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HashTrace

Description

HashTrace is an android application that enables users to track down tweets with specific hashtags, from specific users and specific time span in a particular order. Users can query for the tweets with a particular #Hashtag by providing a value in the settings from which the search query is built and sent to the Twitter API for retrieval.

Intended User

This app is intended for users of the Twitter platform.

Features

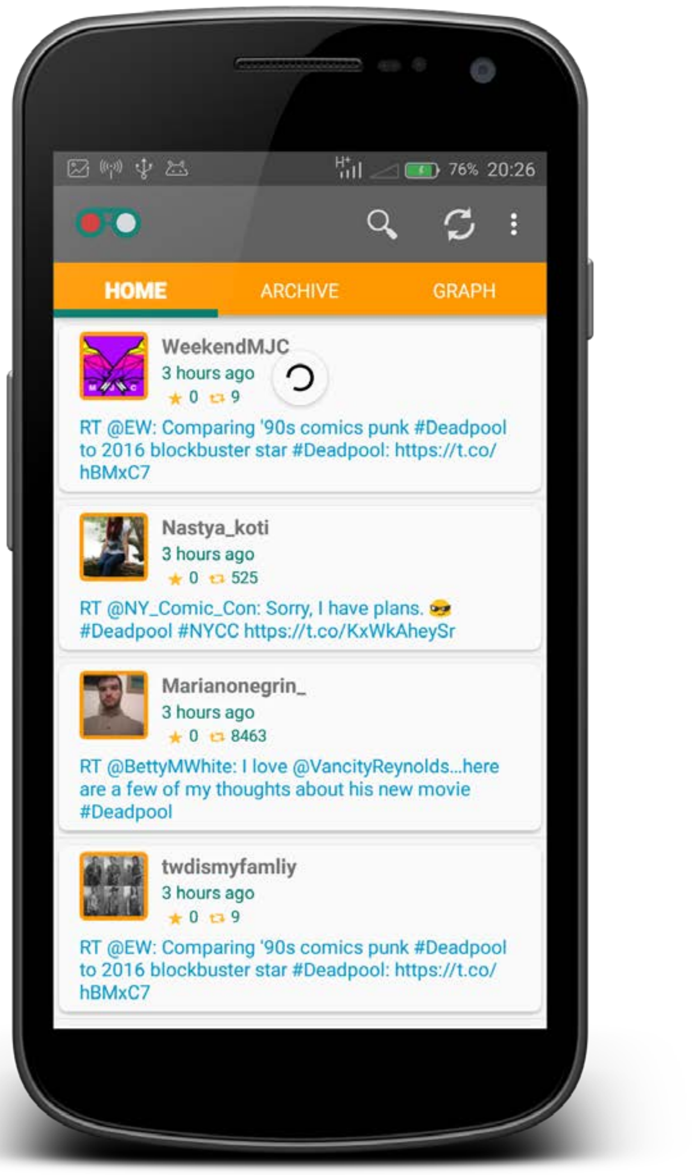
Cool features of the application include: -

- Ability to favorite tweets – these are special tweets which will be stored in users SQLite database for future reference and retrieval on demand by the user.
- Tweet notification – users can set preference to be notified when the specific tweets with specific hashtags, and or from specific users at a postdated time span are detected. This will sync automatically if allowed. Other features like that.
- Cool pull to refresh feature - with sync service in the background.

- Preference Settings – for custom user preferences

User Interface Mocks

Screen 1



WeekendMJC
3 hours ago
★ 0 9
RT @EW: Comparing '90s comics punk #Deadpool to 2016 blockbuster star #Deadpool: https://t.co/hBMxC7

