**Converting Java Banking App to C++**

**Requirements**

9 - Java Banking App Project

**Vectors**

In Worksheet 3 – Creating Variables, we covered the basics of arrays. To help with this exercise we are going to quickly go over a vector that closely links to an array. A C++ array has a set size to it, create an array of ten items, it will always be that size. It is very useful to be able to change the size of the array as we use it, by reducing or adding new items to the array. Vectors are a standard library solution to this; basically think of them as dynamic arrays.

Vectors have three functions that are particularly useful to us in this exercise, *push()*, *pop()*, and *size()*. The push() function allows us to add a new item to the vector, pop() remove the last item in the vector and *size()* gets the number of elements in the vector.

Use the following code to create a vector of ints in a new project. Experiment with vectors before you move onto the next task.



**Exercise**

The exercise is to review the Java Baking App project and create a C++ version. You will need at least two classes, one to represent a basic account and another to represent an extended account. Extended Accounts must inherit from the normal Account class.

The normal Account class needs the following:

An account ID

User Name

User Address

Balance

Overdraft

The extended Account needs the following:

A Transaction History

The application must be able to create and destroy a single or multiple accounts, apply transactions, withdraw money (subject to account balance and overdraft) and view the transaction history.