

Use Case 10: Player Withdraws from Matchmaking Queue

Actors:

- **Player** (Primary)
- **Matchmaking System** (Supporting)

Preconditions:

- The player has requested to find a match and is currently in the matchmaking queue.
- The system is still searching for an opponent.

Trigger:

- The player selects the "**Cancel Matchmaking**" option before a match is found.

Main Flow:

1. The **Player** sends a request to withdraw from the matchmaking queue.
2. The **Matchmaking System** verifies that the player is still in the queue.
3. The system **removes the player from matchmaking**.
4. The player receives a **confirmation message** that matchmaking has been canceled.

Alternative Flows:

- **Match is Found Before Cancellation:** If a match is found just before cancellation, the system **prevents withdrawal**, and the player is placed into the match.
- **Player Disconnects Before Confirmation:** If the player loses connection before confirming cancellation, the system **removes them automatically** from matchmaking after a timeout.

Postconditions:

- The player is no longer in the matchmaking queue.
- The system stops searching for an opponent for the withdrawn player.

Use Case 11: Player Reports an Unfair Match

Actors:

- **Player** (Primary)

- **Matchmaking System** (Supporting)
- **Admin/Support Team** (Supporting)

Preconditions:

- A match has been completed.
- The player believes the match was unfair (e.g., skill disparity, cheating, or matchmaking errors).

Trigger:

- The player selects the "**Report Match**" option from the match history.

Main Flow:

1. The **Player** submits a match report, selecting a reason (e.g., unfair opponent, cheating, connection issues).
2. The **Matchmaking System** logs the report and assigns it a case ID.
3. If the system detects repeated reports against the same player, it **flags the player for admin review**.
4. The **Admin/Support Team** investigates the report and takes action if needed (e.g., reviewing logs, adjusting rankings, issuing penalties).

Alternative Flows:

- **False Report Detection:** If a player repeatedly submits false reports, they may receive a warning or penalty.
- **Automated Skill Adjustment:** If a legitimate skill mismatch is detected, the system **adjusts ranking points** accordingly.

Postconditions:

- The report is logged and reviewed by the system or admins.
- If needed, adjustments to rankings or penalties are applied.

Use Case 12: Matchmaking System Detects a Rematch Request

Actors:

- **Player 1** (Primary)

- **Player 2** (Primary)
- **Matchmaking System** (Supporting)

Preconditions:

- Two players have **just completed a match**.
- One or both players request a **rematch**.

Trigger:

- A player selects "**Request Rematch**" instead of returning to the matchmaking queue.

Main Flow:

1. The **Matchmaking System** checks if the opponent is still online.
2. If the opponent is available, the system **sends them a rematch invitation**.
3. If the opponent **accepts**, a new match is created with the same players.
4. If the opponent **declines or doesn't respond**, the player is placed back in the normal matchmaking queue.

Alternative Flows:

- **Opponent Declines:** The system notifies the player, and they return to matchmaking.
- **Opponent Disconnects Before Accepting:** The system cancels the rematch request and sends the player to matchmaking.

Postconditions:

- If the rematch is accepted, a **new game starts**.
- If declined, the players return to **regular matchmaking**.