# Object Oriented Programming 2 – Final Project Contents

For my final exam I was thinking about possibly making a reservation system for a B&B (Bed and Breakfast).

- The abstract class would most likely be basic information such as First Name, Last Name, JMBG, Date of Birth aka the usual information that is used and needed in any reservation system.  
It would be called Person and contain the printDataPerson(), checkPersonID() and checkAge() functions.

- The next class would be Customer, which would inherit all the information and functions from Person, as well as add one more. The attributes inside this class that are new would be a username which is made automatically from their first name, last name and their personal ID number. The next ones all have to do with credit card information: number, month and year (for the expiration date). I could also add the three little numbers in, if I feel the amount of functions are lacking towards the end. It would simply be an integer variable and have its own little function to check that digits were put in and that it’s three digits long. The function printDataPerson() will override the inherited class and add to it the new information that was acquired within this class.

- The next class would be Host which, like the Customer class, would inherit the base information and functions from the Person class. A new variable will be a username that is automatically generated from the Persons first name, last name and personal ID. The difference between this kind of username and the Customer one, will be that before it the word “Host” will be added onto it as well. The Host class will contain a list of locations and call a function calculateTotalPrice() from the next class, Accommodation. Within this class shall also be another overriding of the printDataPerson() but add onto it the Hosts username.

- The last class shall be Accommodation. In this class shall roughly be: the address of the accommodation, its price, if it’s reserved (possibly even by whom, with the Customers username), a function that calculates the final price based on how long it’s planned on being rented and finally who is the Host of the lot (the HostUsername will be the marker). The next function will simply write into a file all of the information about the accommodation, as a pseudo receipt almost.

Some of this is subject to change and any recommendations/guidance is welcome!

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