



# **CPSC203: WEEK-2 LAB-1**

## **UML-Use Case Descriptions**

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## COURSE WEBSITE

[http://wiki.ucalgary.ca/page/  
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# SCENARIOS BEHIND DEVELOPING USE CASE DIAGRAMS.

- Identify the actors
- Specify the name of the use-cases related with each actor.
- For each use case- generate a full description (detail of the description is in the next slide)



# WRITING A USE CASE DESCRIPTION

- In Each Use-case Description write down the following points:
  - Name
  - Description
  - Primary actors
  - Secondary actors
  - Pre-conditions
  - Main flow
  - Post-conditions
  - Alternative flows



# WRITE DOWN A USE-CASE DESCRIPTION FROM AN -EXAMPLE

**Scenario:** Six months from now, the Grand Cineplex Odeon II is opening in downtown Calgary. It will sport a multilevel parking garage free for moviegoers, enhanced online ticket purchasing, more combos of soda and popcorn, and make a larger dent in your monthly bank statement. They have started the planning for their system infrastructure and part of this involves developing a use case diagram for their system.



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# USE CASES / WORKFLOWS

## Customers

- Purchase tickets (online)
- Print tickets (kiosk)
- Check status of movie (sold out, x% full, etc..)
- Check available seating (which seats, or if it's a "free-for-all")
- Reserve seating (if possible)
- Get parking entrance receipt (by authenticating their ticket, they can enter the parking garage 15 minutes before, and park till 15 minutes after their movie)
- Pay for parking (if they went in earlier or stayed too late)

# USE CASES / WORKFLOWS

## Ticket Salesperson

- Print tickets
- Purchase tickets
- Check status of movie
- Check available seating
- Reserve seating





# USE CASES / WORKFLOWS

## Managers

- See sales statistics
- Refund tickets
- Print tickets
- Purchase tickets
- Check status of movie
- Check available seating
- Reserve seating



# EXAMPLE USE-CASE DESCRIPTION

Name: Purchase Tickets

Description: Purchase tickets for a movie

Primary Actors: Customer, Sales

Secondary Actors: Manager

Preconditions:

1. Movie not sold out
2. Movie playing

Main Flow:

1. Customer logs into online system
2. Customer selects movie theatre
3. Customer selects movie
4. Customer pays for movie



# EXAMPLE USE-CASE

## DESCRIPTION

Post-conditions:

- Customer has a ticket ID and/or printed out ticket for a movie

Alternative Flows:

### ○ In-Theatre Purchase

- Salesperson or Manager verifies available tickets for a playing movie
- They get payment and processes it



## CLASS TASK

- Write down the descriptions for the other use-cases of this scenario.
- Develop a use case diagram for a shipping company such as UPS or FedEx.

### **Requirements:**

- Customers must be able to arrange for a pickup of a package to be delivered
- Customers must be able to check the status of a package, assuming there is a tracking number for it
- Customers must be able to refuse a package
- Delivery people must be able to determine the next address to deliver a package to, and get directions for it
- Delivery people must be able to confirm a package has been delivered, and store the signature of the signer.

# CLASS TASK

## **Requirements(contd):**

- Front staff must be able to accept new packages to be shipped, as well as charge customers.
- Auditors must be able to look at past parcel sending history for a particular location or customer.

