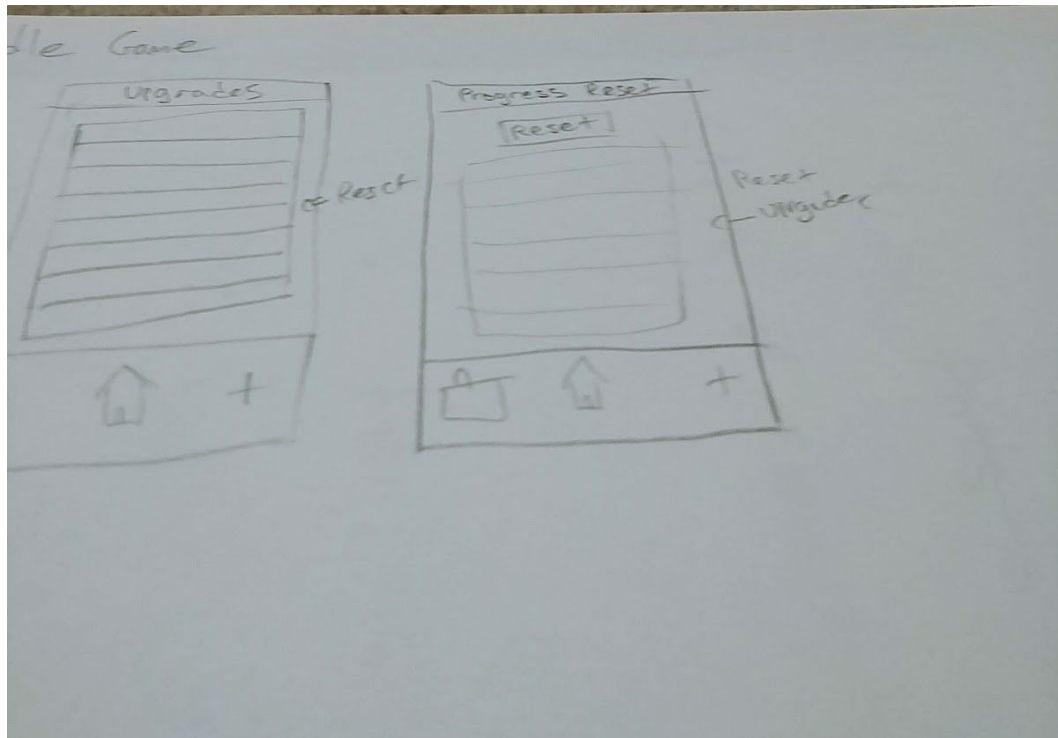
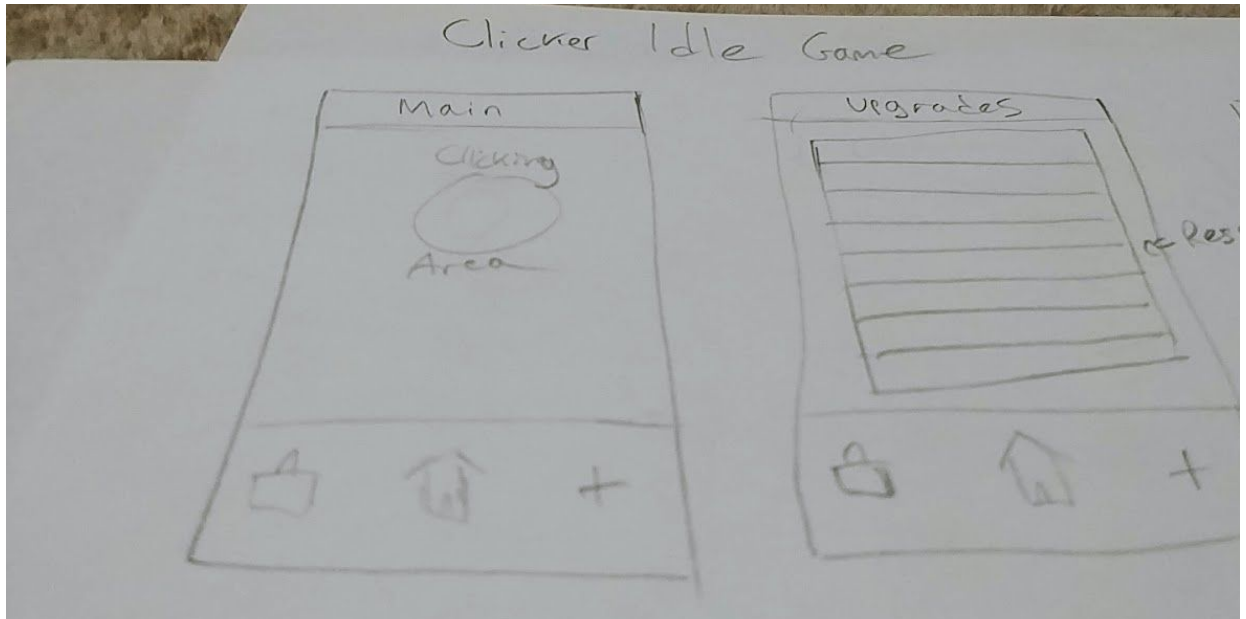


