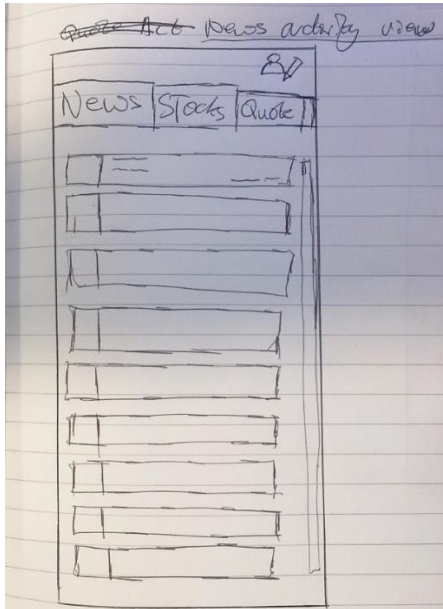


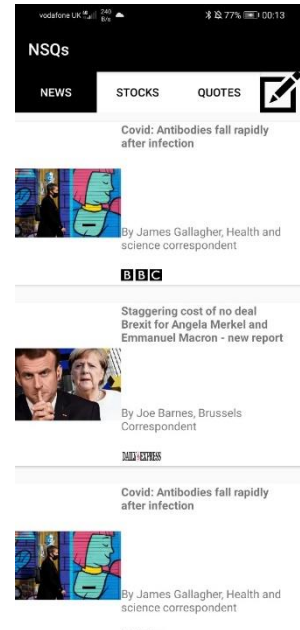
## CS-306 Coursework 1- Designing a news app for Android

### News View:

The first screen of the app will be the News part of the application, the user will be greeted with a scroll view that contains a number of card views that will hold information about news articles based on the users preference. This is a rough initial sketch that I drew up for the news screen so when using Android Studio, I had a reference to work to:



And this was the final design:



From this screenshot we can see that the user has a scrollable card view that allows them to look through various news articles. Also, we can see the other tabs at the above the scroll view that allow the user to switch to different parts of the application. The tab that is in black is always that screen of the app that the user is currently viewing.

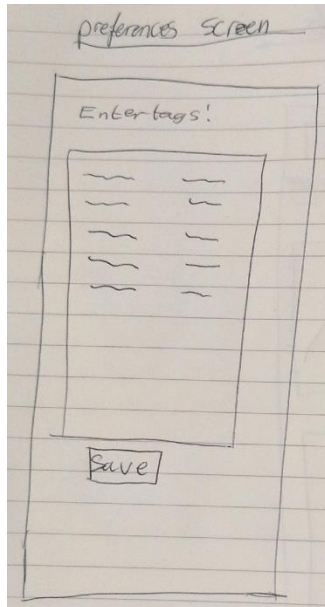
Each card view has the main image from the news article, next to that it has the title/headline of the news article and then below the writer and logo of the paper that it was taken from. The application will look for new articles every time that it is relaunched after fully shutting down the application, also every 5 hours the application will refresh the news articles and push the top news article to the user via a push notification to their phone. The user will also be able to pull down on the scroll view to refresh the list and force the application to look for new news articles. Another time that the application will look for new articles is every time the preferred news topics are updated or changed.

The images can be hidden by either clicking on them individually or by double clicking on one image you will have the ability to hide then all, this will allow for a cleaner view that is just text based if the user feels that the images are not important.

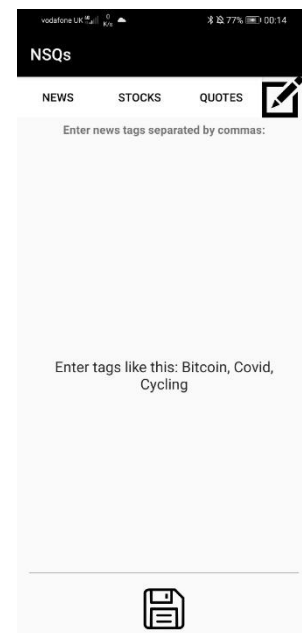
The news preferences can be entered and changed by clicking on the edit icon of the far right of the tabs at the top of the screen, this icon is only available on the news screen as it is the only screen that uses it and would be redundant on other screen and make using the application more confusing.

