

How to Use this Template

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GitHub Username: Adsama94

NSAW

Description

NSAW is all in one app keeping the user informed about the latest news, stock prices, weather information.

Intended User

Anyone can make use of this app. Suitable for most ages.

Features

The main features of the app are - .

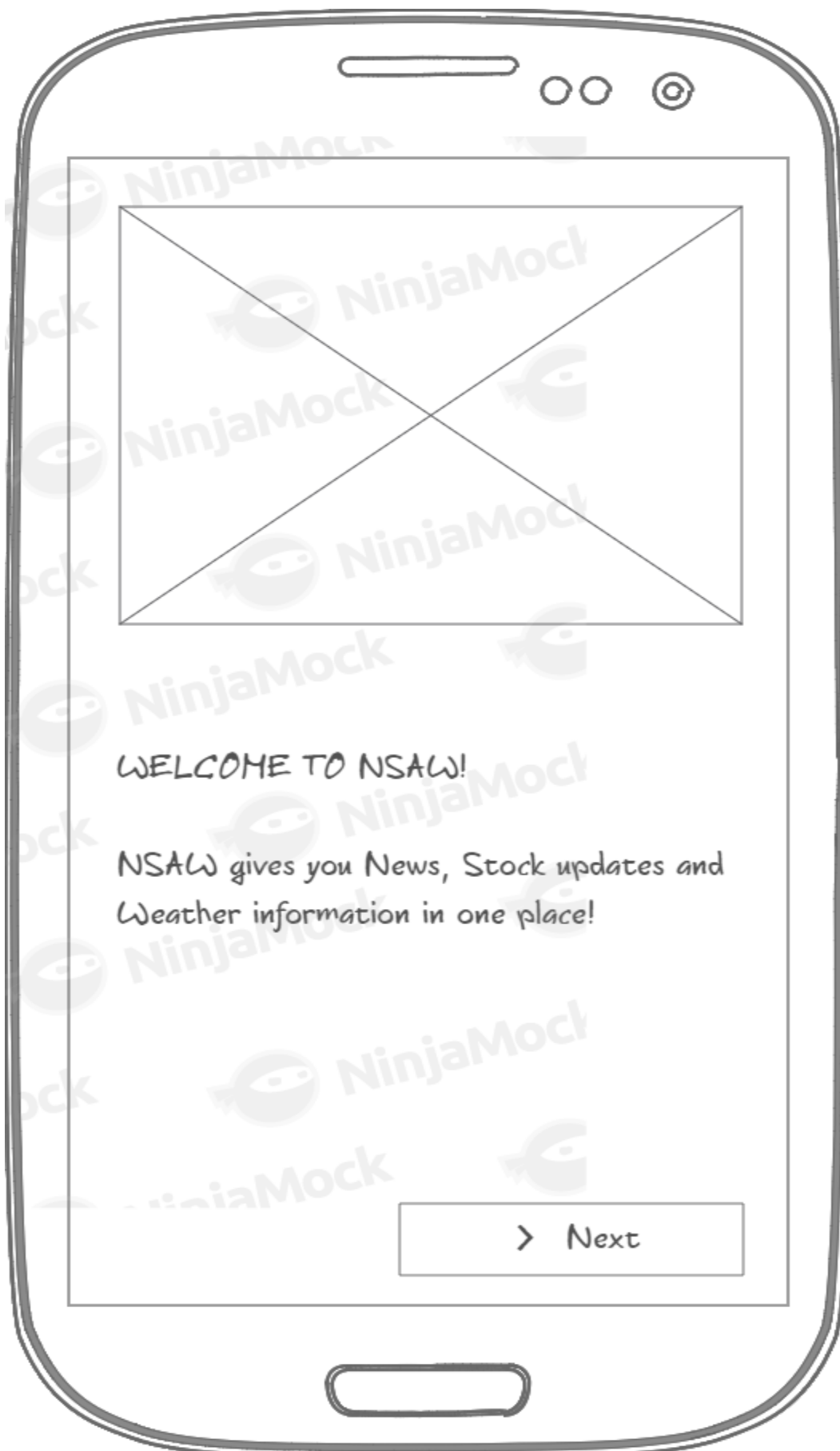
- Latest news on the fly from 5000+ sources.
- Accurate weather updates and extended forecasts.
- Accurate stock market prices with regular updates.

