Note: This template is largely based on the template provided by the Unified Process for Education (<a href="www.yoopeedoo.com">www.yoopeedoo.com</a>) with minor modifications.

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# Dance Competition Management System Use-Case Specifications

Version <1.0>

Dance Competition Management System	Version: <1.0>
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# **Revision History**

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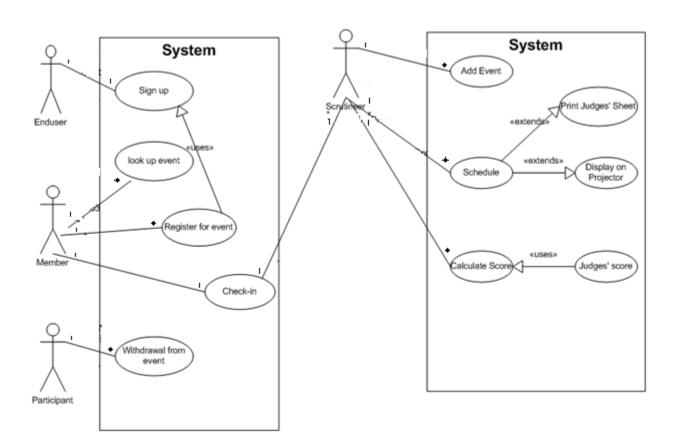
# **Use-Case Specifications**

# 1. Use-Case Model Overview

# 1.1 Actor Descriptions

- End user: Anyone who is not a member of the system and would like to access the system.
- **Member:** Those who use the system to register for competitions.
- **Participant**: Member who has registered for an event.
- **Scrutineer / Administrator:** Those who use the desktop application to organize and conduct dance competition.

# 1.2 Use-Case Diagram



# 1.3 Overview of Use Case Descriptions

The Use cases described in the following sections form the core of the system. They provide complete functionality to the system under creation.

Subsequent versions of the use case description would contain use cases to enter scores into a PDA, instead of sheets. It would also contain in detail, the communication between the different interfaces and entities of the system.

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# 2. Sign Up for Membership

# 2.1 Actors

End user

#### 2.2 Pre-conditions

User must be logged into the dance competition website.

### 2.3 Post-conditions

The System must record the membership information of the new member

# 2.4 Trigger

The user clicks the link to sign up for membership.

#### 2.5 Basic Flow

- 2.5.1 The member enters the membership details on the screen and clicks the sign up button.
- 2.5.2 The system checks for the availability of the username.
- 2.5.3 The system generates the membership ID.
- 2.5.4 The system records the membership information of the new member, in the database.

### 2.6 Extensions

#### 2.6.1 First Alternative Flow

- 2.6.1.1 The member enters the membership details on the screen and clicks the sign up button.
- 2.6.1.2 The system checks for the availability of the username.
- 2.6.1.3 The system displays an error report if the username is not available.

# 2.6.2 Second Alternative Flow

- 2.6.2.1 The member enters the membership details on the screen and clicks the sign up button.
- 2.6.2.2 The system checks for the Date of Birth of the User.
- 2.6.2.3 The system displays an error report and does not allow membership f the user is less than 18yrs of age.

# 2.7 Non-functional Requirements

The system must perform an encoding technique such as hashing to save all passwords securely.

# 3. Look-up Events

# 3.1 Actors

Member

# 3.2 Pre-conditions

User must be signed into the system

#### 3.3 Post-conditions

The System must display the event details when the member is signed in.

# 3.4 Trigger

The user enters the username and password and clicks on the sign in button.

# 3.5 Basic Flow

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- 3.5.1 The member enters the username and password on the screen and clicks the sign in button.
- 3.5.2 The system displays the competition details on the screen.
- 3.5.4 The system allows members to register for the events on the click of a button.

#### 3.6 Extensions

- 3.6.1 First Alternative Flow
- 3.6.1.1 The member enters the username and password on the screen and clicks the sign in button.
- 3.6.1.2 The system checks the username and password combination.
- 3.6.1.3 The system gives an error report if the username and password do not match.

# 4. Register for event

# 4.1 Actors

Member

# 4.2 Pre-conditions

The participants must have membership ID with the system.

# 4.3 Post-conditions

The System must display the confirmation message and record the team ID in the event.

# 4.4 Trigger

The participant clicks the register button.

#### 4.5 Basic Flow

- 4.5.1 The participants enter their ID and the event they would like to participate.
- 4.5.2 The system checks for the participants' eligibility and responds with a unique team ID for the group of participants.

# 4.6 Extensions

- 4.6.1 First Alternative Flow
- 4.6.1.1 The participants provide invalid membership ID.
- 4.6.1.2 The system responds with an error message and asks to renter the membership ID

# 5. Withdrawal from event

### 5.1 Actors

Member

# 5.2 Pre-conditions

The participants must be signed in and must be registered in an event.

# 5.3 Post-conditions

The system must display a confirmation message and remove the team ID from the event.

# 5.4 Trigge

The member enters the team ID and clicks the Withdraw button.

# 5.5 Basic Flow

- 5.5.1 The member enters the team ID and the event of participation.
- 5.5.2 The system responds with a report confirming the withdrawal of the team.

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### 5.6 Extensions

### 5.6.1 First Alternative Flow

- 5.6.1.1 The participants provide invalid team ID.
- 5.6.1.2 The system responds with the e3rror report and asks to renter the team ID.

