Tutorial 05: Drawing a Use Case Diagram

1. From the following text, determine the requirements and identify the use cases (if you have not yet done these as part of tutorial-4 activities).

2. Using pencil and paper, draw a draft use case diagram of the system—using «include» and «extend» stereotypes as appropriate.

3. Discuss your diagram with your tutor. Explain your assumptions. Re-draw your draft diagram in MS Visio.

The system to be developed is a GUI that allows a passenger to purchase a train ticket. Before boarding a train, a passenger must have a valid ticket. At the ticket machine, a potential passenger can select the number of zones s/he wishes to travel. The passenger can insert cash and/or coins to at least the value of the journey. The machine returns the ticket and any change, unless the ticket machine is out of change. A passenger can cancel a transaction at any time prior to a ticket being issued. If there is no passenger input after 30 seconds, the ticket machine cancels the transaction. If a ticket machine is out of order it will not accept input. A potential passenger can purchase a single journey ticket, a return ticket or a multi-rider ticket (which is an advance purchase of the equivalent of ten tickets for the same number of zones that carries a 10% discount).