**CS4013 Project Specs Summary**

**Main Goals:**

**1.**Develop a Property Charge Management System that allows property owners to register each of

their properties and to pay the property tax due for the properties.

**2.**Provide management functionality for the Department of Environment that allows management

to get property tax payment data for any property, get property tax payment data for any

property owner, etc.

**3.**Provide a command line interface and a GUI.

**Goal 1:**

**Property owners should be able to:**

-View a list of their properties.

-View the tax that is due currently per property.

-View any overdue tax (hasn’t been paid for a previous year).

-Query specific previous years.

-Get a balancing statement for any particular year or property.

-Register a property.

-Query the system to view payments made for all their owned properties.

**The system should:**

-Maintain a record of all payments of the property charge on a yearly basis.

-All records should be held in csv files.

**General Info:**

-Property tax is a yearly tax on a property and it is due to be paid on Jan 1st each year.

-A property must be registered on the system before the property tax can be paid.

**The property tax is calculated based on the following combinations:**

-a fixed cost of €100.

-a market value tax based on the following rates:

|  |  |
| --- | --- |
| Property Value | Rate |
| Up to 150,000 | 0 |
| 150,000 - 400,000 | 0.01% |
| 400,001 - 650,000 | 0.02% |
| Above 650,000 | 0.04% |

-a location category tax based on the following rates:

|  |  |
| --- | --- |
| Location | Charge |
| City | €100 |
| Large Town | €80 |
| Small Town | €60 |
| Village | €50 |
| Countryside | €25 |

-An additional flat charge of €100 if the property is not the principle private residence of the owner. -Apply a 7% penalty, compounded for each year that a property tax is unpaid.

**Information to be recorded for a property:**

-Property owner(s)

-Address

-Postcode/Eircode

-Estimated market value

-Location category (City/Large town/Small town/Village/Countryside)

-Principal private residence (yes/no)

**Goal 2:**

**The management should be able to do the following:**

-Get property tax payment data for any property.

-Get property tax payment data for any property owner.

-Get a list of all overdue property tax for a particular year

(with the option to select an area based on the routing key of the Eircode).

-Get property tax statistics for a particular area based on the routing key of the Eircode

(e.g. total tax paid, average tax paid, number and percentage of property taxes paid).

-Investigate the impact of possible changes to the rates and levies contributing to the

property tax to determine how the revenue collected would change.

**Goal 3:**

-The system should be designed in a way that makes it easy to replace one interface with the

other.

**Note:**

-The developed system should be adaptable to other property tax calculation rules

(for example in other countries) and thus want you design the system so that is easy to

substitute the tax calculator outlined here with one that may be developed in the future.

**To be submitted:**

-A document outlining the Class Responsibility Collaboration (CRC) cards.

-A UML diagram showing the relationships between the classes.

-Documentation for the software, generated using the javadoc utility and a help file

describing briefly how to compile and run the application from the command line interface.

This file should also include a link to the github repository.

-The source code for the system where each Java class is stored in a separate file.

All code will be compiled and run from the command line.

-Any text files that are required by the system should also be included.

-The contributions of each team member must be clearly outlined in a document called

“contributions”.

**Classes Needed:**

* Class for property owners to view and change their properties’ info
* Class for management to view and change property owner data.
* Class for calculations of property tax.