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Course: Comp 4630 - Mobile App Development I

Professor: Dr. Haim Levkowitz

# **Group Project Term Paper**

## I. Brainstorm App ideas

Nowadays there are a ton of mobile apps out there all around the world on all mobile platforms such as Android and iOS. The growth of mobile apps has been rapidly growing in the past decades and should keep growing day by day. There are a lot of mobile apps ideas that our group can choose from based on the very first assignment that we did in class. At first, we listed many mobile apps that could be useful to users. Our initial idea on our app project was creating a nearby charity events app which basically displays all the charity events that are currently happening locally. We then tried to find an API that we could implement into our app that will get charity events data nearby. However, we were unable to get the api that would generate what we want for our project. As a result, we decided to brainstorm another project idea which was "News World APP".

## II. Idea Implementation

In today's society, lots of people own mobile devices and have social media accounts. This is a great opportunity for unethical people who intentionally want to spread fake news via social media. As a consequence, people will become victims of fake news. To tackle this problem, our group came up with the idea of creating a News World App which will be able to eliminate the spread of fake news among people.

### III. Introduction to News World App

The News World App is the mobile application that allows users to access the most recent news around the world. By getting access to all the recents and hot news around the globe, there will be no fake news so the users can be hassle free. There are also different categories of news from which users can choose. Those categories consist of technology news, sport news, business news, health news, science news and entertainment news.

Moreover, users can use the chat feature to chat and share articles with their friends in the app.

#### IV. Research on resources

Our group began looking into possible resources such as the relevant APIs and best possible colors combination for our app before deciding to work on our project. We decided to use News APIs from "newsapi.org" as our main data resource. This News API allows us to fetch their news data with no cost at all. On top of that, we also decided to use the retrofit API to make a call request to the News API website and Picasso API to display the image via any image URL in our news world app.

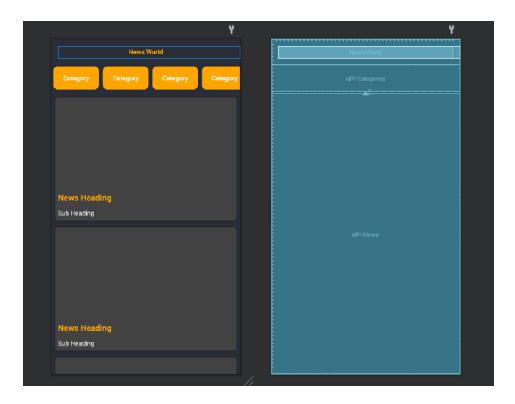
We made sure the News API which we intend to use is workable. We used a postman application to simulate the get request to the News API server. Once everything is error-free. We then try to combine the data in our layout.

#### V. App Layout Design

Before designing the layout for our News App, our group has already checked the data which had been test-run in a postman application. As a result, our group had a clear picture of the possible data we could get from the News API server. We listed down all the data variables and started to design our app layout. For example, each article contained a picture, title and subtitle. Our group would use that available data to draft the layout. We decided to put all this data into Relative-layout and inside the relative-layout. We put all that data into scroll-view, which allows users to scroll up and down the screen. Finally, we created another relative layout to hold the image-view and text views for our title and subtitle accordingly.

There are a total of two main screens in our app. Those screens include main-screen, news-details screen.

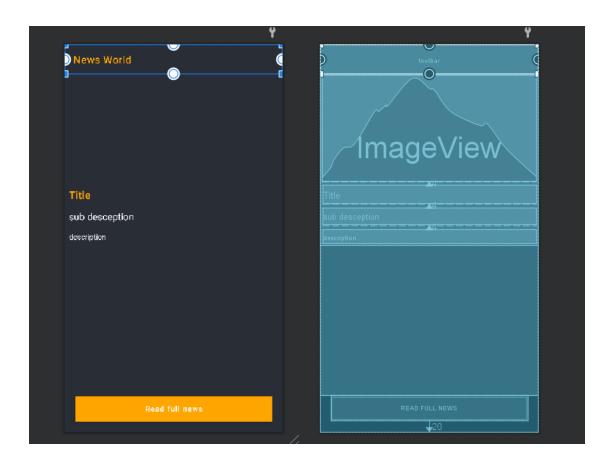
#### V.I Main-screen:



Our main screen consisted of three sections. The first section is the text-view which functions as our title. The second section is the recycle-view to horizontally hold the categories which were list-Items. In addition, each category item was designed in a separate xml file to make the design layout consistent. The Third section is also the recycle-view which holds vertically the list-item and each item was also designed in a separate xml file.

When the users clicked on the categories option, the main screen will automatically update its content and fetch the news based on the categories option.

### V.II news-detail screen:

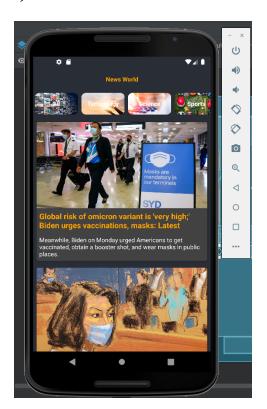


The news-detail screen will be shown if the users clicked on the news from the main-screen. This screen contained three sections. The first section is the toolbar as text-View for title. The second section is the relative layout which holds the image-view, text views for title, subtitle and description accordingly. The third section is the button. This button would allow the user to access the news' link for full news.

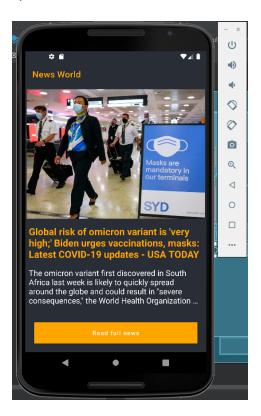
## VI. App output:

This is the output example for our News World App.

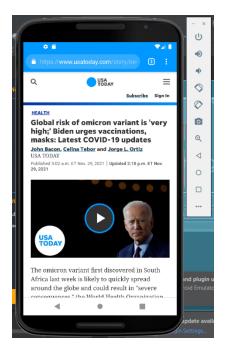
## 1)Main-Screen:



## 2) News-detail Screen:



# 3) The Article Screen:



# VII. Features:

We plan to add more features for our project such as log-in features and chatting features in the following Mobile App II class. These features will allow the users to be more interactive with other users, especially if the users want to share the news to their friends and family.