

BBC News Reader

Project Overview

The user can download the latest news headlines from:

http://feeds.bbc.co.uk/news/world/us_and_canada/rss.xml

Your application should show the titles in a listview. When the user selects an item, it shows the details about the news article. You should show the title, description, and date of the article, as well as a link to the website for the article. Clicking on the link should load the Android web browser to that page.

The user can save articles to a favourites list for later viewing. The user can also delete articles from the favourites list.

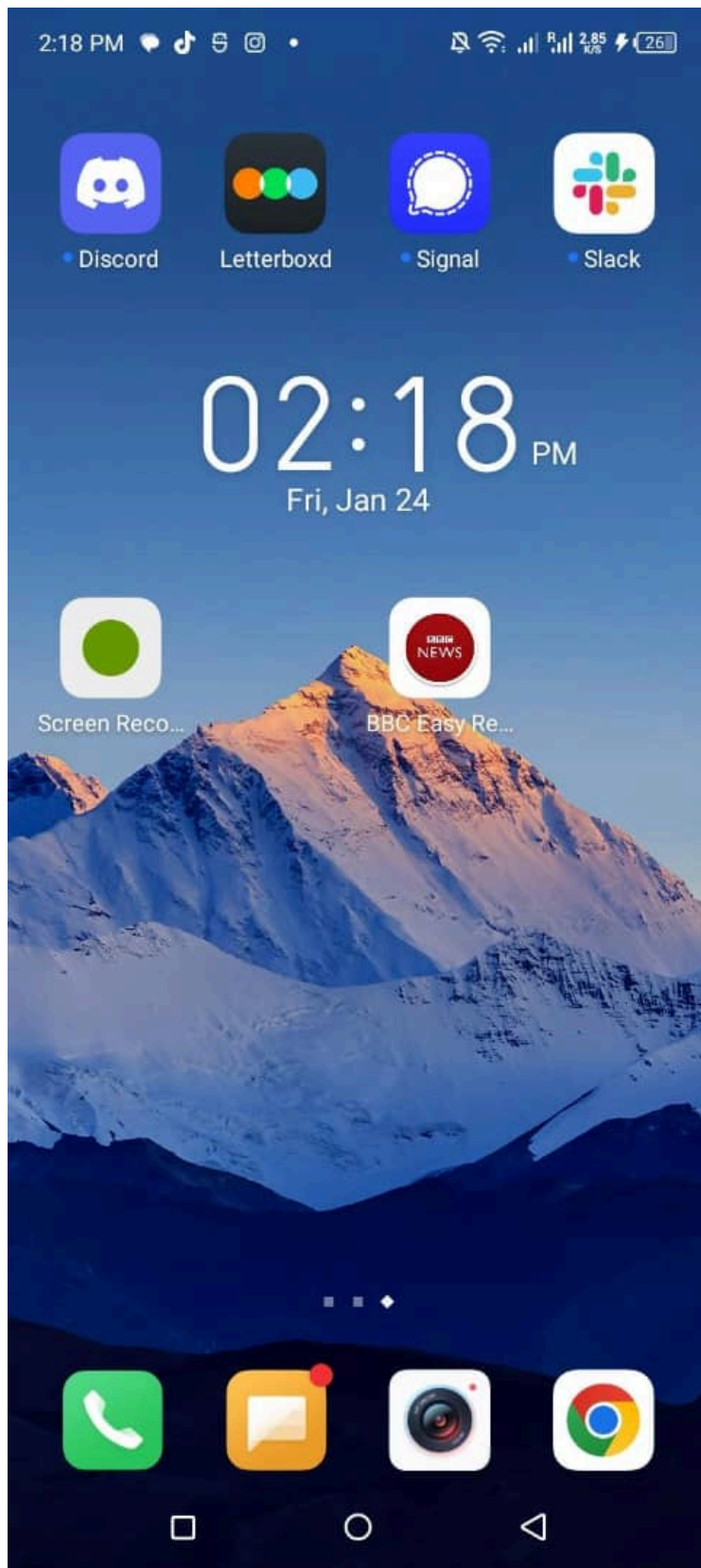
Important Links

Project Video:

<https://github.com/daoudab/Androidbbc/blob/master/WhatsApp%20Video%202025-01-24%20at%2010.08.34%20AM.mp4>

