Software Engineering

Sheet

Use case diagram

1. [Business actors](https://www.uml-diagrams.org/use-case-actor.html#business-actor) are Passenger, Tour Guide, Minor (Child), Passenger with Special Needs (e.g. with disabilities), all playing **external roles** in relation to airport business.

[Business use cases](https://www.uml-diagrams.org/use-case.html#business-use-case) are Individual Check-In, Group Check-In (for groups of tourists), Security Screening, etc. - representing business functions or processes taking place in airport and serving the needs of passengers.

Business use cases Baggage Check-in and Baggage Handling extend Check-In use cases, because passenger might have no luggage, so baggage check-in and handling are optional.

Draw use case diagram

2. Draw use case diagram for Webmail System Use Case Model.

3. Draw the use case diagram and use case table for ‘Login’ to a ‘School Management System’.

4. Draw the use case diagram for an ATM, then write use case table for two functions.

5. Web Customer actor uses some web site to make purchases online. Top level use cases are View Items, Make Purchase and Client Register. View Items use case could be used by customer as top level use case if customer only wants to find and see some products. This use case could also be used as a part of Make Purchase use case. Client Register use case allows customer to register on the web site, for example to get some coupons or be invited to private sales. Note that, Checkout use case is included use case not available by itself - checkout is part of making purchase. Draw the use case diagram.

6. A company specializing in consumer electronics requires an order processing system to be developed that is easy-to-use by its employees, and provides a good response time of less than five seconds. Orders are received from customers online who must state the items and expected delivery deadlines. The orders are recorded and prioritized according to stock availability, transport capacity, delivery deadlines, and time of order. The output from the system will be the price of the order, and the delivery date. The customer then has the option to confirm or reject the order. Draw use case diagram