

# **COSC1295 Advance Programming Assignment - 1**

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**GitHub Repository link:** <https://github.com/rmit-s3634184-prashanth-raj/APAssignment1>

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

As per the design, An abstract class called Person is created which is extended by Classes Adult and Dependent. A class called Profile is created which has basic attributes like Name, Age, Image path and status and set of accessors and mutators. Person class has profile. Therefore whenever a person for instance either an adult or dependent is added, they will have a profile. As and when the profiles are created it is added into an array list as well and can be used further for further menu options.

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

Mininet is the main class and the Driver (menu) class drives the entire execution flow. CreatePeople class is responsible for creating prerequisite people[Adult or Dependent] data. The person class which is an abstract class and Adult and Dependent classes extend the Person class. Person class has Profile class and Profile class has Connection class.

Everytime an adult or a dependent is added into the network,a profile is created. Every time a valid connection is created, connection details are stored for every profile which type and number of connections also, at the adult and dependent level, informations such as their partners or child or parents is maintained.

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

There are predefined Persons which are Adults and Dependents and after a profile is created and a connection is made between profiles, the connection type (which can be family, partner or friend) is stored. For each profile a list of connections are maintained.

While finding a connection the 2 person IDs are accepted.

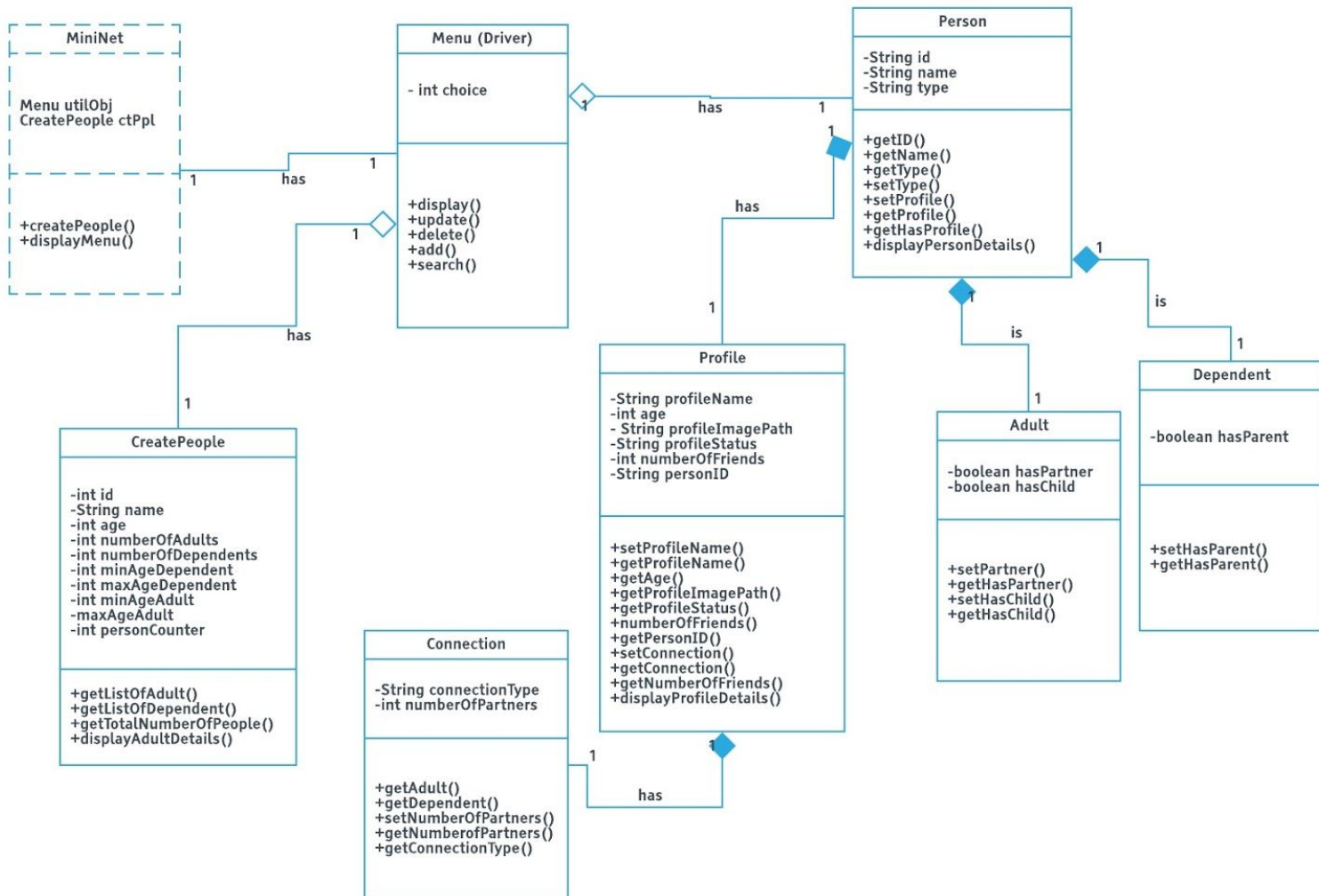
Each of this person will have a profile, each profile' list of connections is iterated to find the connection types.

## Class Diagram - MiniNet Social Network

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### Class Diagram

Group Members: Prashanth Raj & Sumit Sitlani



Members Contribution:

Prashanth Raj: 50%

Sumit Sitlani: 50%