Project Repository: <https://github.com/daoudab/Androidbbc.git>

App Launching Screens

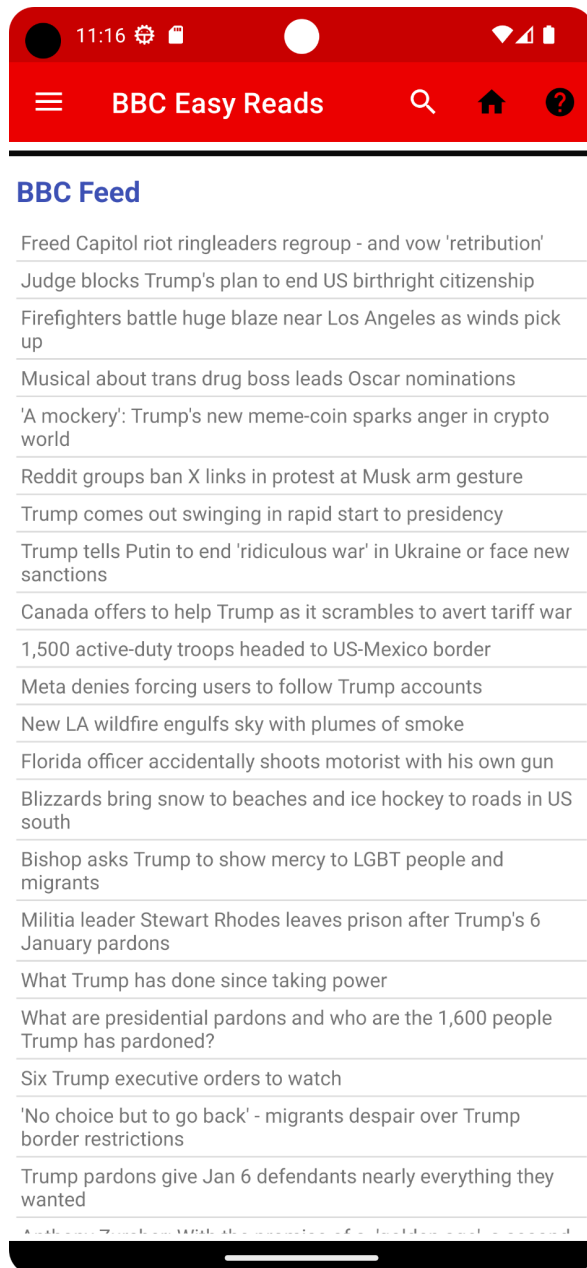




Application Basics

1. Use of ListView

- Display a list of news article titles from the RSS feed.



- Selecting an item shows detailed information (title, description, date, and link).



2. Progress Bar

- Include a progress bar (e.g., during RSS feed download or data parsing).

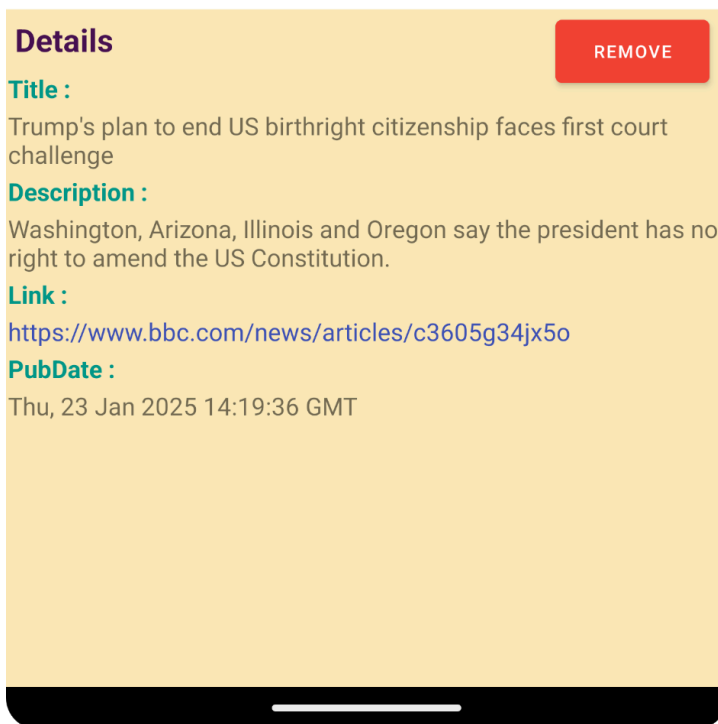
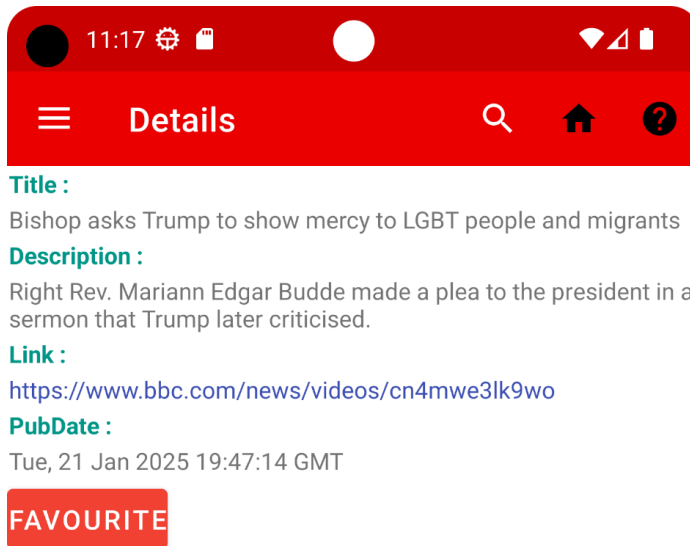


BBC Feed



3. Button

- Two buttons (Add to Favourites & Remove from Favourites).



