Design Document – Quality Assurance – CISC 327

For the project we used a 3-layer architecture in the form of:

* **Presentation Layer (PL)** – This consists of classes that handle the transactions the user wishes to perform. This includes the use of a Linked List data structure to keep track of the actions performed, in order to write them to the Transaction Summary File later. Additionally, the console interface is set up with the ATM.java class.
* **Business Layer (BL)** – The classes of the business layer initialize the system, taking in the Valid Accounts List file, and preparing the Transaction Summary file to be written. The names of these files are received through user input, taken by the QbasicStartup class. They are then used to create a qbasic object.
* **Data Access Layer (DAL)** – This layer currently holds the Data class, which manages the access to the Transaction Summary File

In addition, we have a shared classes package which holds the shared structure needed by all the layers. This currently holds a class called Transaction which is responsible for a single transaction.

Visually, the system looks like this:

Shared Classes Package

**Business Layer**

**Data Access Layer**

**Presentation Layer**