User Interface Mocks

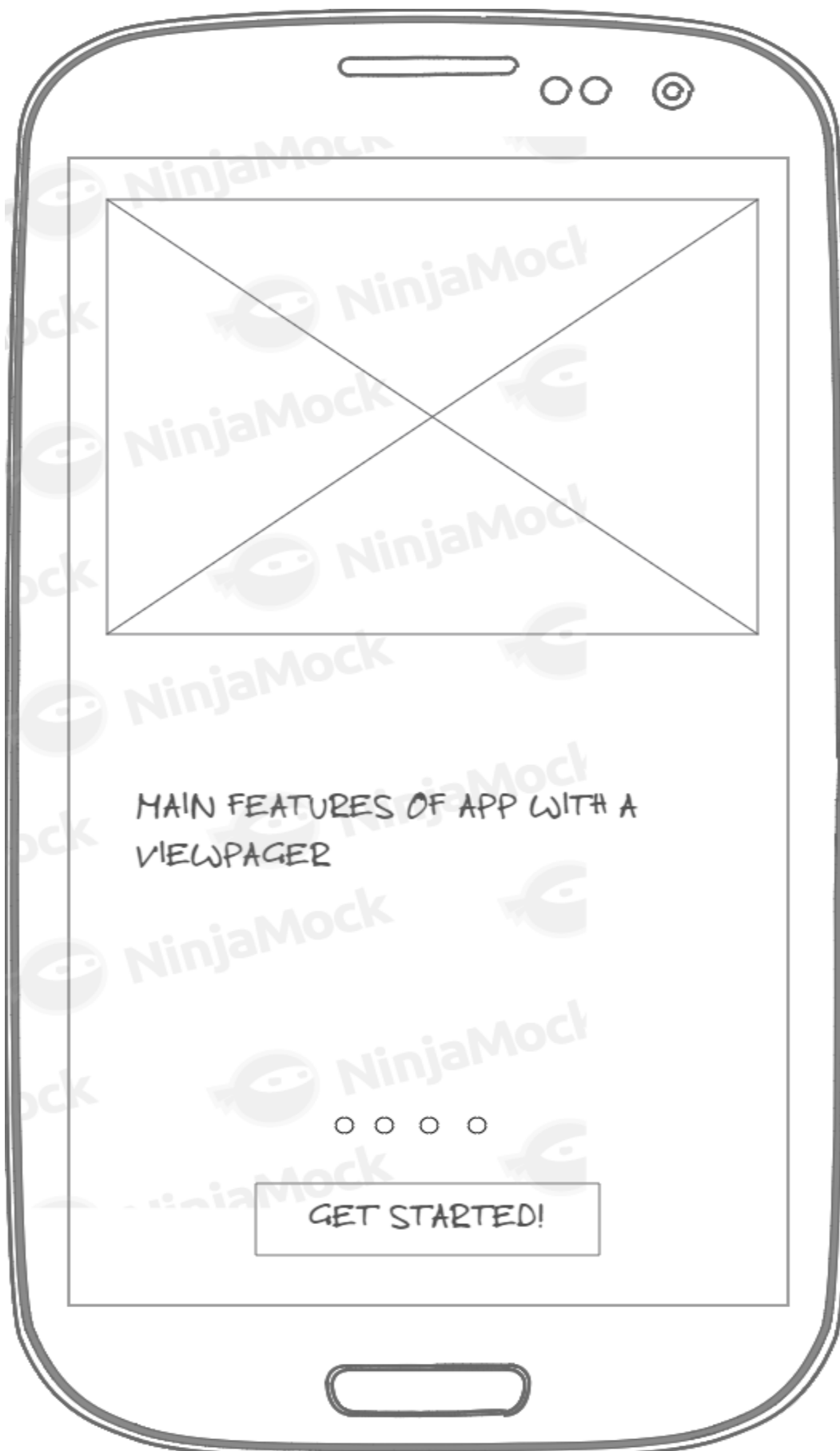
These can be created by hand (take a photo of your drawings and insert them in this flow), or using a program like Google Drawings, www.ninjamock.com, Paper by 53, Photoshop or Balsamiq.

