



NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES

Object Oriented Analysis and Design Lab CL-309

Lab Session 05 Task Section A-C-D-F

Student ID: _____

Time allowed: 100 Minutes

INSTRUCTOR: Muhammad Nadeem

Exercises 01

Championship Manager

Verbal Requirements

- (a) Find the Analysis Classes for User Management in the given scenario**
- (b) Find the Analysis Classes for Game Management in the given scenario**

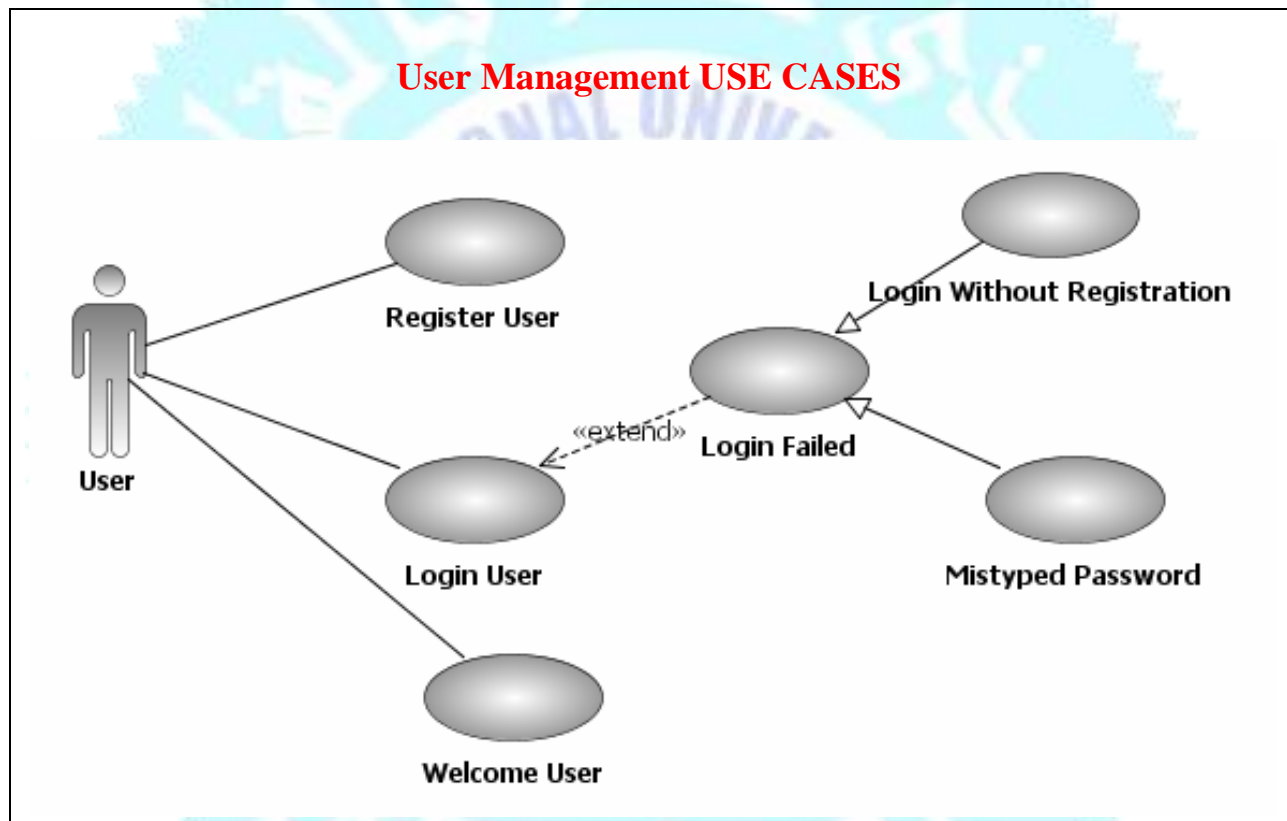
Requirements:

- A player should register and log in to the system before using it.
- Each registered player may announce a championship.
- Each player is allowed to organize a single championship at a time.
- Players may join (enter) a championship on a web page
- When the sufficient numbers of participants are present, the organizer starts the championship.
- After starting a championship, the system must automatically create the pairings in a round-robin system.
- If the championship is not started yet (e.g. the number of participants does not reach a minimum level), the organizer may cancel the championship
- The actual game is played between existing clients, which is outside the scope of the system.
- Both players should report the result and the moves after each game using a web form. A win scores 1 point, a draw $\frac{1}{2}$, and a loss 0.
- If players report contradicting results, the organizer should judge who is the winner. The organizers penalize the cheating player by a 1 point penalty.