4. Edit Text

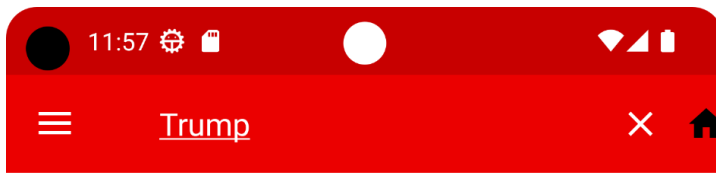
- Include an editable text field with an appropriate input method (Search edit and input).



3T people and migrants

plea to the president in a

nwe3lk9wn



BBC Feed

US government workers told to report DEI efforts or face 'consequences'

Trump urges oil-exporting countries to slash prices

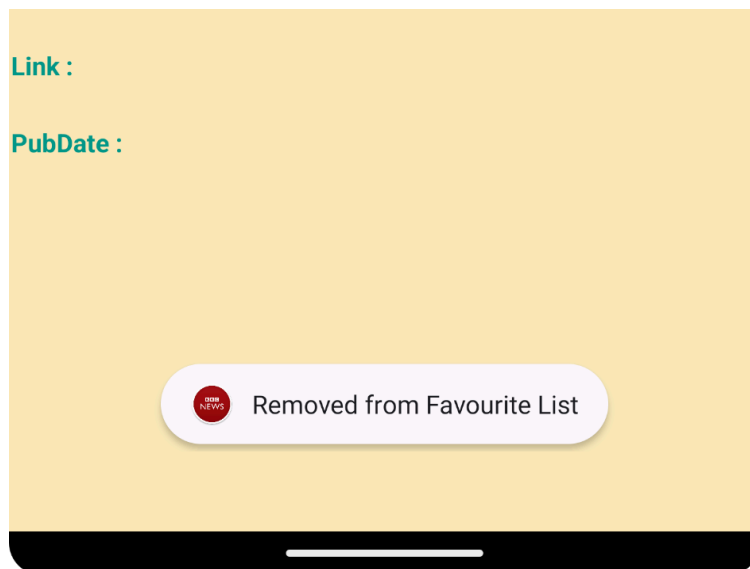
Judge blocks Trump's plan to end US birthright citizenship

Watch Air National Guard tackle Hughes wildfire in LA

Firefighters battle huge blaze near Los Angeles as winds pick up

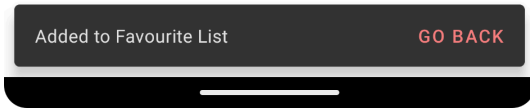
5. Toast Notification

- Implement at least one Toast (e.g., on saving an article to favourites).



6. Snackbar Notification

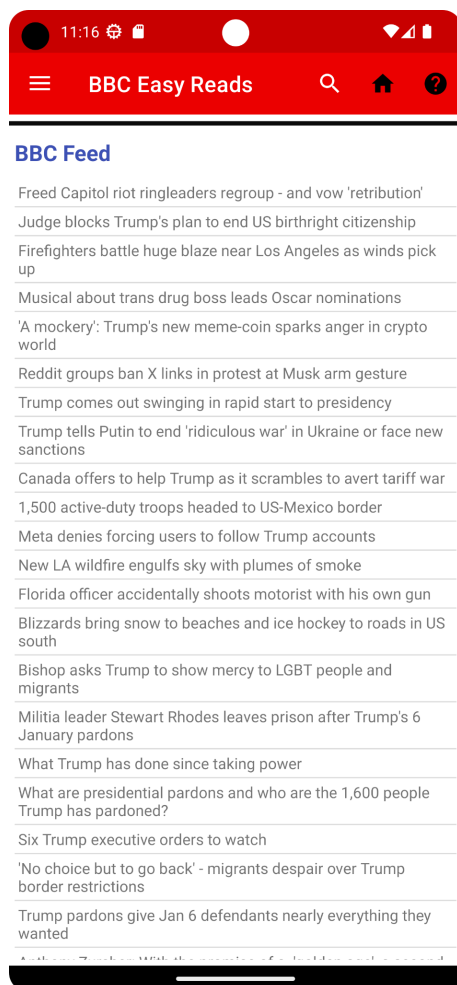
- Implement at least one Snackbar (e.g., after deleting an article from favourites).



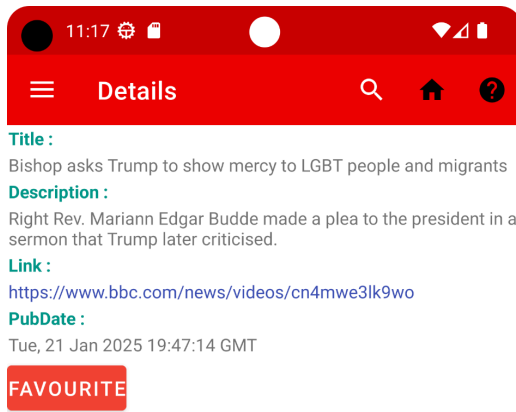
Activities and Navigation

7. Multiple Activities

- Create at least four activities:
 - Main Activity: Displays the list of articles.