HOMEWORK 2

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App Idea 1 : Idle Game/ "Clicker" Game

1. Concept of this app is pretty simple: gain points by tapping the screen, spend the points on upgrades that passively get you more points. App will be themed around something novel (Cookie Clicker, AdVenture Capitalist, etc.). The app will make progress in the background for a set time.
2. Features:
 - a. "Clicker" screen. Time estimate: 3-5 days. Should be easy to make a basic screen and increment a counter. Technology: Internet connection to check the time that has passed to prevent system clock being changed. Multitouch to register multiple taps at the same time.
 - b. Upgrades screen. Time estimate: 3 days. I think this screen should be easy to create as well, but could probably be worked on as long as I have time, as creative upgrades are what drives these kinds of games. Technology: I can't think of any special tech I'd use here.
 - c. Progress reset. Time estimate: 1-3 days. Lots of these games let you start over once you reach a certain point to make faster progress in a new iteration of the same game. I'd be lacking features to not include this. Technology: Not really sure what I'd use here.
3. **This is just logic and not really a technology.**



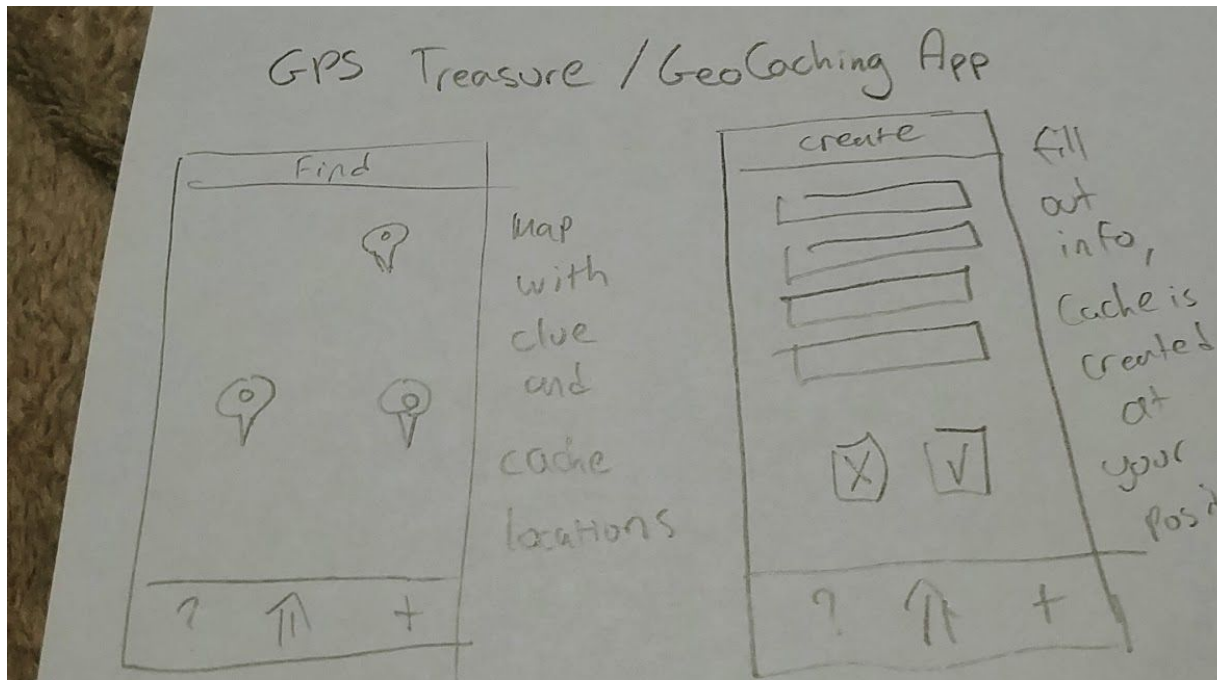
4. AdVenture Capitalist and its sequel (AdVenture Communist) seem to be the prime examples of these sort of games. Both use all the mechanics I mentioned above and keep interest over time through the story/videos and artwork present in the gameplay. In order to compete with these, I'll need a similarly attractive premise to hook players and interesting enough progression to keep them.

