

Use Case Diagram for Cricinfo

Learn how to define use cases and create the corresponding use case diagram for the Cricinfo problem.

We'll cover the following

- System
- Actors
 - Primary actors
 - Secondary actors
- Use cases
 - Admin
 - Commentator
- Relationships
 - Generalization
 - Associations
 - Extend
- Use case diagram

Let's build the use case diagram of Cricinfo and understand the relationship between its different components.

First, we will define the different elements of our Cricinfo system, followed by the complete use case diagram of the system.

System

Our system is "Cricinfo."

Actors

Now, we'll define the main actors of Cricinfo.

Primary actors

- Admin:** The admin is in charge of performing numerous operations—adding or modifying tournaments, innings, updating stats, etc.
- Commentator:** This actor can add commentary to the match or modify it.

Secondary actors

There is no secondary actor in the system.

Use cases

In this section, we'll define the use cases for Cricinfo. We have listed the use cases according to their respective interactions with a particular actor.

Note: You'll see some use cases occurring multiple times because they are shared among different actors in the system.

Admin

- Add/modify team:** To add a team in the system or modify it
- Add/modify player:** To add a player to the team or modify it
- Add/modify tournament:** To add a tournament in the system or modify it
- Add/modify team squad:** To add a team squad or modify it
- Add/modify innings:** To add innings in the match or modify it
- Add/modify over:** To add an over in the match or modify it
- Add/modify ball:** To add a ball in the match or modify it
- Add match:** To add a match in the system
- Add/update news:** To add the match news in the system or update it
- Add/modify stadium:** To add a stadium in the system or modify it
- Add/modify umpire:** To add an umpire in the system or modify it
- Add/update stats:** To add stats of a player, match, or tournament to the system

Commentator

- Add/modify commentary:** To add a commentary to the match or modify it

Relationships

We describe the relationships between and among actors and their use cases in this section.

Generalization

- The admin can add/update stats by adding/updating player, match, or tournament stats. This shows “Add/update stats” use case has a generalization relationship with the “Add/update player stats,” “Add/update match stats,” and “Add/update tournament stats” use cases.
- The admin can add the match type—T20, test, or ODI. Hence, the “Add match” use case has a generalization relationship with the “Add T20,” “Add test,” and “Add ODI” use cases.

Associations

The table below shows the association relationship between actors and their use cases.

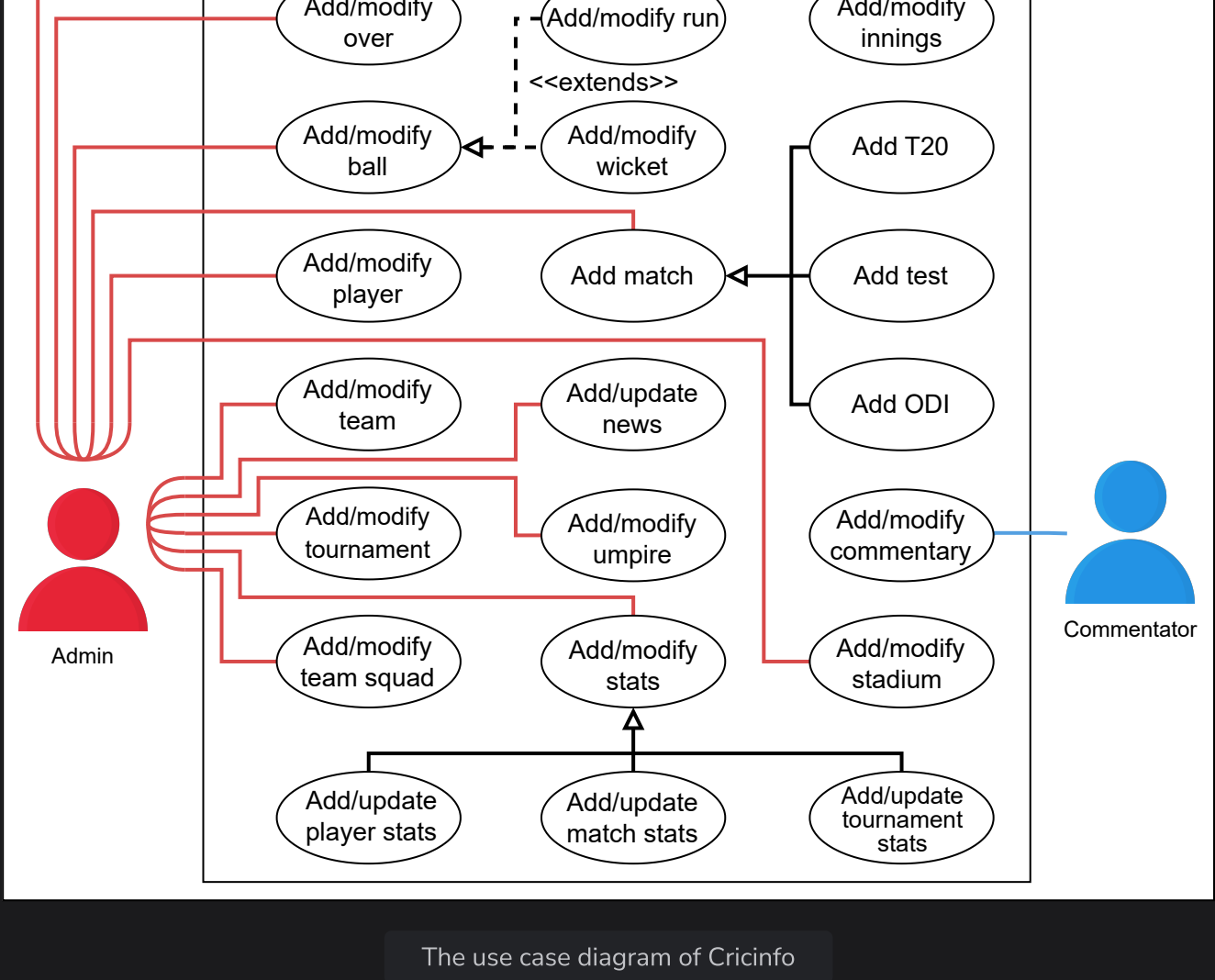
Admin	Commentator
Add/modify team	Add/modify commentary
Add/modify player	
Add/modify tournament	
Add/modify team squad	
Add/modify innings	
Add/modify over	
Add/modify ball	
Add match	
Add/update news	
Add/modify stadium	
Add/modify umpire	
Add/update stats	

Extend

- While adding/modifying the ball, either a run, wicket, or both are added/modified. Therefore, the “Add/modify ball” use case has an extend relationship with the “Add/modify run” and “Add/modify wicket” use cases.

Use case diagram

Here's the use case diagram of Cricinfo:



The use case diagram of Cricinfo

In the next lesson, we'll discuss the class diagram with a detailed explanation of all classes and their relationship with each other.