### User Preferences:

The user can refine the news articles that they are seeing in the news screen by entering tags on a separate screen that the application will save and then only pull news articles that related to and are based around those tags. For example if the user entered the tags: Bitcoin, Covid and Cycling, on the news tab the only articles that would be displayed would related the tags, so you would get a mixture of Bitcoin news, Covid news and Cycling news. The initial design for the screen looked like this:



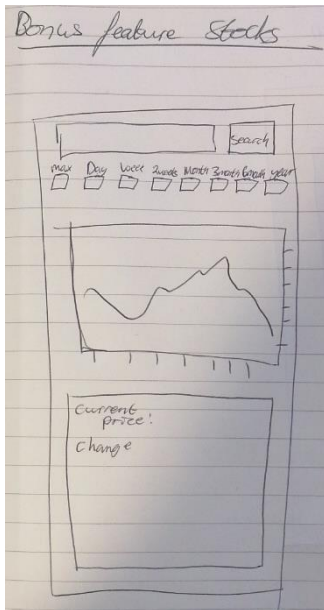
And the final design looked like this:



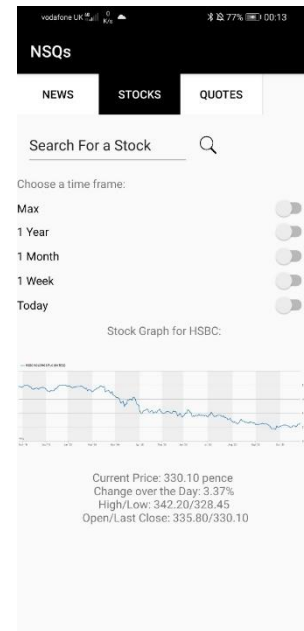
From this we can see that the two designs look very similar and it is a very simple layout with an edit text box that the user can type in and then click the save button to save their news preferences. The user will have to click the save button for the news tags to take effect. This screen as well as the news screen are that only screens that display the edit icon, this is because it makes sense to have the news preferences editor button visible on its own screen and another other subsequent screens that use it and as the Stocks and Quotes screens don't use it, this information is hidden to allow for a smoother usage of the application and as not to confuse the user.

### Stocks View:

This view is accessible by clicking on the "Stocks" tab at the top of the application, it is a screen where users can search for a particular stock so that they can view the graph based on a time period that they have selected. It will also allow the user to see some texted based information about the stock, when available. The initial design on paper looked like this:



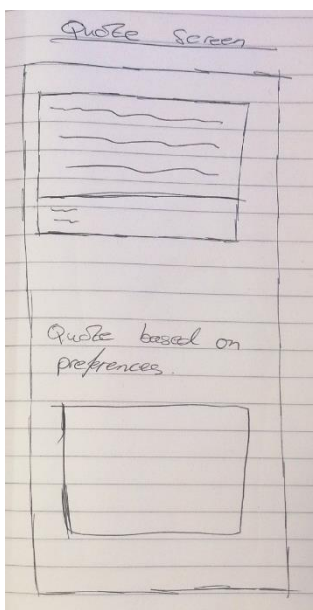
And this was the final design:



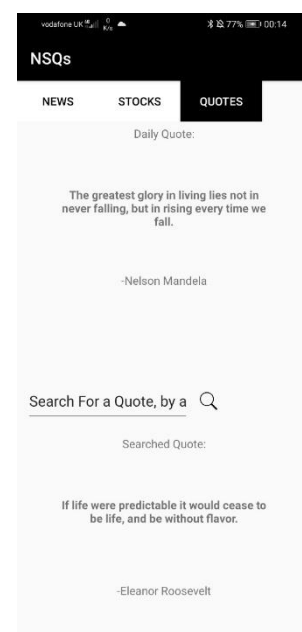
The final design does not look that different to the original sketch. Users will be able to enter a Name of a company or a stock in the search bar, select a time frame to be displayed by the graph and then click the search icon. This will bring up an image of the graph for that stock at that given time, it will also bring up some texted based information about the stock, such as current price, the percentage change over the last day, etc. However, the user will be able to hide this by clicking on it and it will simply disappear and just leave the graph visible. The user will also be able to use a pinch to zoom system to get a close look at the graph if they wish for a closer analysis.

