S3671956 – Anthony Tsoukas

1. Explain the changes if you use a different design compared to your assignment 1

For the most part, most of the previous assignment work had to be revamped with the idea of it being more suited to a GUI style approach, rather than a CLI.

The first major change made, was that within each menu script, a loop function had been built in to allow for users to "quickly re-commit" certain actions – like "Creating another account".

Since it's much easier just to click the "create account button" again through a GUI, we took out the looping commands this time around.

In addition, having a more structured ability to track relationship types in assignment 2, along with improved knowledge of exception handling allows for more efficient use of code to handle various anomalies which might be present when loading and/or making changes to existing data.

2. Explain how the new classes are organized

The classes User, Adult, Child, Infant are set up relatively similar to previous, albeit with additional ArrayList variables to hold relationships where relevant.

There has been a new class been added called "Relation" with the sole purpose of tracking relationships at load-time.

Post relationship load, relevant IDs of relations are annotated to the user's account data.
i.e. Users (depending on their account type) can have 5 different relationships:

- Friend
- Parent
- Child
- Classmate
- Colleague

Each of these has been set up as an Integer ArrayList as part of the Adult/Child/Infant object where necessary. After loading the data from the relations table, the ID of the associated relationship type is added to each user's relevant relationship-array.

3. Explain the process by which your program will interact with user and external data source to run a game.

This app won't be running a game per say, although it will be enabling the user to keep track of members of a social network.

The app will present the user with a single screen, where all their commands required are presented before them. The user will see a list of all current users on the left side of the screen. This list can be shortened to present less users by using the search box available in the GUI.

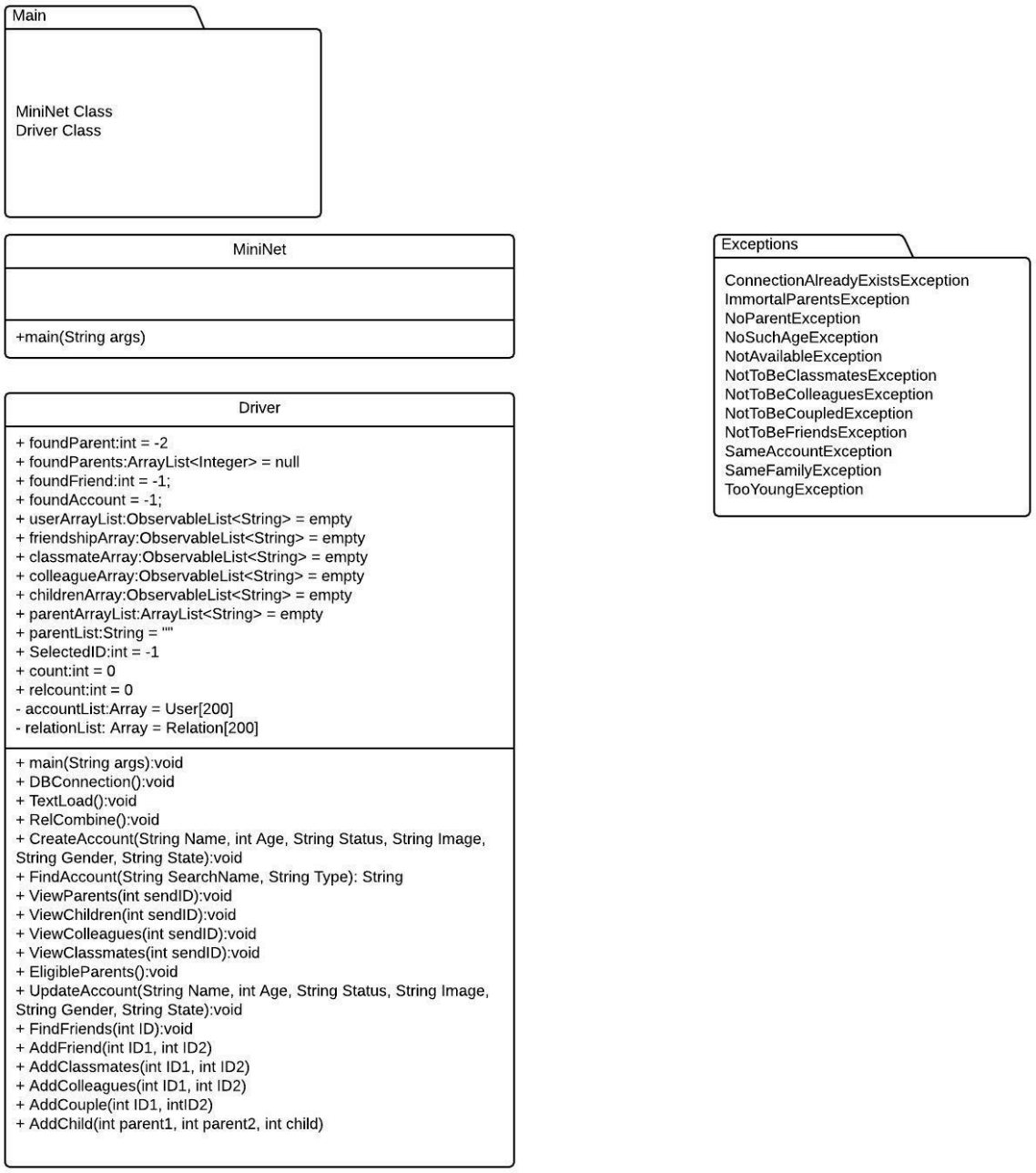
The central part of the screen springs to life immediately upon the user clicking a person on the left side of the screen. Upon clicking, the GUI will present all the information currently stored about that user in the centre of the screen. When a user is clicked on the left hand side of the screen, this user is set as the "Active User".

The right part of the screen allows for changes to be made to the data in the system.
The first button allows for a new user to be created. This is also the only button that will work if there is currently no “Active User” selected.

In order to make changes to user details and/or relationships, a user must be selected from the left-hand side of the screen, before these buttons will work.

Furthermore, an additional feature has been build in to allow for child/infant accounts to be created, and to have their parents set as part of this process – even if the minor being created is being assigned to a set of parents who are unattached, this process will assign these parents into a couple together.

Class Diagram (Page 1)



Class Diagram (Page 2)