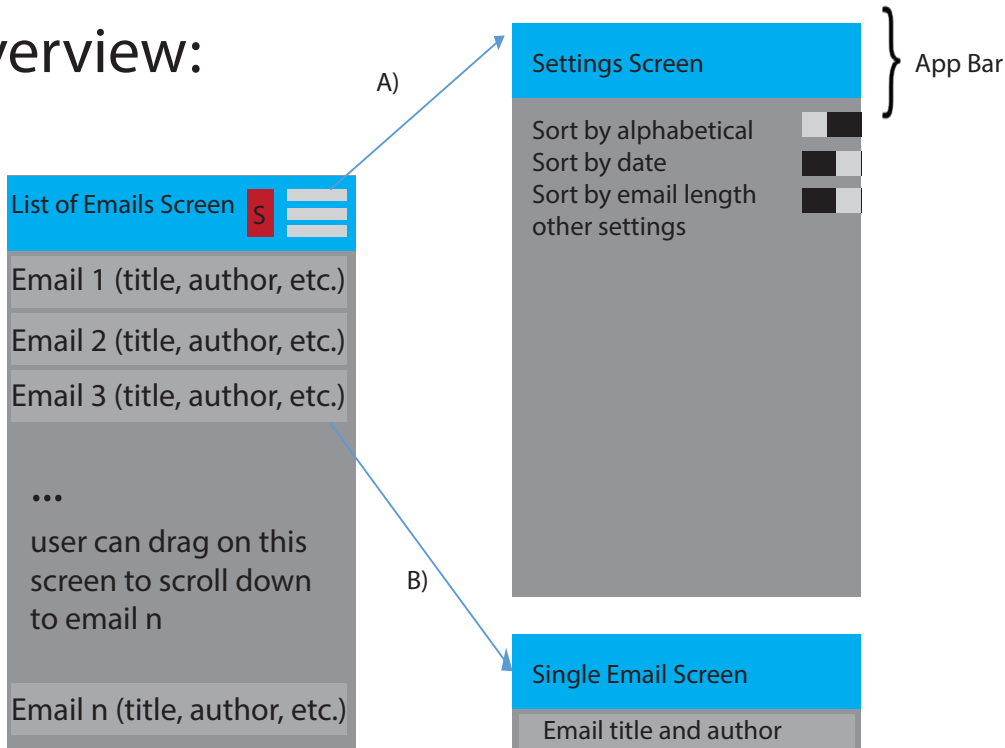
Extra Marks (optional):

- +10%) add a notification mechanism with a timer running in a background task that periodically sends fake email notifications to the home screen of the user's phone
- +10%) asynchronously load an image from the web related somehow to the email's content/title/author, and display that as a small icon for each email in the list of emails
- +5%) style points! Change the theme and color of your UI, to make a more attractive looking app

Resources:

- RecyclerView: <https://developer.android.com/guide/topics/ui/layout/recyclerview>
- App Bar: <https://developer.android.com/training/appbar>
- Fragment: <https://developer.android.com/guide/components/fragments>

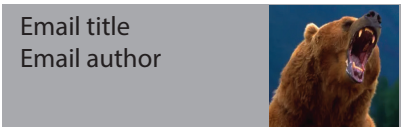
Overview:



Example for extra marks 2
(asynchronously load an image...)


Email 3 (title, author, etc.)

instead of a simple TextView or Button representing each email in "List of Emails Screen", (like above) you could add a more complex representation based on the email's content: for example if the email mentions bears repeatedly, the app could pull some images of bears off the web and display it as an icon next to title, author (below)



A) user clicks on dropdown to access settings menu, another fragment pops up with settings. user can press back from this fragment to return to the "List of Emails Screen"

B) user clicks on a single email in the list, another fragment pops up showing more details about the email (msg. body, etc). User can press back to return to "List of Emails Screen"

 Sort button (user presses it, and the list of emails is sorted according to whatever criteria was set in "Settings Screen")