# SIT232 OOD

Project 1

A banking console app that manages customers and accounts

Account class has attributes that are read/write or read only

Able to transfer money b/w accounts

Can open and close accounts

Interest can be calculated on the last of the month

Customer class

**Attributes**

First name -> read write

Last name -> read/write

Address -> read/write

DOB -> read/write

Contact number -> exactly 10 digits -> can be blank

Email -> can be blank

List of accounts -> List<> -> read only

**Constructors**

Normal -> initialise attributes

Copy ->

Add account -> add to list of accounts

Sum balance -> returns total balance of all accounts owned by the customer

ToString -> returns attributes

Account class

**Attributes**

ID -> required -> read only -> auto generated -> static -> Type uint or ulong

Opening date -> datetime.now -> datetime.compare

Closed date -> read only

Active -> bool -> if close method called -> SET THIS

Balance -> 0 default value -> read/write

Owner -> customer object -> read only

**Methods**

**Constructors**

C1 -> input -> owner/open date(validate)/initial balance(validate)/active(True)

C2 -> input -> owner/init balance/opendate(current date)/init balance(validate)/active(True)

C1 needs to be invoked in C2 (Prac 4.1) -> call constructor from another constructor

Close -> close account(only works on active acc) -> active(False) -> closed date(current date)

Transfer -> input -> account as input-> amount of money -> transfer from A1 to A2

a.Transfer(b, 1000) -> transfer 1000 from Acc a to Acc b

only works on active Accounts

calculate interest ->

update balance -> end of month -> new balance old balance + interest -> calculate interst()

toString -> returns -> account ID, opendate, balance, owners name, close date(if closed)

balance -> 1 decimal -> 2510.5