SOFTWARE DESIGN AND ANALYSIS

SECTION (B)

HOSPITAL MANAGEMENT SYSTEM

(HMS)

ASSIGNMENT#3

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In Assignment 2 we design a class diagram according to our project proposal. But in order to make our class diagram more flexible and more efficient, we use 2 types of designs in assignment 3 in order to low down coupling and other irrelevant stuff from our class diagram.

1) Factory Design pattern.

We use factory design pattern in our class diagram to let the class defer instantiation to the sub class. In our previous design we use (**Receptionist**) as our main class/Super class. But at times client object know that it needs to instantiate the object but of which class it does not know.

So, in order to solve the above problem, we use the Factory design Pattern to solve the problem, we have make a new class named admin login so that if any change requires it can only be done in receptionist_Portal. So that no change can be done in SuperClass.

2) Bridge Design Pattern

In our previous design, we have highest rate of coupling in term of abstraction and implementation. So, in order to Reduce it we use Bridge Design Pattern. Where We split the Doctor Portal and Admin/Receptionist portal in to two different categories. So that the coupling should be reduced.

Updated Class Diagram