Screen 1 (Splash Screen)

The Splash Screen will display the logo and the colors of the app with a welcome message. This screen will also check for internet connectivity. If the app has access to internet, the user moves ahead, if not, a dialog box pops up to open settings or to continue offline.



Screen 2 (Onboarding Activity)



This screen shows the main features of the application with a view pager showing imagery. The user clicks on the “GET STARTED BUTTON” to move on to the Main Activity. This screen is displayed only the first time the app is launched.

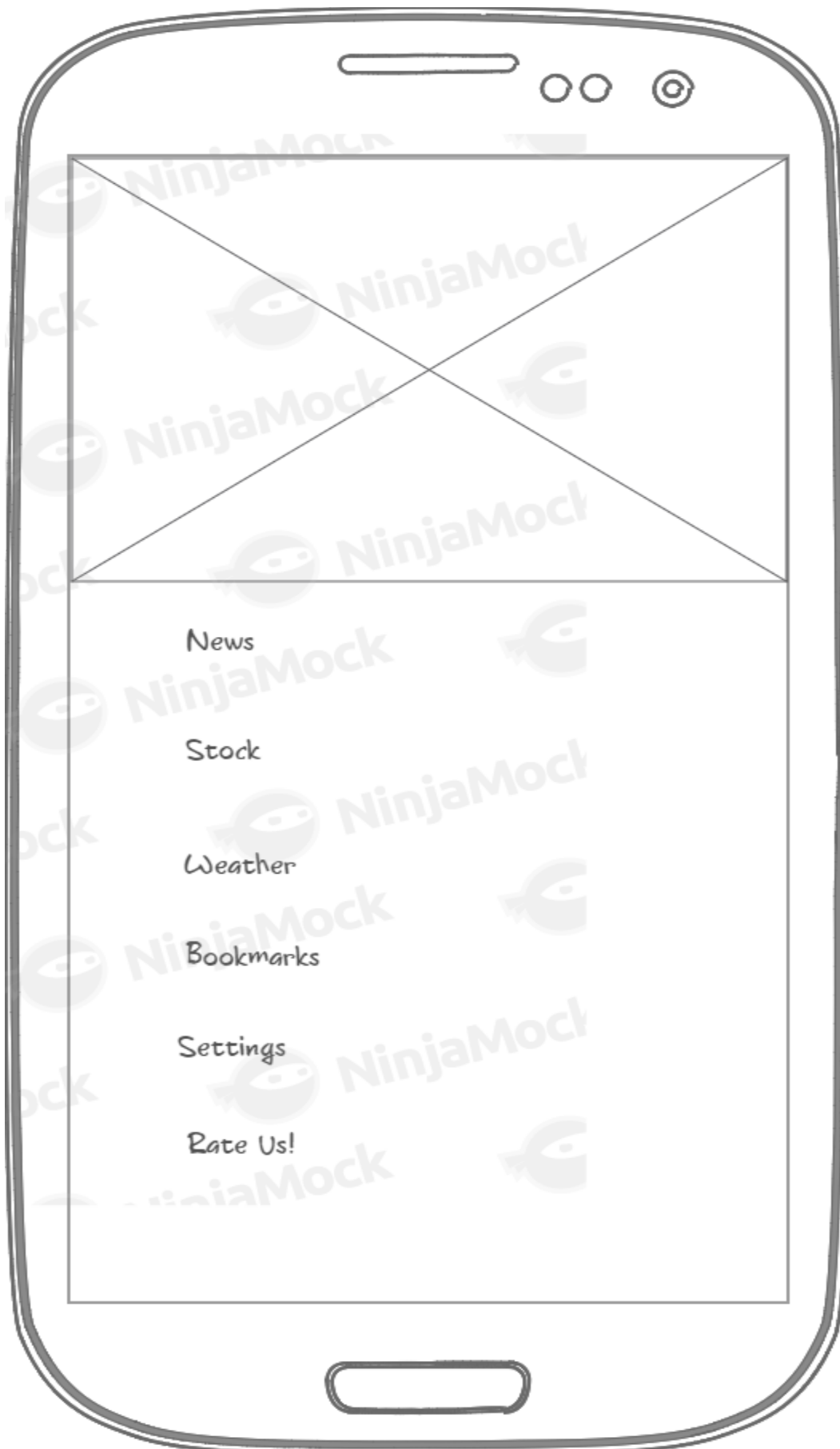
Screen 3 (Main Activity)