- Detail Activity: Shows detailed information about a selected article.



- Favourites Activity: Displays saved articles.

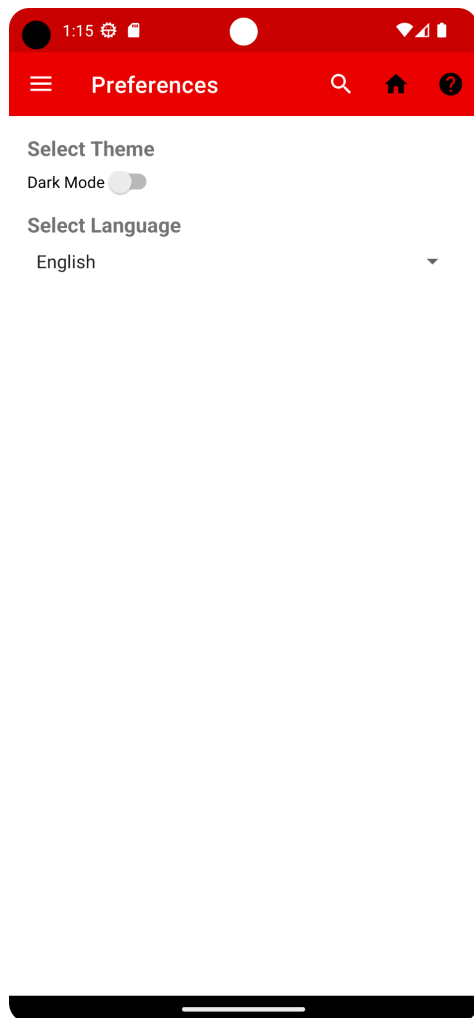


Favourite Feed

- US government workers told to report DEI efforts or face 'consequences'
- US government workers told to report DEI efforts or face 'consequences'
- Trump's plan to end US birthright citizenship faces first court challenge

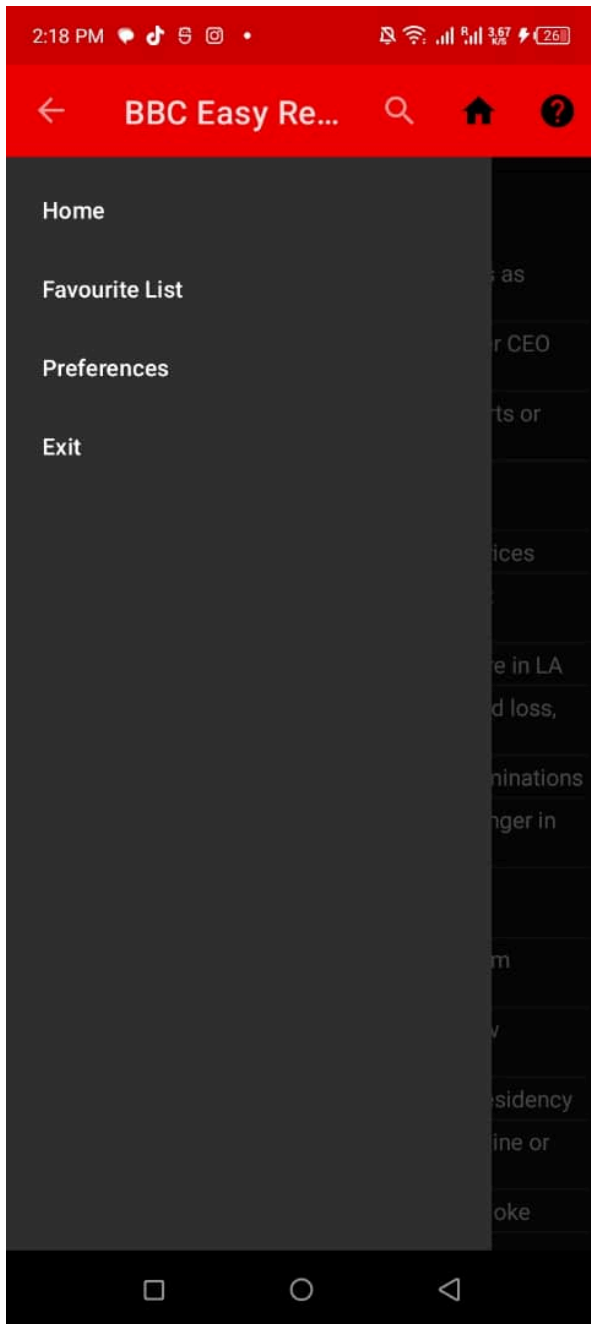


- Preference Activity.



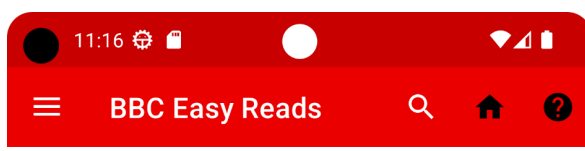
- Exit Activity.

