Subject Class

Design And Implementation

A program used to create a text file with a list of various subjects, which are comprised of a Name and a six character String in the form of XYZ123. The program uses a file called "SUBJECTS.txt", if the program doesn't find the file, it creates it during it's run cycle.

It is assumed that the data entered is correct, including "yes" instead of "YES" or "ABC" instead of "abc".

Testing

The program was testing using various data, although this data did not include the delimiter that was used (":"), as this was not accounted for in the program, and I assumed that the data entered would not include this delimiter. Initially the program used simple call statements to check individual methods, but eventually this was scrapped as work on the actual Testing file began. The data used was:

yes

VPA

Introduction to Sound

VPA106

yes

ITC

Introduction to Java

ITC206

yes

ITC

Networking 1

ITC233

yes

ITC

Networking 2

ITC233

no

Source Code Files

Subject.java - A file that is used to create objects of during the running of TestSubject. Has various methods, that include methods to sort disciplines in the subject code, sort arrays of subjects, and check that the subject code is not already in use and is valid. In order to create an instance of this object, the Subject Code must be valid.

TestSubject.java – A file used to test the functionality of Subject.java. It allows the user to edit a text file, By adding Subjects, which are then saved in the file in a name:code format. The the file cannot be found the program creates the file itself.

Supporting Files

SUBJECTS.txt – A text file which is used to store subject information

Use Case

The user places all the files in the same directory, although the SUBJECTS.txt file does not need to be included, as this is handled by the program. The user then runs the program, either by compiling the TestSubject.java File in an IDE, or by running java TestSubject from a terminal in the same directory as the files.