5. Audience for this app is very wide due to how casual it is. Cookie Clicker is enjoyed by people of all ages and races, mostly due to its simplicity. You only have to click, so there's no real barrier to entry. I think these kinds of apps attract people who like the feeling of progression, procrastinators, commuters, etc. Anyone who's looking to kill a few minutes potentially gives your app a try.
6. The app would have to be free, with In-App purchases/ads to monetize it. This is the accepted and successful business model for these kinds of games. If you try to charge for one, very few people will be willing to even spend a dollar up front to try it when they can get another for free.

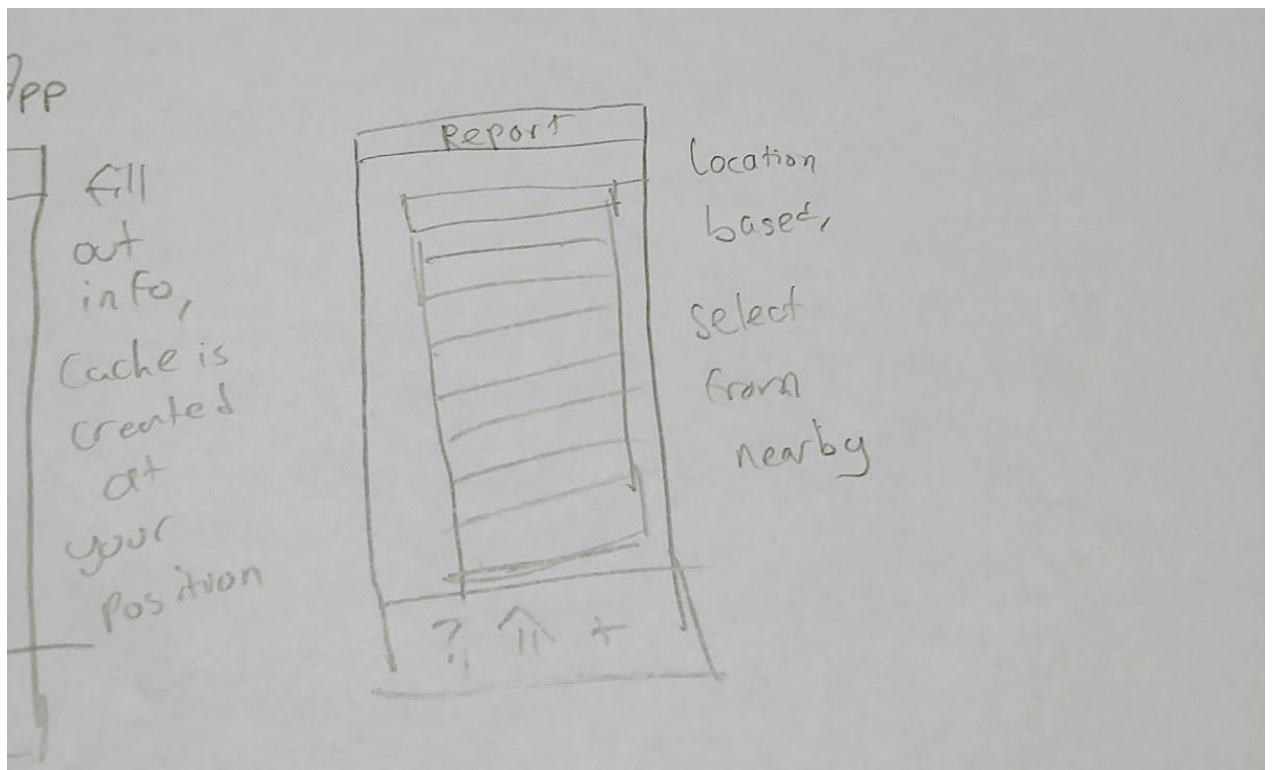
This will need a ton of different mobile specific technologies since there's currently very few in here. The ads and in app purchases would actually be a technology that could be listed above, but will still need more than this.

App Idea 2: GPS Treasure/GeoCaching App

1. An app that leads you to buried treasure. Users would be able to leave their own clues that in turn lead to coordinates for caches that other users could find. Essentially an app for GeoCaching, instead of using a traditional GPS.
2. Features:
 - a. Find a cache. Time: 1 week+, I have no clue how to implement something like this and it would take me awhile. Technology: GPS, database, Internet connection.
 - b. Make a cache. Time: 1 week+, however I could see both of these features being faster after I understand one of them. Technology: GPS, database, Internet connection
 - c. Report a missing/damaged cache. Time: 1 day, should be easy with the database already setup. Technology: GPS, database, Internet connection.



3.



4. Geocaching exists as an app already on the app store, so I would expect this to be the main competition to the app. Reading some of the reviews, their main complaint with the app is that it switched to a subscription model for "premium" features, meaning many of the geocaches are only available to people who pay the monthly fee. I can see this as a selling point for my

This would make a good app. It has a heavy component on the web side to consume, collect, store and then return that data. Using something simple like Firebase would be make that a lot easier.

app, as if it only had a one time fee or was free and monetized some other way it would be a big draw away from the current option.

