

Ingegneria Del Software

Boxing Arena

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Introduction

This document outlines the Software Requirements Specification (SRS) for the Boxing Arena system, a platform designed to manage the ecosystem of boxing competitions efficiently. It connects boxers, gym managers, and referees, enhancing the organization and experience of boxing events.

1. Purpose

The purpose of this document is to provide a detailed guide for the Boxing Arena system, including user stories, functional requirements, and use case diagrams.

2. System Overview

Boxing Arena is a platform that connects boxers, gym managers, and referees. The system enables boxers to register for matches, view rankings, and track their progress. Gym managers can create and organize tournaments, while referees can manage results, assign points, and update leaderboard

2.1. HW and SW requirements

Kart GP can run on Windows, MacOS, and Unix-like operating systems, and to do so the relative database must be installed. Hardware requirements are:

- 2 GB RAM minimum, 4 GB RAM recommended.
- 1.5 GB hard disk space.

2.2. Related Systems

There already exist systems that can be related to the usage of Boxing Arena :

- **Ring -07-**

Common features: both systems allow boxer to participate in a tournament. Advantages of Boxing Arena : The system allows the Boxer to view the Ranking. Disadvantages of Boxing Arena: The system offers a loyalty card to access rewards or offers.

- **i-Boxer**

Common features: both systems allow boxer to participate in a tournament. Advantages of Kart GP: The system allows the referee to assign points. Disadvantages of Boxing Arena : The system does not allow you to choose a weight category, the latter will be decided and managed outside the application

3. User Stories

1. As a boxer, I want to participate in a boxing match, so I can compete against other boxers.
2. As a gym manager, I want to manage boxing tournaments, so I can create events where boxers can compete
3. As a referee, I want to see the results of the boxing matches, so I can assign points and update the leaderboard.

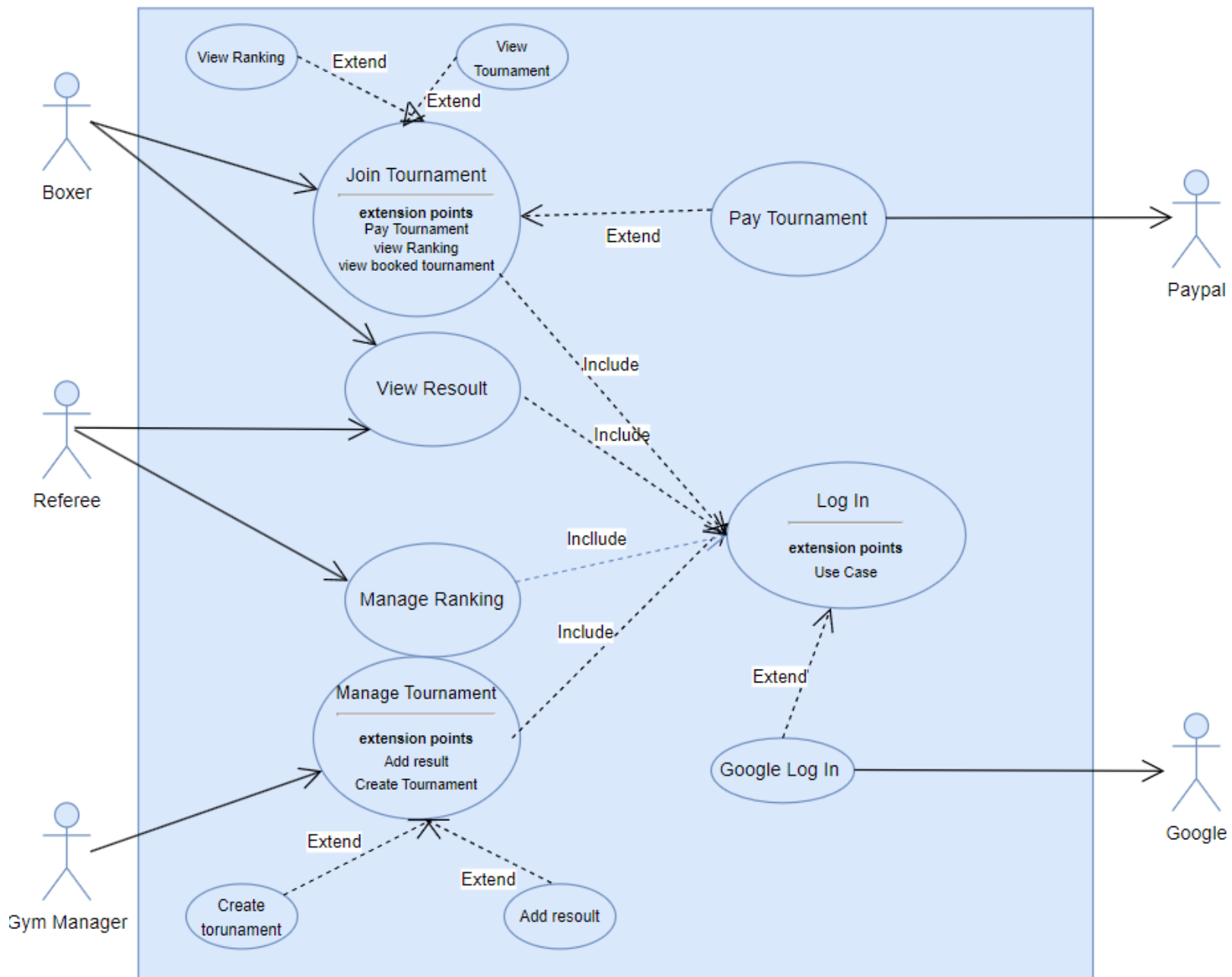
4. Functional Requirements

1. The system shall provide a list of available tournaments.
2. The system shall display a fillable form with the information of the tournaments.
3. The system shall display the result of the match.

5. Use Case Diagram

The following diagram illustrates the main use cases of the Boxing Arena system, including interactions between actors and use cases.

5.1 Overview Diagram



5.2. Internal Steps Internal Steps: Join Tournament

Internal Steps: Join Tournament

1. **The boxer requests to join the tournament.**
 2. **Log in.**
 3. **The system retrieves available tournaments from the database.**
 4. **The system displays available tournaments.**
 5. **The boxer selects the tournament..**
 6. **The system displays the entrance fee.**
 7. **The system asks the boxer to select the payment method.**
 8. **The boxer selects to pay by cash.**
 9. **The system displays the receipt.**
 10. **The system terminates the use case.**
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Extensions

- **3a. The database does not respond:**
 - The system notifies the boxer that it could not retrieve the tournaments and terminates the use case.
- **4a. There are no available tournaments:**
 - The system notifies the boxer that there are no tournaments available and terminates the use case.
- **8a. The boxer wants to pay via PayPal:**
 - The boxer selects PayPal as the payment method.
- **8b. PayPal:**
 - The system redirects the boxer to the PayPal payment page to complete the transaction.
- **10a. The boxer requests to view tournament entries:**
 - The system displays the list of participants already registered for the tournament.