CS 1450 – Intro to Object Oriented Programming

Lab 8

Instructor: Patrik Boloz
Date: 11-7-2023
Due by: 11-14-2023

Instructions:

The objective of this assignment is to create a Python class called "House" with specific attributes and methods to manage and display information about a house.

1. Create a Python class named "House" with the following attributes:

  - `num_bathrooms` (an integer) - representing the number of bathrooms in the house.

  - `price` (a float) - representing the price of the house.

  - `location` (a string) - representing the location of the house.

  - `status` (a string) - representing the status of the house (initially set to "Not Sold").

2. Implement the following methods within the "House" class:

  - `print_num_bathrooms()`: This method should print the number of bathrooms in the house.

  - `print_price()`: This method should print the price of the house.

  - `print_location()`: This method should print the location of the house.

  - `update_price(new_price)`: This method should take a new price as an argument and update the price attribute. It should also print a message confirming that the price has been updated.

  - `update_status(new_status)`: This method should take a new status as an argument and update the status attribute. It should also print a message confirming that the status has been updated.

3. Create an instance of the "House" class with your chosen initial values. Then use the methods of the "House" class to display information about the house and perform the following actions:

  - Print the number of bathrooms.

  - Print the initial price.

  - Print the initial location.

  - Update the price using the `update_price()` method.

  - Update the status to "Sold" using the `update_status()` method.

4. After making the updates, display the number of bathrooms, updated price, location, and status of the house.

Submission:

Submit a Python script containing the "House" class and the code for creating an instance of the class, using its methods to interact with the house's information.

Note:

- Ensure that your code is well-organized and follows proper naming conventions.

- Use comments to explain the purpose of your class and methods.

- Test your code to ensure that it works as expected, as shown in the sample output.