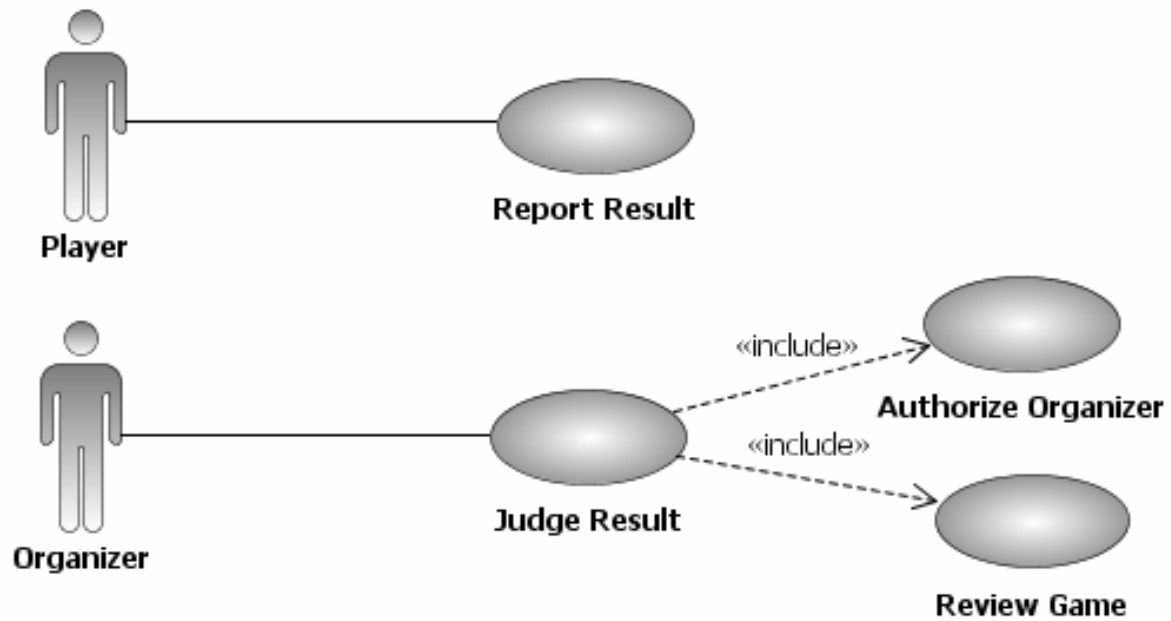
– When all games are finished, the organizer should close the championship by announcing the winner. Then he or she may start organizing a new championship.

A game should be finished within a given deadline (time limit).

- If none of the two players have reported the result within this deadline, then both players are considered to be losers.
- If only one player has reported the result, then his (or her) version is considered to be the official result.



Game Management Use Cases



Exercises 02

Design the Robustness Diagram and Analysis Classes for **Place Order** USE CASE

Use case ID	UC006A
Use case name	Place Order
Actors	Customer
Description	Customer places an order to purchase certain products from the shop.
Trigger	Customer wants to order certain products from the shop.
Precondition	Customer is logged in.
Postcondition	The system saves the new order.
Normal flow	<ol style="list-style-type: none">1. Customer visits the Shopping cart page.2. Customer clicks the Buy button.3. The system displays the Order details form where the required data to complete the order (name, phone number, email, shipping and billing addresses, payment method) needs to be provided.<ol style="list-style-type: none">3.a. The system will retrieve information of the customer in order to populate a list of default values.4. Customer fills in data and submits Order details form by clicking the Confirm button.5. The system records the order.<ol style="list-style-type: none">5.a. It retrieves shopping cart elements to add them to the order.6. The system displays the Order created page.
Alternative flows	None
Exceptions	<ol style="list-style-type: none">1. The system cannot save the order due to a database failure.2. The customer can cancel the order at any time before confirming it.
Includes	Manage Shopping Cart
Notes and issues	<ol style="list-style-type: none">1. The customer is unable to move items back into the shopping cart.2. If the order is cancelled, its items will also be lost.3. The system calculates and re-calculates the total price for the order according to the amount changes. This price includes not only the value of the price attribute of each item but also the discounts for certain products and for special customers.