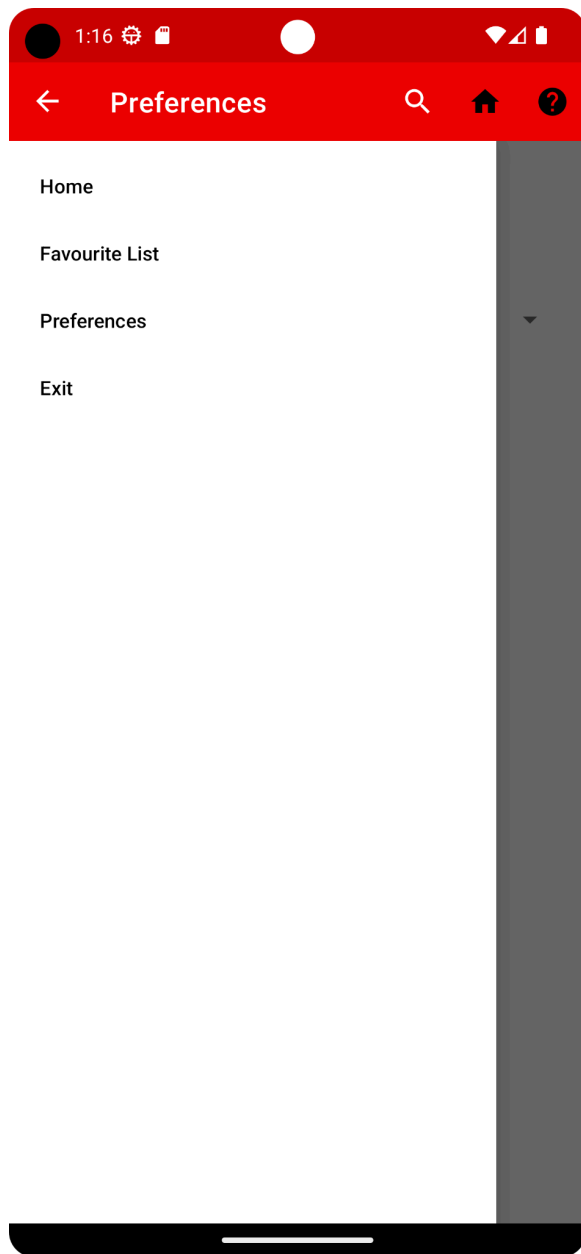
Once clicked closes the app while retaining all data using SQLite and SharedPreferences



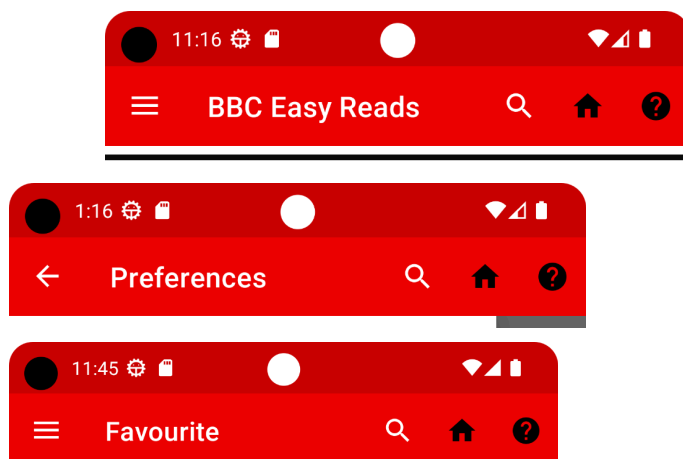
8. Toolbar and NavigationDrawer

- Include a graphical Toolbar and NavigationDrawer for switching between activities.



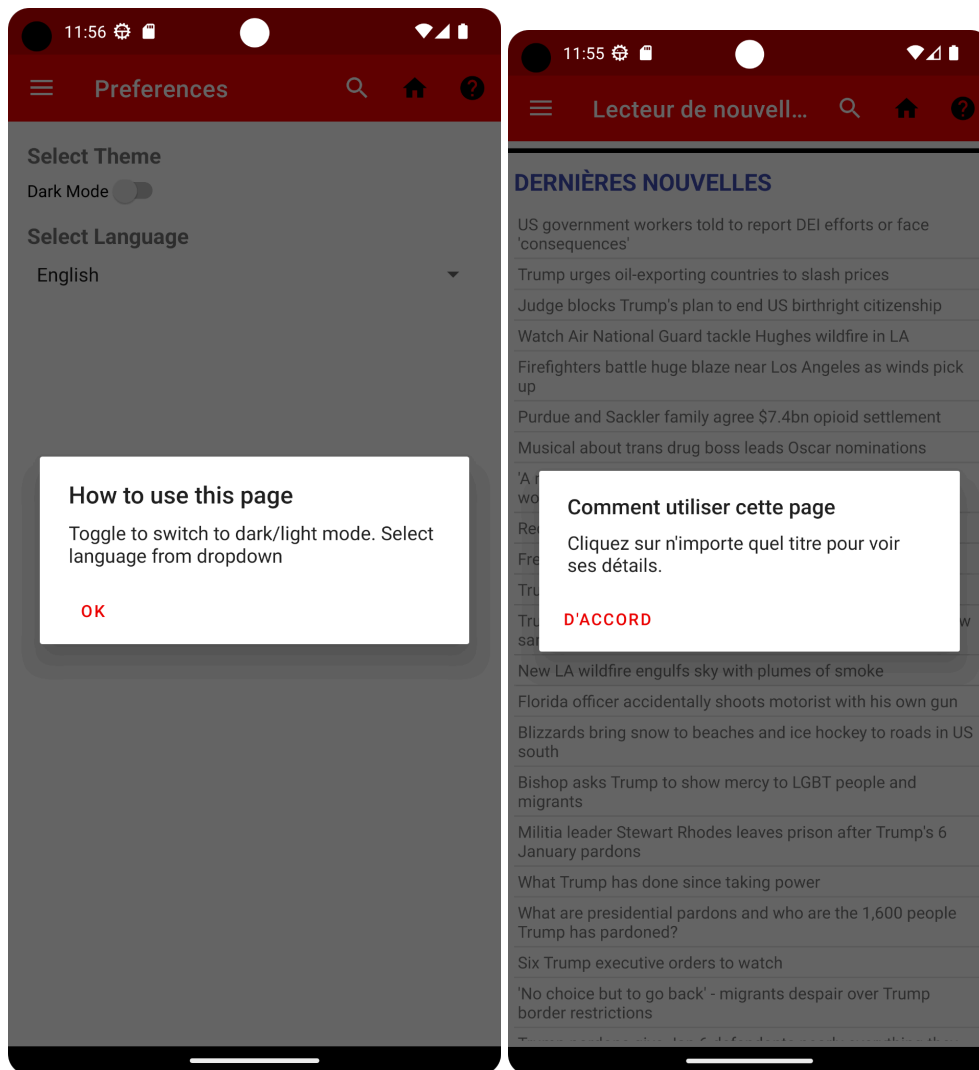


- Toolbar must display the Activity title and version number.



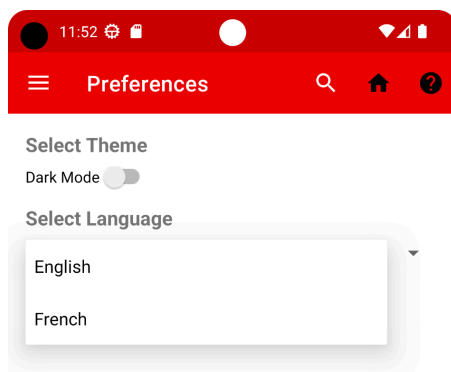
9. Help Menu with AlertDialog

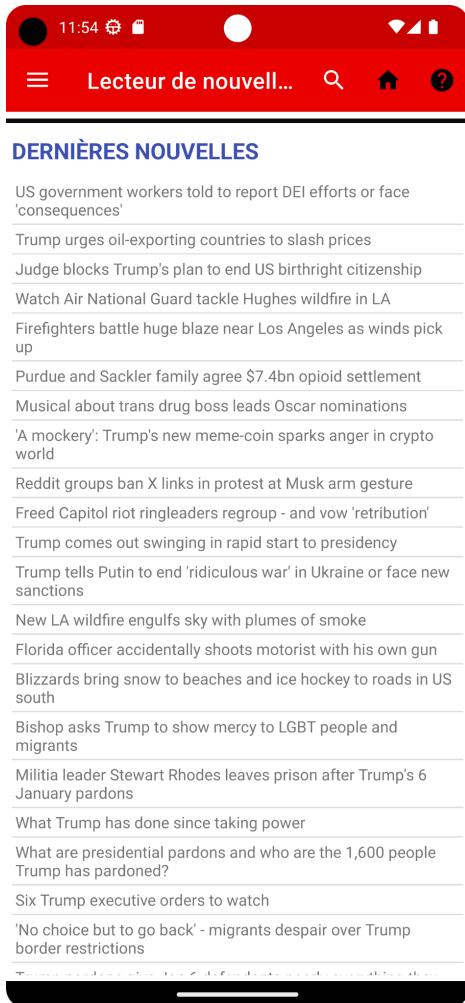
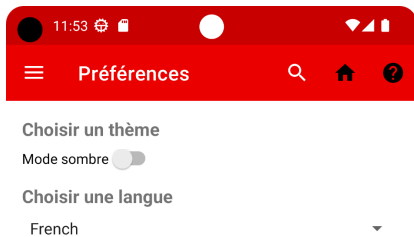
- Add a Help menu in each activity that shows an AlertDialog with instructions for using the app.



10. Multilingual Support

- Provide support for Canadian French (switching between English and French).