This screen will display the primary layout and information of the app. The highlighted information will display in the CardView and the remaining information will display in a RecyclerView. Clicking on any of the item on the RecyclerView or the clicking on the CardView will take the user to the detail screen. Google Ads will also display a banner on the bottom of the screen. By default, the app will use **IntentService to fetch results** in the background.

To further fine tune user experience, the toolbar also provides a location icon which accesses the user location to provide appropriate results. For example - precise location weather updates, precise location news updates, etc.

Screen 4 (Navigation Drawer)



The user can also click on the Hamburger Icon on the top left of the toolbar on the MainActivity to open the navigation pane from where the user can select what they want to see in the main screen - News(Default selection), Stock, Weather or change settings.

For the following search requests, **AsyncTask will be used** for execution.

If news is selected, user can search for any keyword.

If weather is selected, user can search for any location.

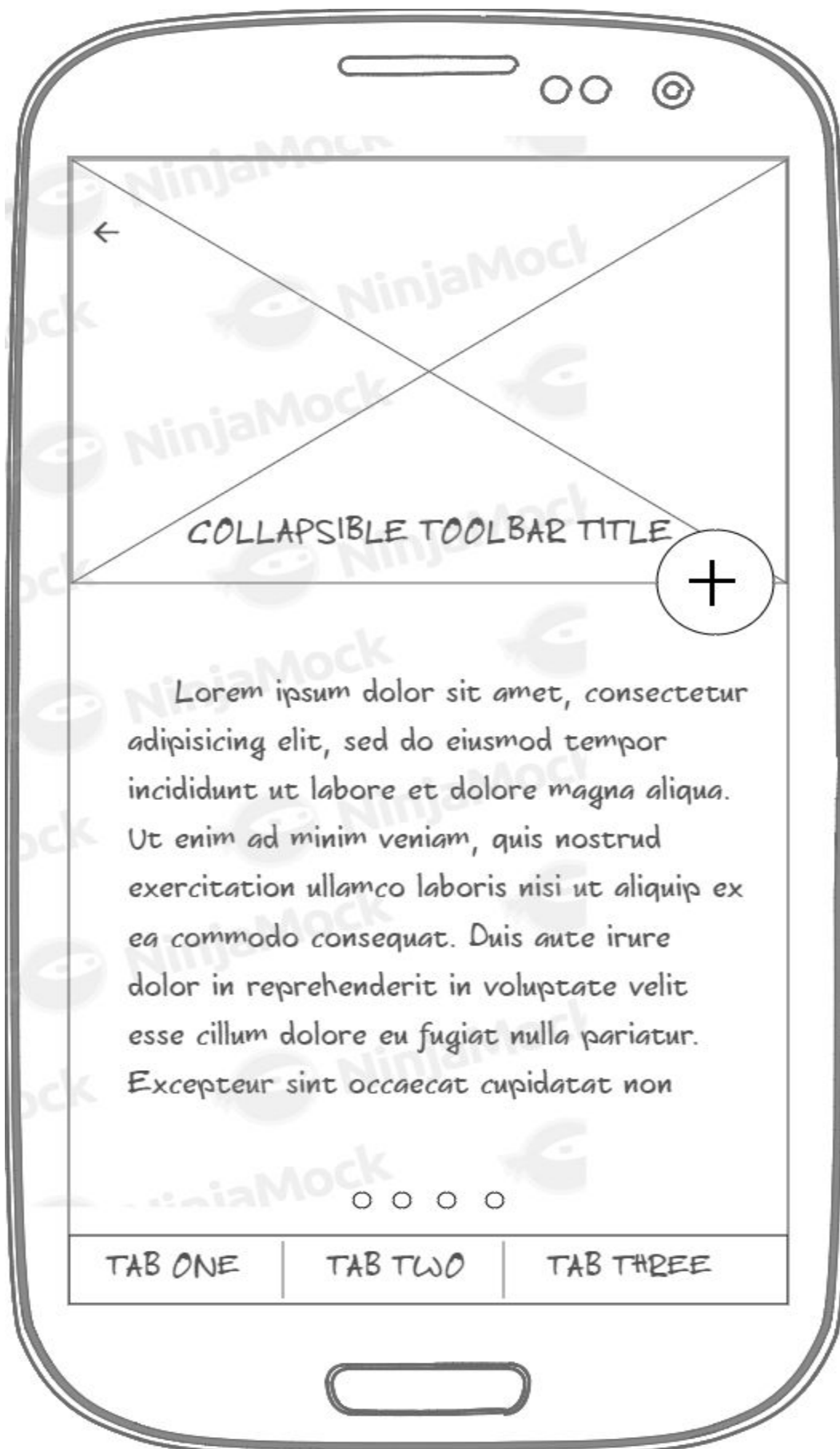
If stocks is selected, user can search for any company name.