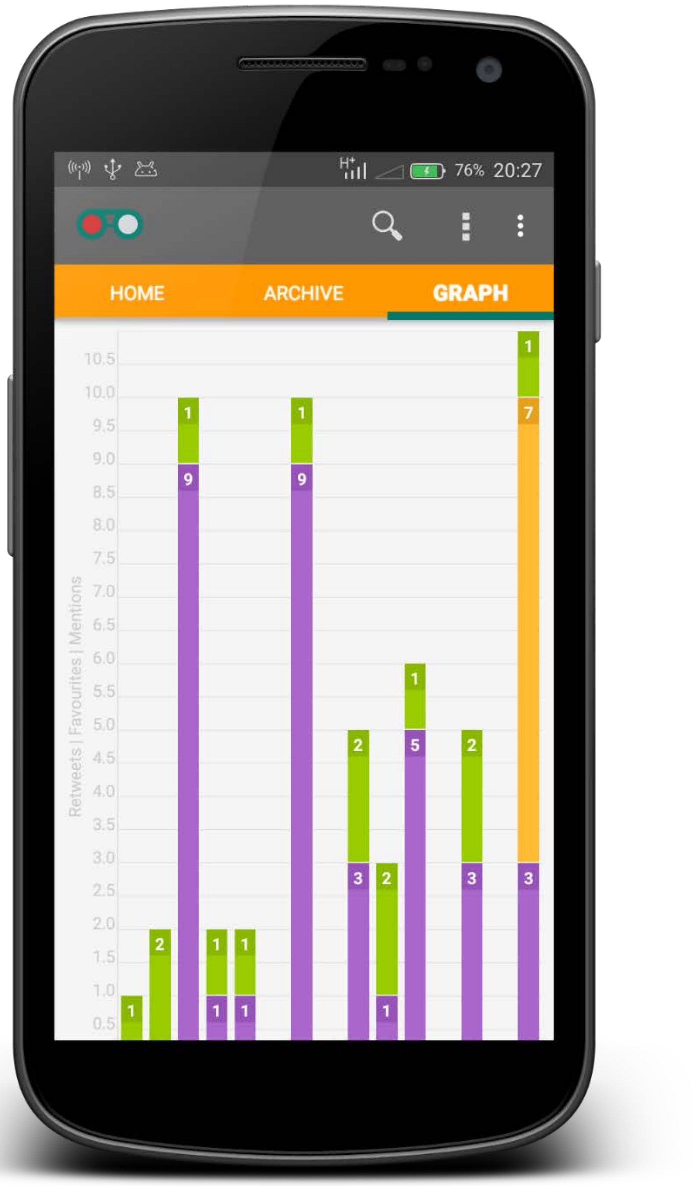
Nastya_koti
3 hours ago
★ 0 525
RT @NY_Comic_Con: Sorry, I have plans. 😎 #Deadpool #NYCC https://t.co/KxWkAheySr

Marianonegrin_
3 hours ago
★ 0 8463
RT @BettyMWhite: I love @VancityReynolds...here are a few of my thoughts about his new movie #Deadpool

twdismyfamliy
3 hours ago
★ 0 9
RT @EW: Comparing '90s comics punk #Deadpool to 2016 blockbuster star #Deadpool: https://t.co/hBMxC7