5. The audience for this app is limited to people who are interested in geocaching, which admittedly is probably a very small and niche market compared to many apps on the app store.
6. This app would either be free with ads/pay for no ads, or just cost 5 - 10\$ up front. I do think monetizing this app is the main issue, as it seems that people are unhappy with the idea of a subscription, which is the easiest way to monetize a service like this.

App Idea 3: Criminal History Database

1. An app that attempts to notify you of convicted criminals in your vicinity. Uses local news feeds, local jail arrests, a felon database and the sex offender registry to provide updates and alerts. Contains links to tip sites and numbers for authorities.
2. Features:
 - a. Local crime news feed, probably would be unavailable in certain areas. Time: 1 week+, I'd have to find and implement an API for this. Technology: API, Internet connection, GPS
 - b. Criminal database lookup, could simply search an existing site and display the results. Time: 1-3 days, depending on the ease of displaying the info. Technology: database, API, Internet connection, GPS
 - c. Sex Offender notification, could check the registry to notify you of individuals in your area. Time: 1 week+, would be similar to implementing the news feed.
 - d. Tip sites info page and law enforcement numbers. Time: 1 day, should be fairly easy to implement. Technology: Internet connection, API?, database

How would you parse the data for this since the news and other items are mostly buried in text. There are the arrest records that are public but it'd be pretty difficult to parse the news articles. The list of technologies is ok, and you might need to add a few more, but overall it's an app that would do well if all the pieces are there. However, unless you know how you'd parse all that data reliably this has a lot of risks.

Criminal History Database

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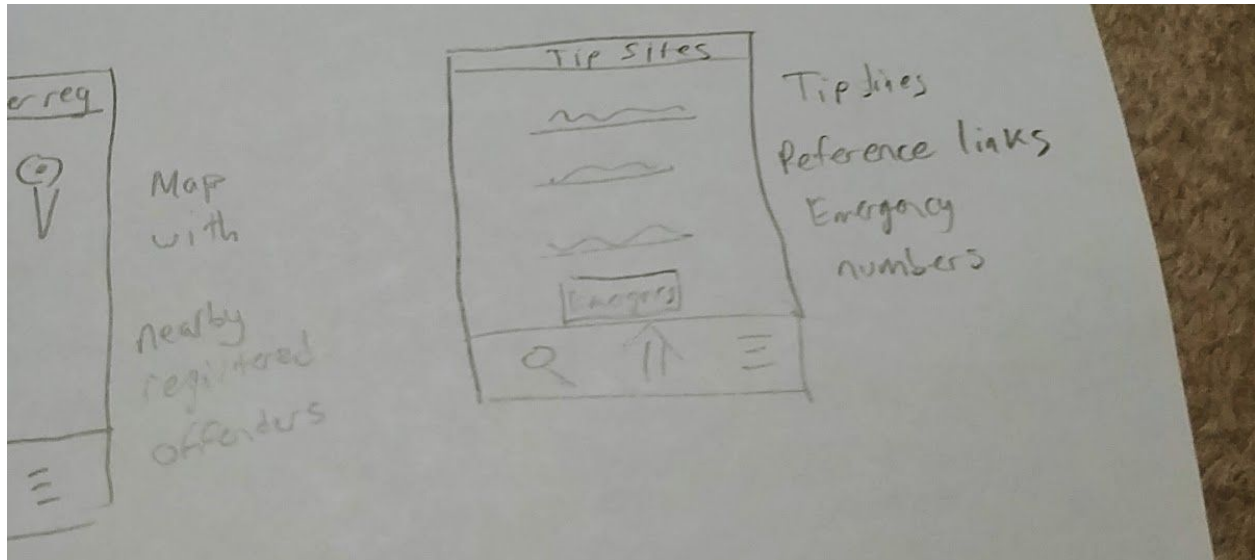
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4. There are numerous apps like this on the app store with similar functionality to mine. This seems like a difficult market to break into, and it seems like it comes down to aesthetic and personal preference. If I were to attempt to make this app, I think I'd need a team rather than making it as a solo person. However, for the purposes of a project it would be fine.
5. The audience for this app actually is much wider than I anticipated, as many people from mothers to students to everyday people seem to like the peace of mind provided by these sorts of applications. I suppose the attraction is that people feel "in the know" about potentially dangerous individuals, when it's more statistically likely that these people won't reoffend.
6. Most of the competition is free, with a subscription to remove ads. I think that copying their monetization model would be the best approach, otherwise people will not be inclined to try the application.