CSE 4407: System Analysis and Design

Quiz #: 3 & 4   Date: 19/12/2020

Time: 30 Minutes   Marks: 20

1. a) Musixscore.com is an online service providing sheet music to customers. On the "browse music" Web page, customers select a genre of music from a drop-down list. The Web page uses Ajax to obtain a list of performers, musicians, or groups that match the genre, which is formatted as a dropdown list. When a selection is made from the performer's drop-down list, the Web page uses Ajax to display a third drop-down list displaying all the CDs or other works of the performer. When a CD is selected, the Web page uses Ajax to obtain all the songs on the CD in a fourth drop-down list. The viewer may make multiple selections. When the **Add to Shopping Cart** image is clicked, the songs are added to the shopping cart. The viewer may change any of the drop-down lists to select additional sheet music, and the process is repeated. Draw a sequence diagram using boundary, control, and entity classes for the Musixscore Web page.   7

    b) Alice in the human resources department at the Cho Manufacturing plant is constantly being asked by employees how much is taken out of their paychecks for insurance, taxes, medical, mandatory retirement, and voluntary retirement. "It takes up to a few hours every day," says Alice.   7

    She would like a Web system that would allow employees to use a secure logon to view the information. Alice wants the system to interface with health and dental insurance companies to obtain the amount remaining in the employee's account for the year. She would also like to obtain retirement amounts saved along with investment results. Alice has a high regard for privacy and wants the system to have employees register and give permission to obtain financial amounts from the dental insurance and retirement companies. Draw a use case diagram representing the activities of the Employee Benefit system.

    c) Given ৳300 investment, what is the present value of this investment in 7 years. (Hint: Discount rate = 9%)   2

    d) What are user stories? Give two examples of user stories with regard to your lab project.   4