If bookmarks is selected, user can view the bookmarked news, weather, stock info.

If settings is selected, user is redirected to settings screen.

If rate us is selected, the user can rate the app on the playstore.

Screen 5 (Detail Activity)

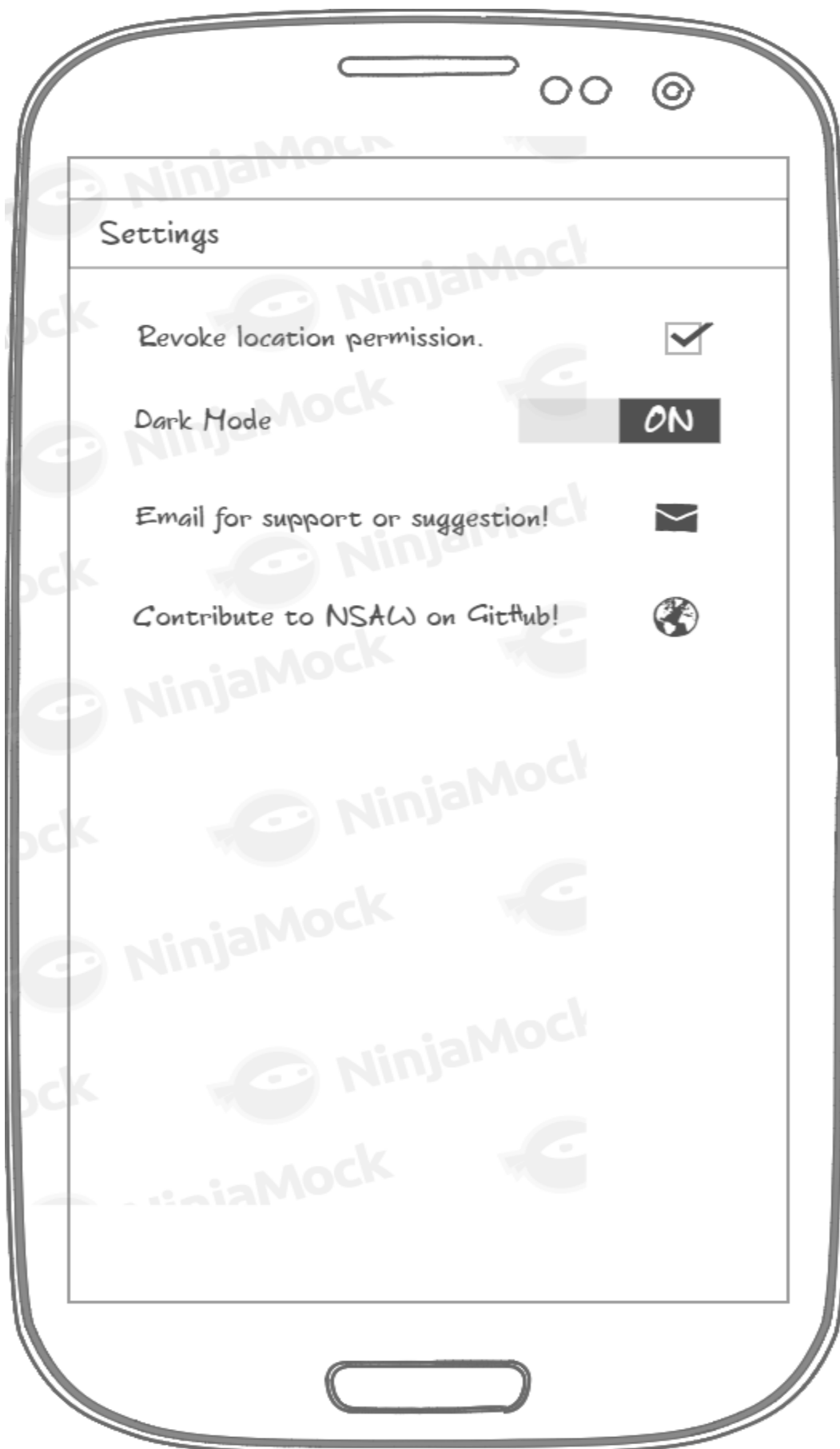


The Detail Activity shows the in-depth details of an item selected from the CardView or the RecyclerView in MainActivity. The activity has a collapsing toolbar and a vertical ScrollView with a ViewPager which will enable