

CSE 322 : Software Engineering

Fall 2021

Assigned: 3<sup>rd</sup> December 2021 Due: 9<sup>th</sup> December 2021

## Sheet 7 System Modelling

- 1. What are the perspectives that can be used to model the system? List the main function that each of these models play and the possible UML diagrams that can be used to show these models.
- 2. Develop a sequence diagram showing the interactions involved when a trainee registers for a training session in a gym. The gym has several branches and not all sessions are available in all branches. The trainee is requested to mark the branches he/she can go to. Sessions may have limited enrollment, so the registration process must include checks that places are available.
- 3. Consider how articles and authors are represented in the e-journal you read. Model the object classes that might be used in the system implementation to represent an article and an author portfolio.
- 4. Draw state diagrams of the control software for the software for a MP3 player.
- 5. Based on your experience with a soda vending machine, draw an activity diagram that models the data processing involved when a customer orders a pepsi cup from the machine.