**Project Planning/Initialization & Analysis**

**Move Match Mobile App**

1. ***Assess the size, scope, and complexity of the project, and establishes procedures to support subsequent activities.***

The size, scope and complexity of my project was hard to decipher at first. From the start, I thought of the APIs that would have to be called and was both surprised and reassured when I discovered that I could use a single API call for the three services that I decided for the scope of this project. Once I determined this and looked up the different system requirements required for the planned UI, I was able to estimate the size of the project. I believe that, if I count all the account information, login and register screens as well as the host, join and swiping activities involved, there will be between 8 and 12 activities involved in the project. The code will involve a large amount of time dedicated as there will be API calls, OTP and hyperlinks being generated, notifications as well a SMS message being sent. All of this leads me to believe that this project will be complex to build and difficult to have all these working parts coincide without errors.

I will be following, as closely as possible, the schedule set out in the project proposal as I believe that will be the best way to divide my time as effectively as possible. Allowing for breaks, time off, illnesses and any other issues that may arise, I will be planning weekdays to start from 8:30am until 6pm and will follow the Pomodoro focus method of working with 45-minute work periods, 15-minute break periods and 1 hour long breaks every 4 complete periods. Weekends will be used to reflect on the coming week and to clean up any possible deliverables, uploads to the VCS and creating test cases.

1. ***Analysts identify detailed system requirements***

Having researched the different dating apps that use the swiping method as well as the streaming sites that we hope to implement in this project, the minimum mobile system requirements will be as follows:

* For the dating application style swiping, the minimum requirements are **iOS 13.0 and up, Android 7.0 and up as well as the latest versions of all major web browsers(Chrome, Firefox, Safari, Edge etc.).**

For the different streaming services:

* **Netflix** – available on Android phones and tablets running **Android 2.3 or later.**  Current application version requires **Android 5.0 or later.** Older devices may not be able to download the application from the Google Play Store, although these devices may be able to get a version directly from Netflix. **Optional Picture in Picture is available to Android 8.0 and up only.**
* **Disney+** - Android phones and tables running **Android 5.0 or later are needed** to run the current application version. For those using Chromecast as a streaming device can cast from an Android device. Likewise, you can cast to devices such as Android TV.
* **Amazon Prime Video** –Android phones and tablets running **Android 5.0 and up are needed** to run the current application version.

After reviewing the above system requirements, I will be building this application for all Android devices that are running 7.0 and above to be able to accurately and easily portray the swiping method that will be the crux of the project.

1. ***Requirements capture and modelling undertaken***

**Requirements** – Will need to code the swiping mechanism, find the proper API call for the different streaming services, pass an OTP to another user by link or message, CRUD for user profile, sort by genre , (Advanced Feature – application learns from matches and suggests similar movies in the future), possibility of groups beyond two for viewing parties, settle on design (UI and UX).

**Functional Requirements** –

* Call to APIs, send OTP and link, confirm matches of films and shows, CRUD operations for users, sort by genre and possibly language, check for regions to give proper movie lists, social media linking, there is more that will come up as the project continues.

**Non-Functional Requirements** –

**Availability** - requirements for continuous running, 24/7, minimum idle time, etc.

**Reliability** – behaviour in case of alarm status, automatic restart, and operation recovery.

**Scalability** – application should have ways to expand the system and avoid adversely affected performance.

**Security** – application operation and use of safety requirements related to access control, private data processing, and external attack risk reduction.

**Usability** – ease of use and a user-friendly UI as well as a seamless UX

**Extensibility** - requirement for application extensibility in case there is a need to add new functional requirements.

**Modelling** – There are 2 different models that I have some experience with and those are the Waterfall methodology and the Agile methodology, but I don’t feel like either is the proper approach for this project. As there are only the two individuals who will be a part of this project (myself and my coordinator, Adin Ashby), I will be most likely following an Iterative approach, which is new to me. I believe that this model will work the best as I will be able to show Adin each step of the process through a VCS and he will be able to direct, update and act as the primary stakeholder and the project manager. This way, I hope to receive input and coaching through each step of the application process.

1. ***Information stored within a CASE tool includes DFD, UML, etc.***

I decided to use the Software Ideas Modeler as my CASE software tool and draw.io for any UML diagrams that will be required for the project. There will be a requirements diagram, the ERD for the database, the DFD for the application as well as any other diagrams that are deemed necessary for the application.

1. ***Writing user stories***

There will be at least 30 user stories that will be incorporated into the project. I will be creating these stories as the development process continues as there will be different sections of the application that will require focus at different times. To start, I will be creating Login and Registration Activities, so the beginning stories are:

**External Customers**

1. As a Regular User, I want to be able to register my email, password, and name to the database.
2. As a Regular User, I want to be able to login to the application.
3. As a Regular User, I want to be able to login to the application using a third-party source.
4. As a Regular User, I want to be able to share matches or movies watched on social media.
5. As a Regular User, I want to be able to update my email, password, and name.
6. As a Regular User, I want to be able to access my account once logged in.
7. As a Regular User, I want to be able to choose my language of choice.
8. As a Regular User, I want to set up a link to another user, either by OTP or hyperlink.
9. As a Regular User, I want to be able to select my streaming service.
10. As a Regular User, I want to be able to logout of my account.
11. As a Regular User, I want to be able to get extra information about the movies in the Swipe Card section.
12. As a Regular User, I want the matches made to be the same film as chosen by the 2 users.
13. As a Regular User, I would like the application to be easy to find, in the Store and on my device.

**Admins & Developers**

1. As a Developer, I want to be able to

User Stories will be added to and updated as the development cycle continues.