

# Project Overview

The application you will develop is a Book Tracker App that enables users to manage their books, specifically focusing on tracking their reading progress.

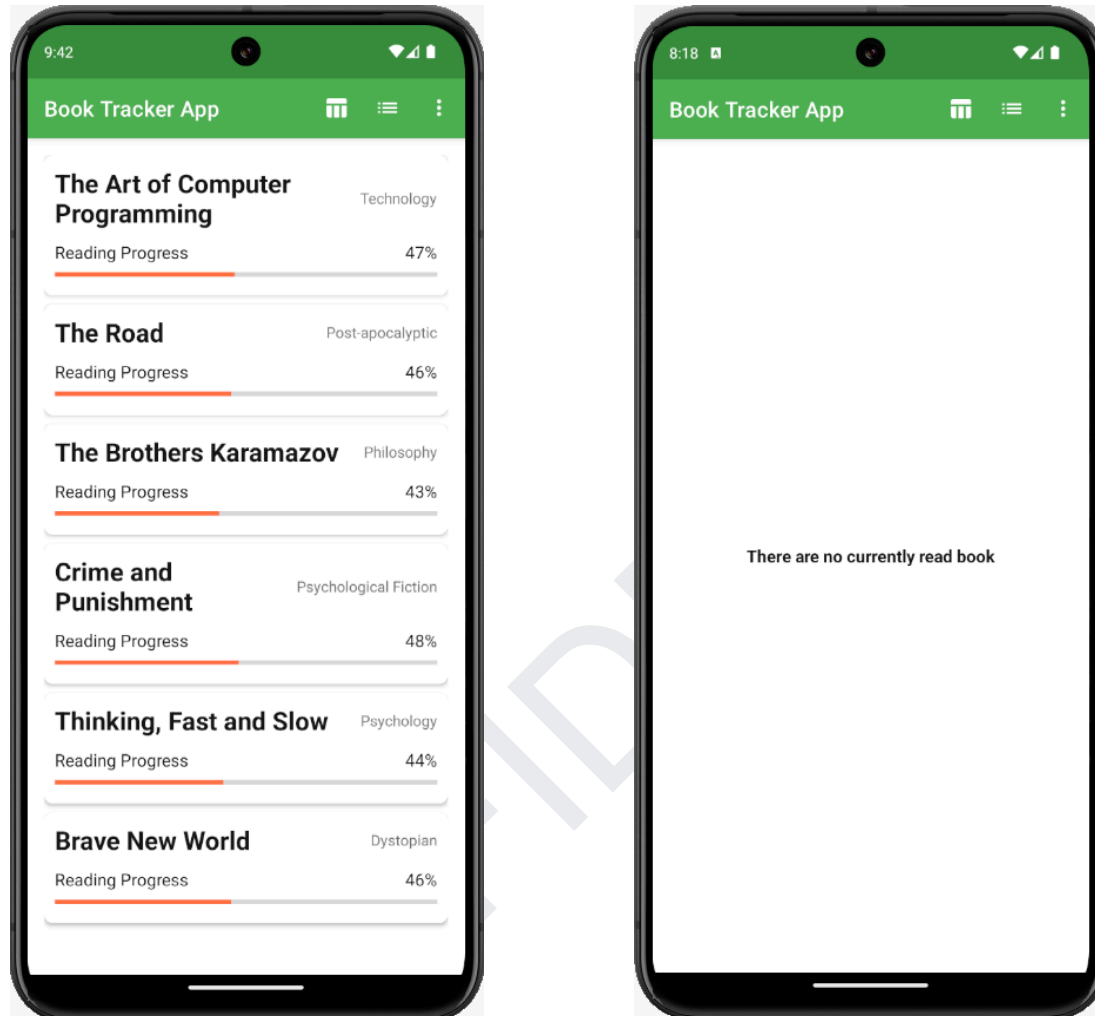
The application will offer several features to keep users updated on their reading progress. Users can add books, view and sort all books based on metadata (such as date added, title, genre, or author), categorize them by status, and update book details. Additionally, the app will include options to set reminder notifications for books being read and to enable dark mode for a more comfortable viewing experience.

You will develop these features for the app using the provided starter project. The Readme file on the starter project provides detailed instructions. Note: Any improvisation, enhancement, or addition of new features that are not asked for is not needed here.

You will need to have a good understanding of all the features to do the exam. To understand the project further, please take a look at the user interface (UI) below and implement it in the project.

