**CS106 Project – Word Report**

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**Introduction to Programming IISPRING 2017**

**Introduction**

The project task was to develop a patient management system for a general medical practice. The main focus and functionality of the program is inserting, modifying, deleting, exporting and importing patient records.

The patient record holds the patient *id, name, last name, last date of visit, sex, age, height, weight, comment* on the patient’s condition and the *BMI*.

The program is written in *java* and contains three classes:

1) **user\_input\_check** checks user input whether the input is correct or not.

2) **patient\_record** object class for creating new patient records.

3) **patient\_management\_APP** which combines the *user\_input\_check* and *patient\_record* as well as adding some other features like importing, exporting patient data from and to a file etc.

The program starts of by presenting a menu with **7** options:

**1 - Insert new patient data.**

**2 - Retrieve existing patient data.**

**3 - Modify existing patient data.**

**4 - Delete existing patient data.**

**5 - Export patient data to a file.**

**6 - Import patient data from file.**

**7 - EXIT.**

The *first* option asks the user to enter all the required information for creating a *patient\_record* object. The option uses array list for collecting the *patient\_record* objects as well as *user\_input\_check* for checking whether the user has entered the requested information.

The *second* option uses the *id* from the object which is same as the array list index in order to retrieve the requested patient’s information.

The *third* option contains a sub menu which options are same as the information that the object holds as the focus of the option is to modify the information. The user choses the option after which is presented with the current information that the object holds and then it asks for the new information.

The *fourth* option uses also the *id* which is same as the array list index in order to delete the specific patient record.

The *fifth* option asks the user for the name, extension and the directory where they want to export the record file, while using the *user\_input\_check*. The information is exported in a specific format which is also used in the sixth option in order also to import the data from the same file.

The *sixth* option asks the user for the name, extension and the directory of the file from which they want to import the patient record information, using again the *user\_input\_check*. The file needs to be written in a specific way in order for the import the work. The format is displayed in the export option.

The *seventh* or the last option is an exit option which just ends the program.

**The flowchart**

