

**American International University- Bangladesh**

**CSC 1205: Object Oriented Programming 1 (JAVA)**

**CO4 Evaluation**

**Project Concluding Report**

**Spring 19-20**

**Project Title: PC MARKET MANAGEMENT**

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**Introduction:**

We are developing this mini data management code in java for a pc shop owner to manage his shop, components, employee easily. The owner can check the available quantity of components and also can sell and add them.

**Problem Analysis:**

PC market owners can use this application. By using this application a market owner can manage shop, employee, and shop components. The system is developed for shop owners to save the components name, price, quantity, company name, components condition, etc. The owner can also check all the information about the components.

**UI Design Analysis:**

On the homepage of this application, the user can see many options. The first function is pc shop management where users can insert, remove the information and also search and show all information. In the insert section, the user can give input of pc shop id, pc shop name and also can add, sell components.

**Logical Analysis:**

If the user wants to change the component id they have to simply click on the component and then an update button will appear which will instantly allow the user to add new information and update it. In order to remove the component, the user has to first enter ‘remove component’ and then click on remove component to remove the component information. In order to search the component information, the shop owner has to click on search components. After typing the id or name of components the user needs to press the search button. Then all the components information will appear on display.

**OOP Concept Analysis:**

We used the following OOP concepts:

1. Inheritance

* In pc components and laptop components, we inherited properties from the component.
* Pc and laptop components inherit the name, price, component id from components.

2. Abstraction

* Components is an abstract class and its interface is Quantity add sell

3. Polymorphism

* Pc shop, employee, pc components, laptop components use polymorphism

4. Association

* One to one association – Pc shop has Components
* One to many associations – Pc market has shop and employee

5. Interface

* Component’s interface is Quantity add sell
* PC shop’s interface is Component operation
* PC markets interfaces are Shop Operation, Employee Operation

6. Encapsulation

* All classes and interfaces use encapsulation

**Impact of this Project:**

By using this application, market owners can easily manage their shop and employee. In pc shop, they can easily insert, remove, search and show all information easily. They also can manage employee information such as insert, search, remove, and salary.

**Limitations and Possible Future Improvements:**

This application’s facility is limited to only a few operations. In the future, we can add so many operations such as a discount on components, customer information collection, EMI facility on payment, showing components lists to the customer, and so on.