horizontal scrolling through stories belonging to one topic. (News for example, or weather for the next day).

The bottom navigation bar will allow users an immersive experience of changing topics right from the Detail Activity instead of going to MainActivity and opening the drawer to make the selection.

The Floating Action Button will allow users to either share the current story or to save it in the device storage for offline viewing.

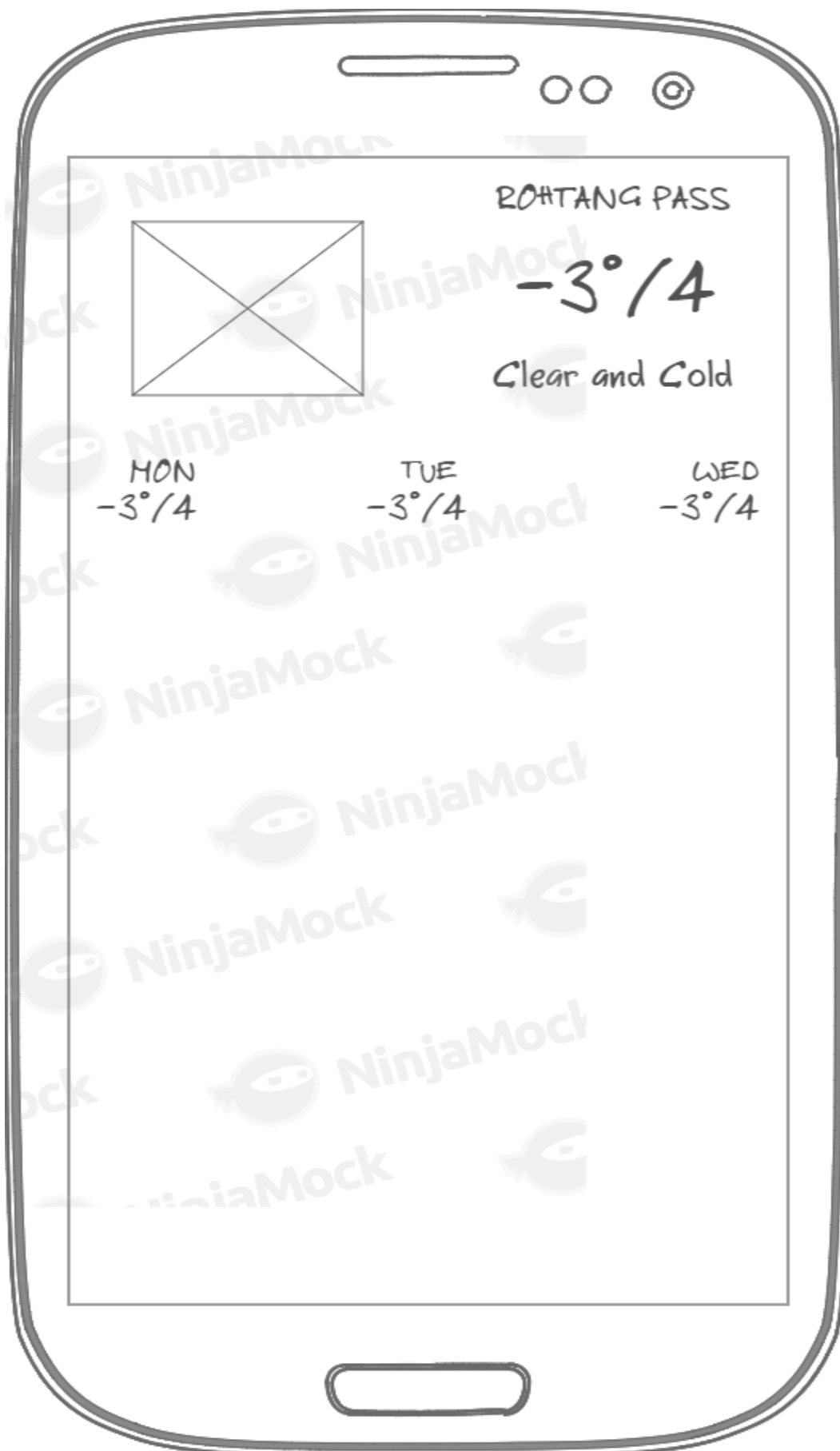
Screen 6 (Settings Activity)



