

# **Assignment 1 (Semester 1 2018)**

## **Advanced Programming (COSC1295)**

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1. Explain how your design will be able to store the profile information.

The profile information (variables) for each person in the database are stored as objects in an ArrayList. ArrayLists are not limited in size and so can store an unlimited number of objects (i.e. profiles). Profiles can be readily added to and deleted from the ArrayList.

2. Explain how your class hierarchy will facilitate the network management.

Methods that are used to manipulate profile objects in the ArrayList (i.e. addProfiles and searchProfiles) are contained in subclasses of the Array class which contains the ArrayList. While methods that manipulate profile objects are listed as subclasses of the Person class. The Person class is linked to subclasses that are used to instantiate profile objects (i.e. Adult and Children classes).

3. Explain the process by which your program can maintain the networks and find connections more efficiently.

The hierarchal nature of the program structure allows for efficient connectivity between classes and subclasses. This is enhanced through the use of abstract methods, etc.