

Department of Computer Science and Engineering
CSE471: System Analysis and Design
Summer 2023
Assignment 3
Deadline: 24 August, 2023
Total Marks: 10

1. For large distributed business franchises in Bangladesh, a well-known software farm is building software that can be used commonly. Here the concept is that the business management policies are provided from a Head office and the Back offices are the distributed franchisors who abide by the business policies. Here, the Head Office component contains five components that are Stock Item database component, Policy component, Tax component, Rebate component, and Special Price component. The Policy component provides two interfaces, setPolicy, and taxExempt. The setPolicy interface is required by the Stock Item component. Tax and Rebate components provide an interface called readStock which is dependent on stock details from the Stock Items component. These two components also require the taxExempt interface. The Special Price component requires the tax price interface which is provided by the Tax component and Rebate component. The Tax component provides taxStatus interface, Rebate component provides rebateStatus interface, Special Price component provides specialValue interface which are exposed outside of The Head Office component through 3 ports and all three of these interfaces are required by The Back Office component. The Back Office component provides two interfaces taxExempt and setArea which are required by the Tax Rebate component and the Region Component respectively.

Design a Component Diagram based on the above scenario. [CO2]