The settings screen provides the user with multiple options - such as changing the app theme, email button for any suggestions, complaints or errors the user may have encountered or to just simply revoke the location permissions.

Screen 7 (App Widget)

The NSAW app also provides a device home-screen widget which displays the current weather along with an extended forecast.



Key Considerations

How will your app handle data persistence?

The app will use a content provider to interact with a SQLite database for data storage on device. The user can favorite or bookmark any news, stocks, weather updates.

Describe any edge or corner cases in the UX.

If the app loses internet connectivity anytime during the flow, the user is prompted through a dialog box to check connectivity. The app gets notified dynamically in change in connectivity.

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

Picasso to handle the loading and caching of images.

Butterknife to bind views to avoid findViewById calls.

Retrofit/OkHttp for various RESTful API/Http calls.

Espresso to test various UI elements.

CircleImageView for rounded ImageViews.

Lottie for various transitions and animations.

Describe how you will implement Google Play Services or other external services.

The app will leverage the use of **Google location services** to determine the exact location of the user to provide accurate weather updates.

The app will also rely on **Google analytics** to get insights on usage and potential user retention statistics.

The app will also use **Google AdMobs** to display small banner ads and interstitial ads.

Next Steps: Required Tasks

The following section provides a brief step by step approach of the tasks needed to complete the app.

Task 1: Project Setup

Gather API keys from various API providers. Narrow down data to display on the UI.

- Configure libraries.
- Add all dependencies.

Task 2: Implement UI for Each Activity and Fragment

- Build UI for SplashActivity
- Build UI for OnboardingActivity
- Build UI for MainActivity
- Build UI for DetailActivity
- Build UI for DetailFragment
- Build UI for Widget

Task 3: Implement Google Services

Implement Google Location Services, Google AdMobs.

- Display small banner ads and implement interstitial ads between main screens.
- Add Google analytics to UI elements for tracking.
- Add google location services.

Task 4: Set up data persistence

Creating a custom Content Provider and database to store news, weather updates, stock information.

- Implement sharing features to send data to other apps.
- Implement custom SQLite Database to account for proper storage of items with respect to type. Like news, weather, etc.
- For offline mode, the content provider uses a CursorLoader to display the bookmarked content to the views.

Task 5: Add notifications

Adding in-app notifications for weather alerts, latest news.

- Dynamically broadcast notifications on appropriate events.
 - Add intent to open up the app and navigate to the event that triggered the notification.
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