### 6. Add an event

#### 6.1 Actors

Scrutineer

# 6.2 Pre-conditions

The scrutineer must be logged in the system.

### 6.3 Post-conditions

The System records the new event details onto the webpage.

# 6.4 Trigger

The scrutineer clicks the Add Event button

#### 6.5 Basic Flow

- 6.5.1 The scrutineer enters the event details and clicks the Add Event button.
- 6.5.2 The system then makes the event details available on the website.

#### 6.6 Extensions

#### 7.6.1 First Alternative Flow

- 7.6.1.1 The scrutineer enters the invalid event date and clicks the Add Event button.
- 7.6.1.2 The system responds with the error report and asks to reenter the event details.

# 7. Check-in

# 7.1 Actors

Scrutineer

# 7.2 Pre-conditions

The participants must provide their team id to the scrutineer.

### 7.3 Post-conditions

The System must put the team Id into the judges' table.

# 7.4 Trigger

The scrutineer clicks the check-in button

# 7.5 Basic Flow

- 4.5.1 The participants produce their team id to the scrutineer.
- 4.5.2 The scrutineer enters the team Id and clicks the check-in button.
- 4.5.3 The system then responds with the name of the participants to confirm the check-in.

#### 7.6 Extensions

# 4.6.1 First Alternative Flow

- 4.6.1.1 The participants provide invalid team id.
- 4.6.1.2 The scrutineer enters the team id and clicks the check-in button

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4.6.1.2 The system responds with the error report and asks for a re-entering of team Id

# 8. Schedule

### 8.1 Actors

Scrutineer

# 8.2 Pre-conditions

The scrutineer must open the schedule tab.

#### 8.3 Post-conditions

The system must display the schedule in the review tab.

# 8.4 Trigger

The scrutineer clicks the schedule button

#### 8.5 Basic Flow

- 5.5.1 The scrutineer enters the scheduling information and click schedule
- 5.5.2 The system calculates the schedule and displays the details of the events.

# 8.6 Non-functional Requirements

The system should not take more than 2 second to calculate the schedule.

# 9. Print Judge's Sheet

#### 9.1 Actors

Scrutineer

### 9.2 Pre-conditions

Schedule and the number of judges must be available

#### 9.3 Post-conditions

The system must print out the judge's sheet with correct information.

# 9.4 Trigger

The scrutineer clicks the print button.

#### 9.5 Basic Flow

- 9.5.1 The scrutineer enters the number of judges and clicks print button.
- 9.5.2 The system checks the connection and printer response.
- 9.5.2 The system prints as many copies (as specified) of the judges' sheet.

# 9.6 Extensions

# 9.6.1 First Alternative Flow

- 9.6.1.1 The scrutineer provides the number of judges and click print button
- 9.6.1.2 The system checks the connection and printer response
- 9.6.1.3 The system displays an error message if the printer does not response

### 9.7 Non-functional Requirements

The printer should be connected to the system.

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# 10. Display information on Projector screen

#### 10.1 Actors

Scrutineer

#### 10.2 Pre-conditions

The scrutineer must open the projector tab.

#### 10.3 Post-conditions

The system must display all acquired information into another window that can be projected

# 10.4 Trigger

The scrutineer clicks the project button

#### 10.5 Basic Flow

8.5.1 The scrutineer checks the projector page for the necessary details and once the correctness of the details are checked, the scrutineer clicks the project button.

8.5.2 The system displays the information displayed on the projector page of the desktop application on the projector screen.

### 10.6 Extensions

- 8.6.1 First Alternative Flow
- 8.6.1.1 The scrutineer adds information in the "special announcement" column on the projector page.
- 8.6.1.2 The system adds that to the information displayed on the projector screen.

# 10.7 Non-functional Requirements

The operating system in which the system operates must support dual view display.

# 11. Calculate scores

#### 11.1 Actors

Scrutineer

# 11.2 Pre-conditions

The scrutineer must enter the scores from the judges.

#### 11.3 Post-conditions

The system must feed the recalled couples to the next round.

# 11.4 Trigger

The scrutineer clicks the calculate button

# 11.5 Basic Flow

- 11.5.1 The scrutineer enters the judges' scores of all the teams.
- 11.5.2 The system displays the teams with their scores and displays it in descending order of the score.
- 11.5.3 The scrutineer then enters the number of teams to be recalled for the next round.
- 11.5.4 The system responds with the teams selected for the next round.

# 11.6 Extensions

### 11.6.1 First Alternative Flow

11.6.1.1 The scrutineer enters the judges' scores of all the teams.

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- 11.6.1.2 The system displays a warning message if the judges' scores have not been entered completely.
- 11.6.1.3 The scrutineer decides to compute anyway.
- 11.6.1.4 The system will calculate with the missing information.

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# 12. Appendix

A throw-away web prototype was created to ensure the interaction of the web system complied with the requirements of the user. The link to view the prototype is "http://cs.uncc.edu/fcl/dance/"

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# 13. Glossary

- **13.1 Membership Details:** First Name, last name, date of birth, email address, gender, proficiency level, Favorite dance styles, username, password
- **13.2 Event Details:** Event name, venue, date, time, requirements.
- **13. 3 Schedule details:** Time per dance, Time between the dances, Time between the heats, Start time of the round.