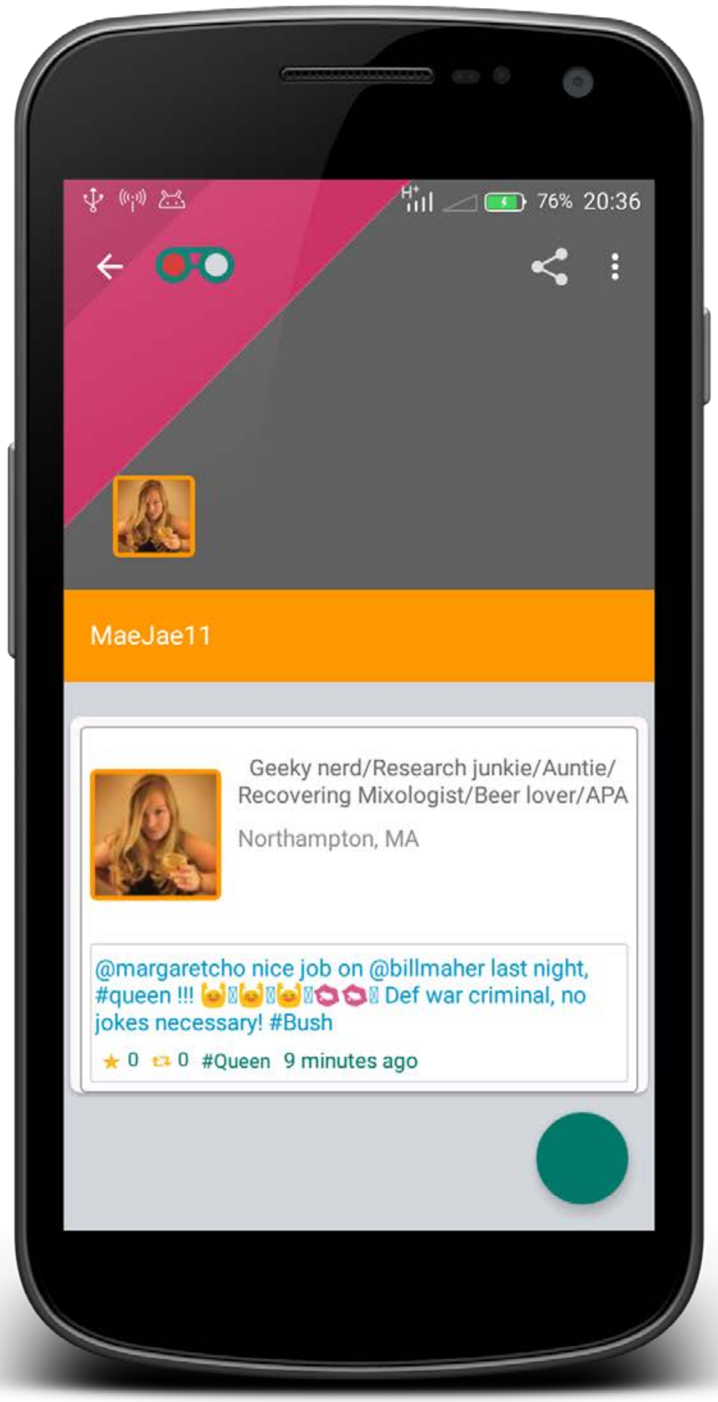
The main screen view – tweets fragment

Screen 2



The main screen view – graph fragment

Screen 3



76% 20:36

MaeJae11

Geeky nerd/Research junkie/Auntie/Recovering Mixologist/Beer lover/APA

Northampton, MA

@margaretcho nice job on @billmaher last night, #queen !!! Def war criminal, no jokes necessary! #Bush

★ 0 0 #Queen 9 minutes ago

The detail screen view – detail fragment

Key Considerations

How will your app handle data persistence?

The app will handle data using its own Content Provider, which I will create from scratch. Data will sync between the twitter API and the local SQLite Database upon user request and on periodic basis.

Describe any corner cases in the UX.

The back button will exit the app. However, since the app will ensure it restores the previous state , it will allow the user to resume the last recent screen.

The ViewPager fragments will use the SlidingTabStripLayout to give the user feedback on the selection.

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

I'l be using the following libraries: -

- Picasso - to handle the loading and caching of images.- has proven to be one of the best image loading library. It is lightweight and properly documented.
- ButterKnife - to inject layout views which helps reduces the lines of code by handling initialization of views automatically.
- Android Support, Design, CardView and RecycleViewer libraries – to incorporate material design theming.
- Twitter4j – provide access to twitter API. Its robust and one of the well documented twitter API libraries.
- FacebookStetho –to monitor network requests

Required Tasks

Task 1: Project Setup

Configure dependencies:
- Configure binary libraries
- Configure module libraries
- Sync project

Task 2: Implement UI for Each Activity and Fragment

List the subtasks. For example:
- Draft UI Scheme
- Build UI for Main – MainActivity and MainFragment
- Build UI for Detail - DetailActivity and DeatilFragment
- Build UI for Settings – SettingsActivity
- Configure Material Design Theming for the Application

Task 3: Implement the Content Provider

Implement the following classes: -
- TweetHashTraceContentProvider
- TweetHashTraceContract
- TweetHashTraceDbHelper
- TweetHashTracePatch

Task 4: Implement the API connectivity

Describe the next task. For example, “Implement Google Play Services,” or “Handle Error Cases,” or “Create Build Variant.”

Use the twitter4j library to establish connection between the twitter API: -
- Create the Necessary Tweet Models
- Create IntentServices or/and SyncAdapter for the network Requests

Task 5: Create Custom Views Library Modules

Create the following library modules
- SlidingTabStripLayout library
- SwipeMenuListView library

Task 6: Create Build Variants

Create the following Build Variants: -
:

- Promo
- Pro
- Free

Task 7: Create Signing Configurations

Generate signing configurations for each build variant and set them in the build files for automatic apk signing.

Task 8: Implement Google Play Services

Implement the following play services libraries: -
:

- Maps
- Analytics
- AdMob for promo and free versions

Task 8: Implement widgets

Create widget to display latest tweet data. Implement classes to provide the following functionalities: -

- Widget remote views
- Widget layouts
- Widget services

Task 9: Implement Optional Components of Rubric

Implement the following optional components: -
:

- Notification
- ShareActionProvider
- CustomViews
- BroadCastEvents