Data Storage

11. Persistent Storage with ListView

- Save articles to a database.

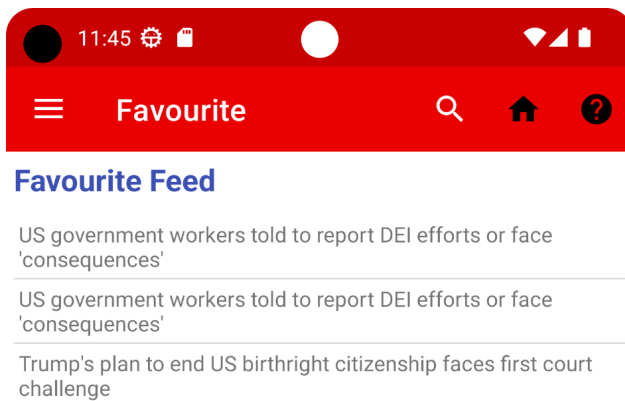
2 usages

```
public DBHelper(Context context) { super(context, DATABASE_NAME, factory: null, version: 1); }

@Override
public void onCreate(SQLiteDatabase db) {
    // TODO Auto-generated method stub
    db.execSQL("CREATE TABLE " + TABLE_NAME + "(_id INTEGER PRIMARY KEY AUTOINCREMENT,"
        + COL_TITLE + " text,"
        + COL_DESCRIPTION + " text,"
        + COL_LINK + " text,"
        + COL_DATE + " text);");
}

@Override
public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
    // TODO Auto-generated method stub
    db.execSQL("DROP TABLE IF EXISTS " + TABLE_NAME);
    onCreate(db);
}
```

- Ensure saved articles reappear in the ListView upon app relaunch.



12. Add/Delete Functionality

- Enable users to add articles to favourites and delete them from the database.

11:43

Details

Title :

US government workers told to report DEI efforts or face 'consequences'

Description :

Government employees received emails threatening "consequences" if they did not report DEI work to the White House.

Link :

<https://www.bbc.com/news/articles/c78wn5qg3nyo>

PubDate :

Thu, 23 Jan 2025 19:56:52 GMT

FAVOURITE

11:45

Favourite

Favourite Feed

US government workers told to report DEI efforts or face 'consequences'

US government workers told to report DEI efforts or face 'consequences'

Trump's plan to end US birthright citizenship faces first court challenge

Added to Favourite List

GO BACK

Favourite Feed

US government workers told to report DEI efforts or face 'consequences'

US government workers told to report DEI efforts or face 'consequences'

Trump's plan to end US birthright citizenship faces first court challenge

Details

REMOVE

Title :

Trump's plan to end US birthright citizenship faces first court challenge

Description :

Washington, Arizona, Illinois and Oregon say the president has no right to amend the US Constitution.

Link :

<https://www.bbc.com/news/articles/c3605g34jx5o>


PubDate :

Thu, 23 Jan 2025 14:19:36 GMT

Description :

Link :

PubDate :

 Removed from Favourite List

Favourite Feed

Trump comes out swinging in rapid start to presidency

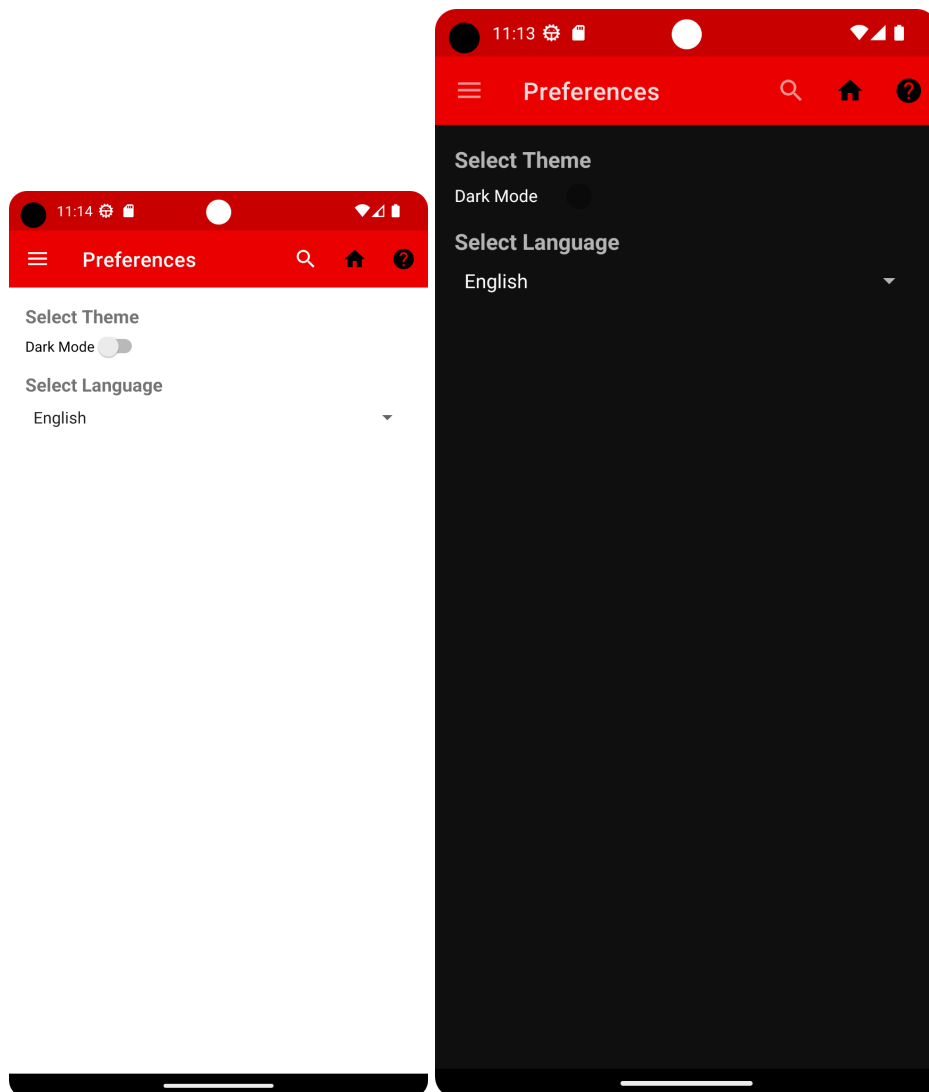
US government workers told to report DEI efforts or face 'consequences'

