

Sports Concussion Assessment System Project

Phase I Part 1

Include your actor and major use case descriptions on this page. You may add pages if necessary.

Actors

[Sports Medical Practitioners]

[Athletes]

Major Use Cases

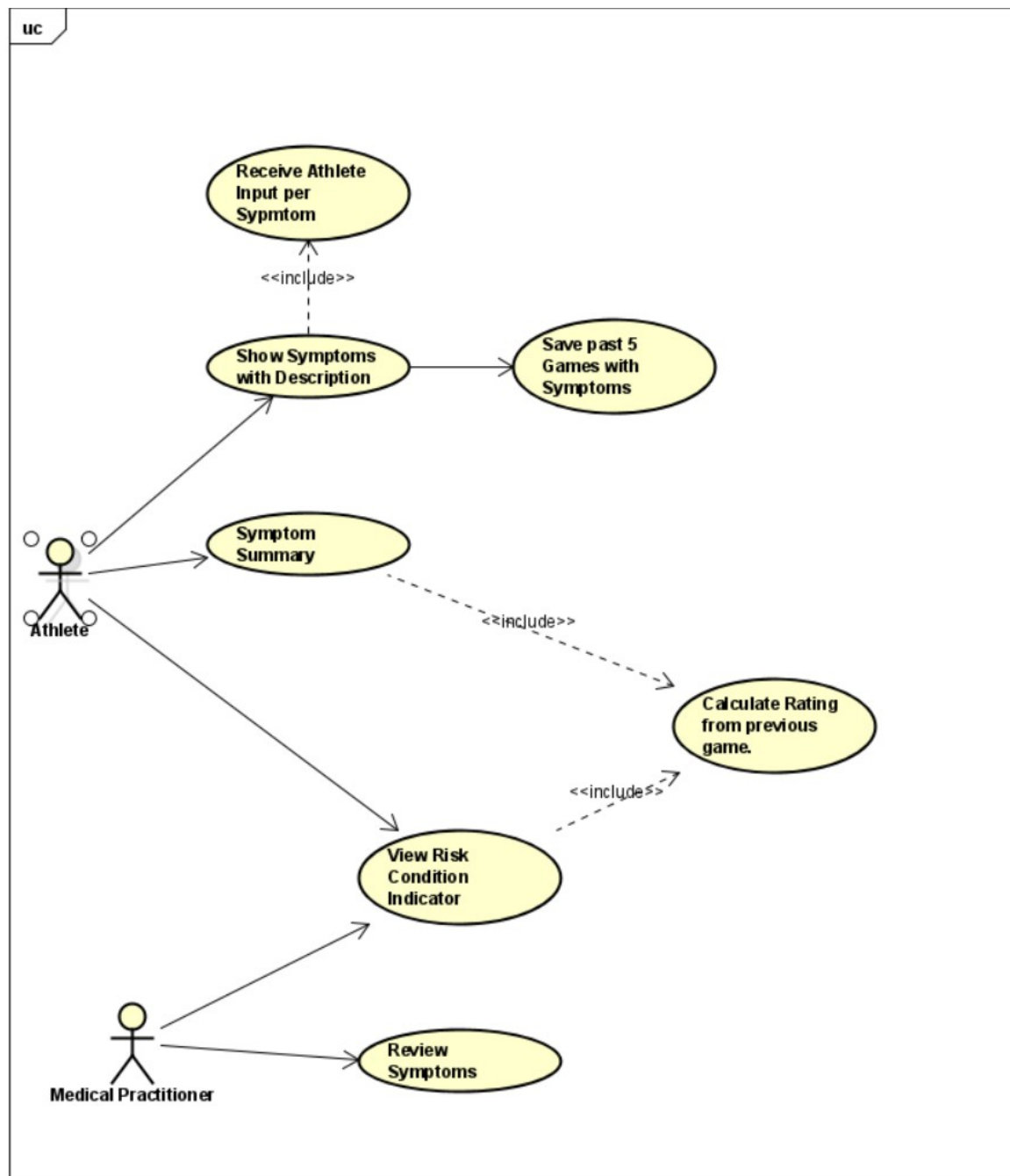
[Monitor athletes conditions for symptoms of concussion.]

[Help Sports Medical PRactitioners make a mor timely diagnosis of concussions.]

[Avoid subsequent issues that could put the athletes' well being at risk.]

Phase I Part 2

Use Astah to draw a use case diagram. Use proper UML notation. Take a clear screenshot of your completed diagram and paste it on this page.



Phase II Part 1

Include your use case descriptions on this page. You may add pages if necessary.

Use Case Description for Athlete

"Sports Concussion Assessment System" will help athletes learn the risk of concussion. Athletes will enter their health conditions based on well-defined symptoms through the athlete application, as well as their pain levels on a numerical scale from 0 (no pain) to 6 (severe pain). Athletes will need to provide the information for up to at least two games for their to be enough data.

There will be 22 symptoms for the athlete to respond to after each game. With this information the athlete will be able to see a per game summary that includes the total number of symptoms, symptom severity score and the overall rating - when compared to the previous game.

Severity Score will be calculated from adding all of the symptom scores.

Use Case Description for Sport Medical Practitioner

"Sports Concussion Assessment System" will help sports medical practitioners monitor athletes' health conditions for symptoms of concussion. This can help sports medical practitioners make a more timely diagnosis of concussions and avoid subsequent issues that could put the athlete's well-being at risk. Sports Medical Practitioners will receive and evaluate the conditions or symptoms of athletes after each game/training session for a possible concussion. This will provide the Sports Medical Practitioner with reports so he can advise athletes as needed.

The Sports Medical Practitioner will obtain the severity score for the athlete. This will provide them with the information necessary to evaluate the athlete. The severity score will be divided into 3 categories: "No Difference", "Unsure", and "Very Different". The system will display "green" for no difference, "yellow" for unsure, "red" for very different.

Phase II Part 2

List the potential objects in the provided space. Use the template provided to create a CRC diagram for each object. You may add pages if necessary.

Potential Object

- Athlete - Role
- Sport Medical Practitioner - Role
- Symptoms - Things
- Input Severity of Symptoms after each game - Occurrence and Events
- Calculating Severity Score after each game - Occurrence and Events
- Symptom Summary - Occurrence and Events

Class: Athlete	
Responsibilities Input severity of the symptoms after each game. View the symptom summary. View Risk Condition Indicator.	Collaborators Sports Medical Practitioner Severity Calculator

Class: Sports Medical Practitioner	
Responsibilities View Symptom Summary from Athlete. Calculate Severity Score. View Risk Condition Indicator for Athlete. Display color based on overall rating.	Collaborators Athlete Severity Calculator

Class: Severity Calculator	
Responsibilities	Collaborators
Calculate Severity Score.	Sports Medical Practitioner Athlete

Phase II Part 3

Use Astah to draw the class diagram. Use proper UML notation. Take a clear screenshot of your completed diagram and paste it on this page.

Note: isMedicalPractitioner has acces to multiple athletes at a time. However, they cannot use the symptomEntry method from the console UI.

