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Mobile Software Development

**Foreword**

I might be a bit obsessed with this old game; Heroes of Might and Magic III. It has these creatures, monsters if you will, that has different statistics. Battles require checking these stats (especially speed attribute) and calculating the possible outcome and that is why I would find this app useful, for myself at least.

Other functions are just fillers that I must do to meet the assignment requirements. Heroes of Might and Magic will be references as HoMM from now on.

**First vision**

**Main page** is the original picture and the main theme playing in the background. If I have enough time, I will make picture changeable by double tapping the screen to town views and playing the according theme music.

Main page also has some buttons, one that launches creature compendium, one that launches view to add heroes to database and one that launches browser app to some HoMM page. And maybe one that launches camera. Will see.

**Creature compendium** page is empty at first, urging user to select town. Selected town’s creatures will then be listed on the page, after they have been fetched from pre-populated database. By clicking creature, app opens more specific view of the creature (Gif?) and maybe even bring upgraded version to the side using swipe. Radio buttons provided in the top of the screen change to upgraded creature view.

**Heroes** page is empty. Also, no heroes exist in the database at first. Possibly I will provide images of the heroes beforehand and then user selects the town, the hero and then fills in the name and stats and saves the hero to database. Hero can be updated or deleted and fetched from database when it is not empty.

**Design**

Will try to follow the original styling of HoMM. Otherwise it has limited set of functionalities (only buttons and couple input fields) to keep it as simple as possible. If there is enough time, I might try to add more functionalities.

**Actual Development**

**Main page**

Turned out to be just as the first vision. With one extra image view that launches web browser to HoMM HD -website. User cannot change orientation in the main page to keep all sizes and positions fixed. Main goal when developing main page was to make it look pleasant.

**Creature compendium** is not what was the vision at first. For the time being there are some creatures listed but it is a barebone version. This is supposed to be the main thing of the app and it requires more development in the future.

**Heroes** page is what was supposed to be (minus images). This view still requires heading to make it more readable.   
Layout is as simple as possible (recycler view and floating button). ‘Less is more’ principle applies here, keeping everything easy to understand.

**Design** resembles original HoMM as much as possible. All backgrounds and images used are extracted from the original game files. I have been relying on this picture to know whether I can use these assets or not: https://lifehacker.com/follow-this-chart-to-know-if-you-can-use-an-image-from-1615584870

**Testing**

Since the app is small and relatively simple, testing was achieved by testing functionalities inside the app. E.g. creating and fetching rows from database.

**Challenges**

There just was not enough time but for that I only have myself to blame. Kept neglecting this project because other projects were supposed to be more demanding and time consuming. That they were but so was this.

On the technical side; I could not find a way to read or even modify (pre-populate) database files. DB Browser for SQLite -app did not work. Necessary populating was done with run-time code execution.

For me nothing works straight away with android developing. I am afraid that there might be way too much uncommented code on styling and xml -files. All variable names should be as self-explanatory as possible.

**New things learned**

Database and everything related to it. Also, lots of focus was given to different types of adapters and layouts.

This app is not done nor polished, but the concept made developing fun and I believe I will finish this someday.