13. SharedPreferences

- Use SharedPreferences to save at least one application setting (e.g., theme preference, default language).

```
4 pages
public class Preferences extends AppCompatActivity implements NavigationView.OnNavigationI

3 usages
private Switch themeSwitch;
4 usages
private Spinner languageSpinner;
5 usages
private SharedPreferences sharedPreferences;
3 usages
private Toolbar toolbar;
5 usages
private DrawerLayout drawerLayout;
```



Networking

14. AsyncTask for HTTP Requests

- Use AsyncTask to fetch data from the RSS feed (http://feeds.bbc.co.uk/news/world/us_and_canada/rss.xml).

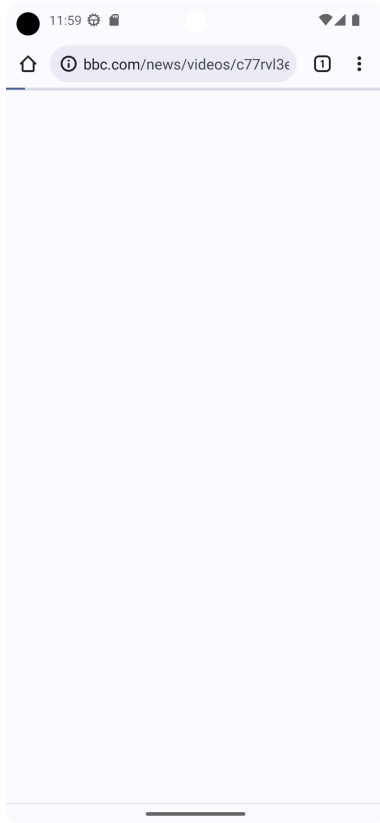
```
// Start background task to fetch news
getNews getNews = new getNews();
getNews.execute(...params: "https://feeds.bbc.co.uk/news/world/us_and_canada/rss.xml");
}

// Async task to fetch news data
2 usages
private class getNews extends AsyncTask<String, Integer, ArrayList<newsList>> {
    2 usages
    ArrayList<newsList> newsList = new ArrayList<>();
    1 usage
    ProgressBar progressBar = findViewById(R.id.progressBar);

    @Override
    protected ArrayList<newsList> doInBackground(String... args) {
        try {
            URL url = new URL(args[0]);
            publishProgress(...values: 0);
            Thread.sleep(millis: 100);
            publishProgress(...values: 25);
        }
    }
}
```

15. Open Links in Android Web Browser

- Load the article link in the device's built-in web browser when clicked.



Fragments

16. Fragment Integration

- Use a fragment in at least one activity (display article details in a fragment - used by favourites and newslst to show a news item).

Favourite Feed

US government workers told to report DEI efforts or face 'consequences'

US government workers told to report DEI efforts or face 'consequences'

Trump's plan to end US birthright citizenship faces first court challenge

Title :
Bishop asks Trump to show mercy to LGBT people and migrants

Description :
Right Rev. Mariann Edgar Budde made a plea to the president in a sermon that Trump later criticised.

Link :
<https://www.bbc.com/news/videos/cn4mwe3lk9wo>

PubDate :
Tue, 21 Jan 2025 19:47:14 GMT

FAVOURITE

Details

REMOVE

Title :
Trump's plan to end US birthright citizenship faces first court challenge

Description :
Washington, Arizona, Illinois and Oregon say the president has no right to amend the US Constitution.

Link :
<https://www.bbc.com/news/articles/c3605g34jx5o>

PubDate :
Thu, 23 Jan 2025 14:19:36 GMT

