**CS 402: Android Development**

Homework 2

During this semester, you will concept, design and create an app for your final project. Choose 1 idea and refine it. Feel free to submit additional ideas for review.

Requirements

1. **App Idea Description​**: In a paragraph, describe what your application does and a few major features of the app.

**The application will incorporate some of the key important terms in the world of cyber security. The user will be able to look up these words quickly along with its brief explanation. The user would also be able to bookmark key words according their needs. The app will also allow the user to add key value pair of word and meanings to the dictionary as they advance their career in cyber security.**

**The app will also furthur provide some of the important tools such as most common Hashing functions (SHA256, md5 etc) where user will be able to provide an input where they may choose to provide an optional salt.**

**Other things that app would have a built in calculator for programmers. Often time when programmers are doing cipher stuff (XOR operations)or trying to understand a logic they need to bitwise operations. The app will definitely incorporate that.**

**Other things that will be included the app will be an additional password API that will be used to find out if the given in the input is one of the most common.**

1. **Demographic**:**​**Whoistheappfor?Describerelevantinformationsuchasagerange, gender, geography (location, environment, topography), income levels, interests, education level or anything else that describe the uniqueness of your audience.

**The app is mainly focused towards students in cyber security background. Allowing quick lookups and saving their own notes will allow them to enhance their learning and get comfortable with the tools and terminologies that are used all across cyber security fields. The app also targets audience who have pursued their degree in cyber security. Sometimes all it takes to revise are a few clicks.**

**This tool extends the idea of having a regular old dictionary. The tool is more interactive and is focused towards becoming a hand carry tool / Calculator / planner / note keeper for students and cyber security personals.**

1. **Price​**: Describe the monetary methodology of your app. Is it pay to download, in-app purchase, subscription, ad driven or something else? If it’s free, describe why.

**The app will contain in app purchases. The dictionary part (which includes quick look up, adding favorites) of the app along with note taking will be free, whereas using additional tools such as bitwise calculator, password analyzer or hash calculator will be part of in app purchases.**

1. **Mobile Technologies:​** List the technologies that the app will require such as web services, camera, maps, embedded database, accelerometer, bluetooth, fingerprint reader, sensors, pedometer, etc.

**The app will incorporate web services such as use of password API and other things will be use of embedded database.**

1. **Market Research​**: Search the iOS and Google Play stores for apps that do a similar thing to your idea. Provide links. List a few ways that your app will improve upon what’s already out there. Provide details.

Graphical user interface, text

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This calculator is the closet I could get.

**The app will start to acquire important tools as I go along my cyber security path. Hex editor is one of them. Other things will include tools like using encrypting passwords using different modes (CBC, ECB, CFB, OFB), data, information, images, videos to send to a friend. Some other things would be incorporating news feed in one of the frame. Other things may include like a tip of the day, to remain protected and safe as the world of cyber security gets sophisticated day by day.**

**Other things that can be incorporated would be like test prep or running ads for COMPTIA, network+, security+ certifications.**

1. **Wireframes**:**​**Draw or design wireframes foreach of the major screens of your app. Settings and other supporting screens can be omitted.

**Design inspired by the following picture found on internet**:

<https://www.google.com/search?q=dictionary+app+design&sxsrf=ALeKk02KWl40A90yIH4gg7VMOhwrRgm9kQ:1614456339611&tbm=isch&source=iu&ictx=1&fir=OFOxxxBZWgfCyM%252CGUsM8uqH8K0OkM%252C_&vet=1&usg=AI4_-kQQ8nrP8737tDPnzYdc4sAYNvkJqg&sa=X&ved=2ahUKEwiiuoLF7orvAhWLt54KHdJFArEQ9QF6BAgIEAE&biw=1291&bih=808#imgrc=SserD8IW_xXdyM>

Graphical user interface, application

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