# Application User Interface (UI)

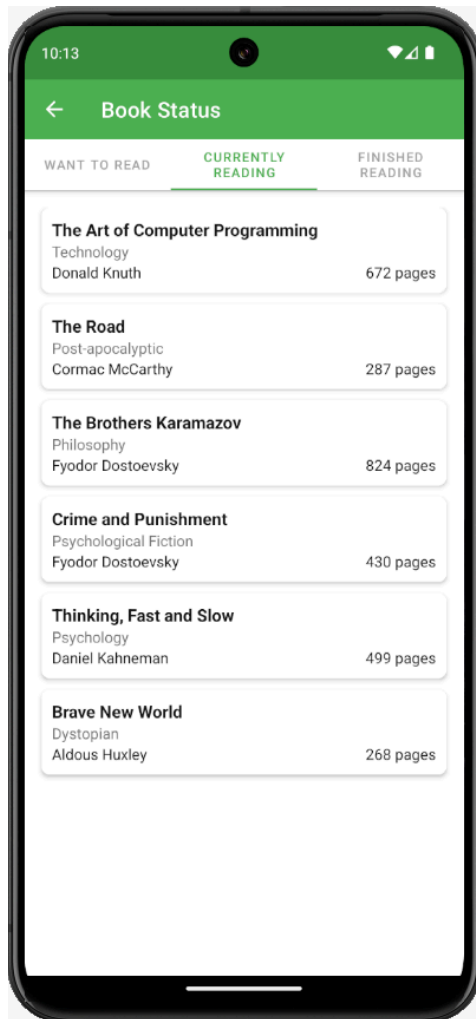
## Home Screen



- Currently Read Book List
  - CurrentlyReadBookView - Custom View (R.id.customRVCurrentlyReadBookView):
    - RecyclerView (R.id.rv\_currently\_read\_books)
      - List Item (currently\_read\_book\_item.xml):
        - TextView (R.id.tv\_bookTitle)
        - TextView (R.id.tv\_bookGenre)
        - TextView (R.id.tv\_readingProgressValue)
    - TextView (R.id.tv\_empty\_currently\_read\_books)
- Option Menu

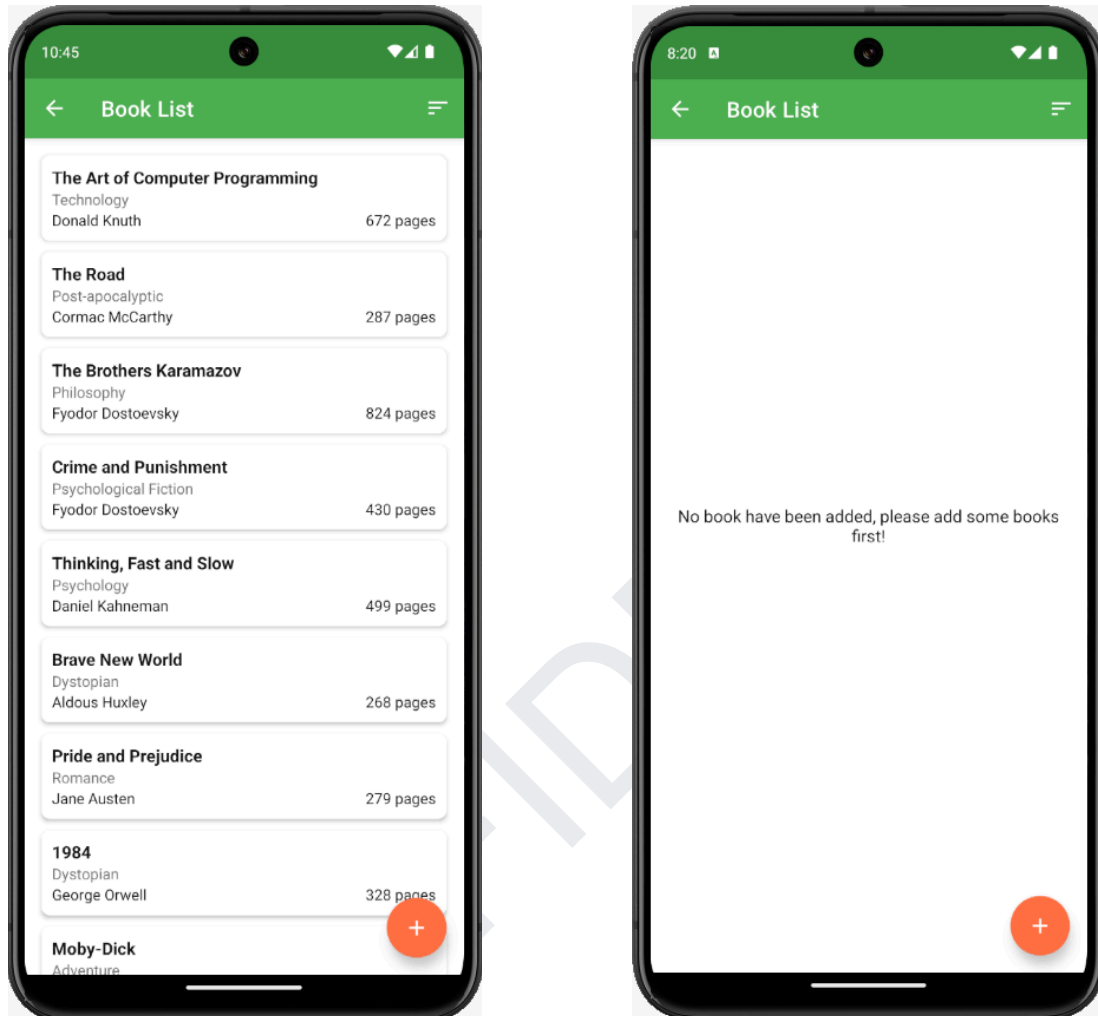
- Show Book Status Screen (R.id.action\_status)
- Show Book List Screen(R.id.action\_list)
- Show Settings Screen (R.id.action\_settings)

## Book Status Screen



- Up Navigation Button:
  - Navigate to the Home Screen
- Book Status Tab
  - TabLayout (R.id.tabs)
- Book Status List
  - ViewPager (R.id.view\_pager)
    - List Item (list\_book\_item.xml):
      - TextView (R.id.tv\_bookTitle)
      - TextView (R.id.tv\_bookGenre)
      - TextView (R.id.tv\_bookAuthor)
      - TextView (R.id.tv\_bookTotalPages)

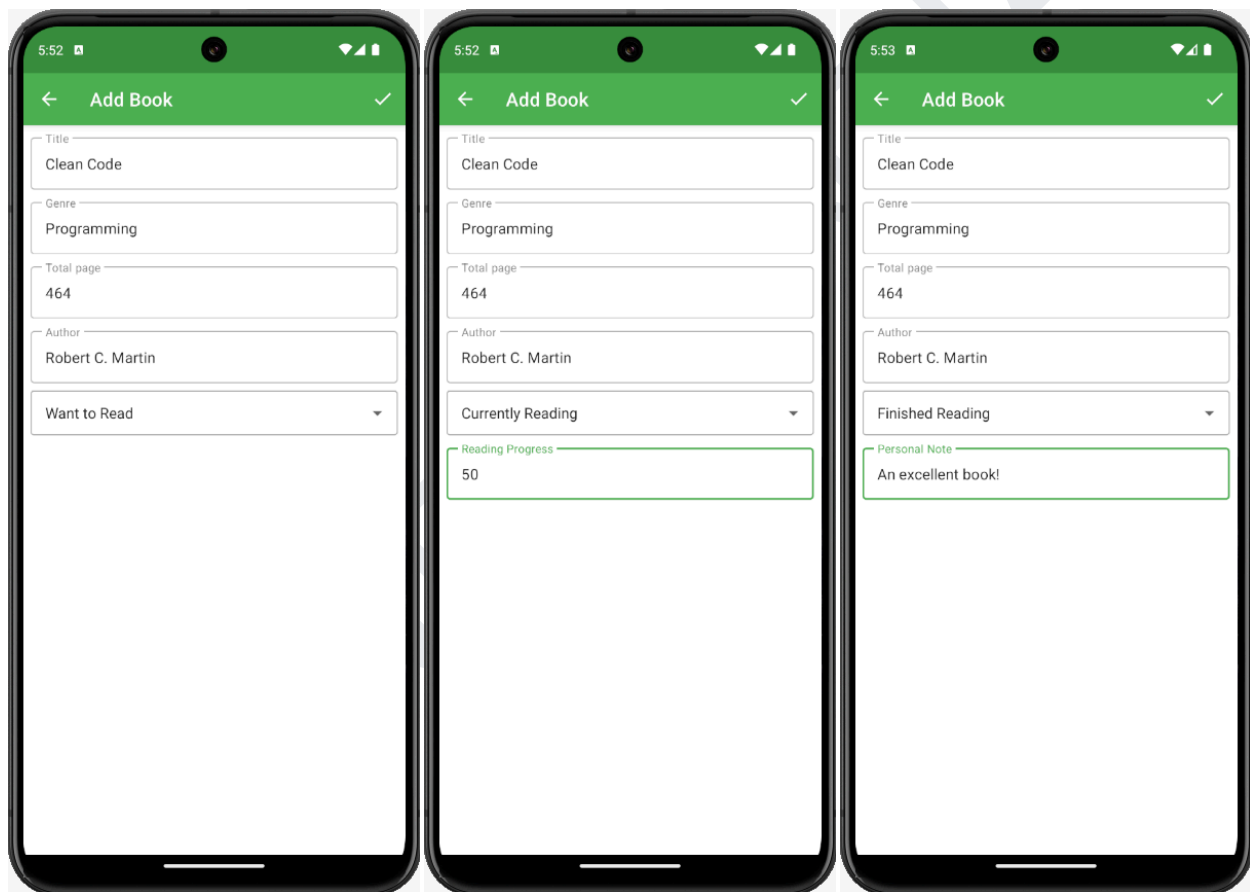
## Book List Screen



- Up Navigation Button:
  - Navigate to the Home Screen
- Option Menu
  - Sort Books (R.id.action\_sort)
    - By date added
    - By title
    - By genre
    - By author
- Book List:
  - RecyclerView (R.id.rv\_list\_books)
    - List Item (list\_book\_item.xml):

- TextView (R.id.tv\_bookTitle)
  - TextView (R.id.tv\_bookGenre)
  - TextView (R.id.tv\_bookAuthor)
  - TextView (R.id.tv\_bookTotalPages)
  - TextView (R.id.tv\_empty\_list)
- Add Book
  - Floating Action Button (FAB) (R.id.fab\_addBook)

## Add Book Screen

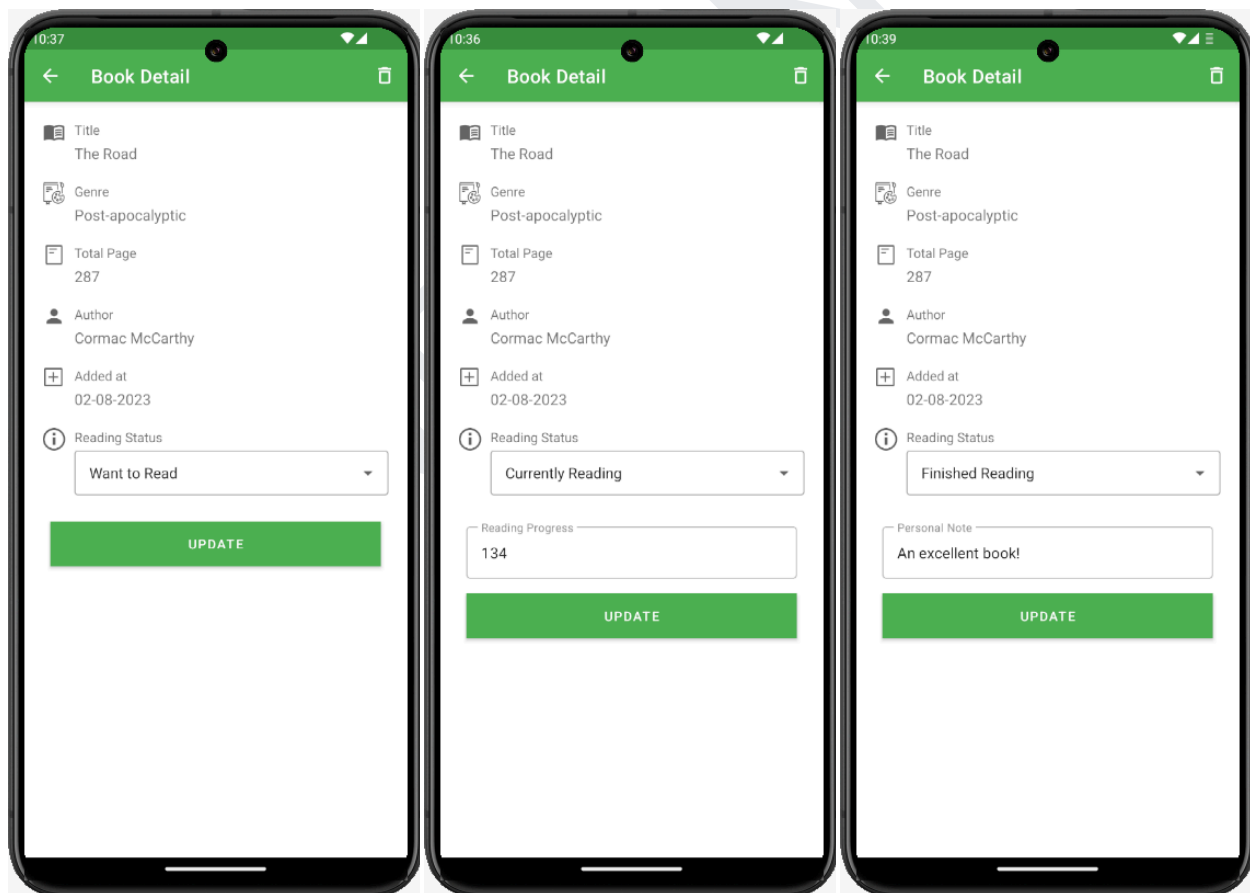


- Up Navigation Button:
  - Navigate to the List Book Screen
- ViewGroup
  - ConstraintLayout (R.id.viewGroup\_addBookActivity)
- App Bar
  - AppBarLayout (R.id.appbar\_addBookActivity)

- Theme: @style/Theme.BookTrackerApp.AppBarOverlay
  - Toolbar (R.id.toolbar\_addBookActivity)
    - Layout Height: ?attr/actionBarSize
    - PopupTheme: @style/Theme.BookTrackerApp.PopupOverlay
- Input:
  - Title
    - TextInputLayout (R.id.til\_title\_add)
      - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
      - Margin: 8dp
      - Hint: @string/book\_title\_hint
      - TextInputEditText (R.id.tiet\_title\_add)
  - Genre
    - TextInputLayout (R.id.til\_genre\_add)
      - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
      - Margin: 8dp
      - Hint: @string/book\_genre\_hint
      - TextInputEditText (R.id.tiet\_genre\_add)
  - TotalPage
    - TextInputLayout (R.id.til\_totalPage\_add)
      - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
      - Margin: 8dp
      - Hint: @string/book\_totalPage\_hint
      - TextInputEditText (R.id.tiet\_totalPage\_add)
        - Input Type: number
  - Author
    - TextInputLayout (R.id.til\_author\_add)
      - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
      - Margin: 8dp
      - Hint: @string/book\_author\_hint
      - TextInputEditText (R.id.tiet\_author\_add)
  - Status
    - Spinner (R.id.spinner\_status\_add)
      - Margin: 8dp
      - Padding: 0dp
      - Background: @drawable/background\_spinner
  - Reading Progress
    - TextInputLayout (R.id.til\_readingProgress\_add)
      - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
      - Margin: 8dp

- Hint: @string/book\_readingProgress\_hint
- TextInputEditText (R.id.tiet\_readingProgress\_add)
  - Input Type: number
- Personal Note
  - TextInputLayout (R.id.til\_personalNote\_add)
    - Style: @style/Widget.MaterialComponents.TextInputLayout.OutlinedBox
    - Margin: 8dp
    - Hint: @string/book\_personalNote\_hint
    - TextInputEditText (R.id.tiet\_personalNote\_add)
- Option Menu
  - Add Book (R.id.action\_insert)

## Detail Book Screen

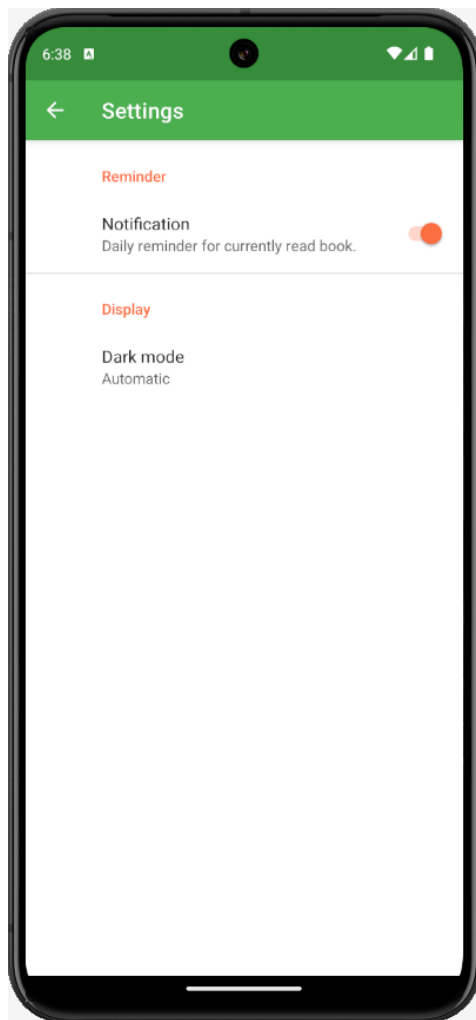


- Up Navigation Button:

- Navigate to the List Book Screen
- Book Detail
  - Title
    - TextView (R.id.tv\_bookTitleValue)
  - Genre
    - TextView (R.id.tv\_bookGenreValue)
  - Total Page
    - TextView (R.id.tv\_bookTotalPageValue)
  - Author
    - TextView (R.id.tv\_bookAuthorValue)
  - Added at
    - TextView (R.id.tv\_bookAddedAtValue)
  - Status
    - Spinner (R.id.spinner\_bookStatusValue)
  - Reading Progress
    - TextInputLayout (R.id.til\_readingProgress\_detail)
      - TextInputEditText (R.id.tiet\_readingProgress\_detail)
  - Personal Note
    - TextInputLayout (R.id.til\_personalNote\_detail)
      - TextInputEditText (R.id.tiet\_personalNote\_detail)
  - Update Book's data
    - Button (R.id.btn\_update)
- Option Menu
  - Delete Book (R.id.action\_delete)

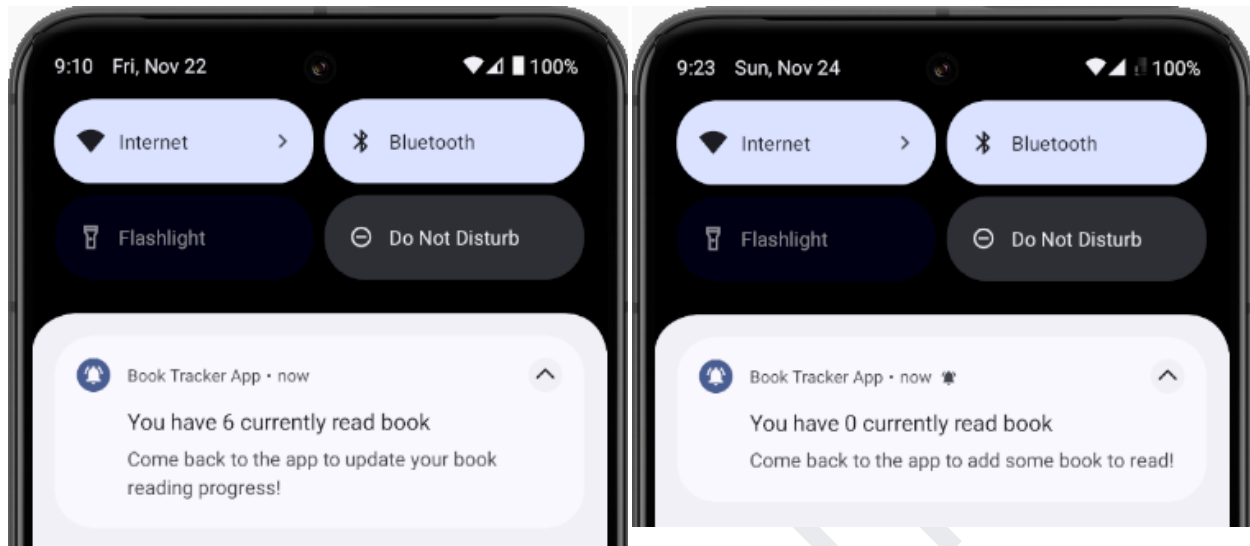


## Setting Screen



- Up Navigation Button :
  - Navigate to the Home Screen
- Setting Preference:
  - Reminder Notification
    - SwitchPreference
      - Preference key: key\_notification
      - Default value: false
  - Dark Mode
    - ListPreference
      - Option Value: Automatic, Nighth mode, Light mode
      - Default value: Automatic

## Notification



- Small icon: `R.drawable.ic_notification`
- Content title: `R.string.notification_title`
- Content text when there is a currently read book: `R.string.notification_subtitle`
- Content text when no currently read book: `R.string.notification_subtitle_no_book`