### Quotes View:

This view allows the user to see a daily quote that could help inspire them for that day, another element on this page is the ability for the user to search for quotes, either by a person's name or keyword. The original sketch for this screen looked like this:



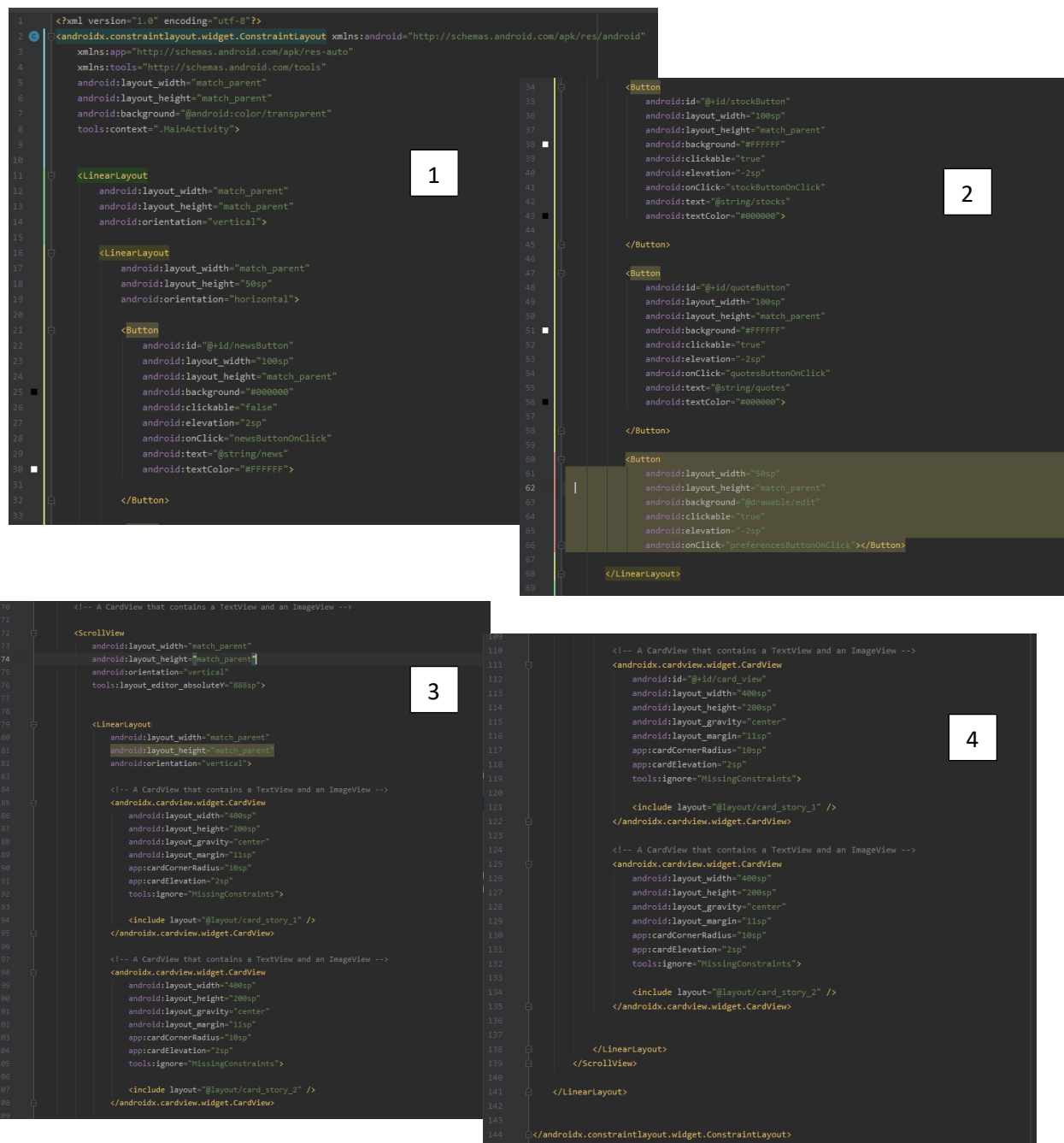
With the final design looking like this:



From this we can see that again the initial and final designs do not look to different from one another. We have the daily quote on the top and then underneath who said the quote is a search box where the user can enter key terms to then look from a quote. On this screen we can see the Daily quote at the top of the screen, this is refreshed every day when the app is first started on that day, with the person's name below. Then underneath this we can see a search bar where the user can enter search terms and names to then get a quote that fits their needs, this could be used for a piece of writing, or if the users need a quote for a presentation.

### XML Screenshots:

#### XML for News View:



XML for Stocks View: