Use Case Diagrams and Descriptions

Use Case Descriptions

1. View Leaderboard

- **Description:** The player views the leaderboard displaying ranks, player names, and number of matches won.
- **Dependencies:** Requires leaderboard data from the server.

2. View Match History

- **Description:** The player views previous match results, including opponent names and outcomes (Win/Lose).
- **Dependencies:** Requires match history data from the server.

3. Select Language

- **Description:** The player selects either English or French for the display language.
- **Dependencies:** User must be authenticated.

4. Invite Friend

- **Description:** The player invites a friend to play by selecting them from the friend list.
- **Dependencies:** Invited player must be online, and the response must be received within 10 minutes.

5. Select Music

- **Description:** The player selects audio options from two music bundles for background music and sound effects.
- **Dependencies:** User must be authenticated.

6. Select Game Level

- **Description:** The player selects a game difficulty level (Easy, Medium, Hard) before starting a match.
- **Dependencies:** Game level must be selected prior to match start.

7. Play with Bot

- **Description:** The player plays against a bot when offline or when no other players are available.
- **Dependencies:** Bot system must be pre-configured.

8. Use Prebuilt Ships

- **Description:** The player drags and drops prebuilt ships from a side screen into the game grid.
- **Dependencies:** The player must have been matched already.

9. Start Match

- **Description:** The player is taken to the gameplay screen upon confirming ship placements.
- **Dependencies:** All ships must be placed.

10. Shoot Enemy Grid

- **Description:** The player selects a coordinate on the enemy grid to shoot.
- **Dependencies:** The enemy's grid must be initialized and visible, and it must be the player's turn.

11. View Game Results

- **Description:** The player sees game results and leaderboard updates after a match concludes.
- **Dependencies:** Game conclusion must be reached.

12. Access Tutorial

- **Description:** New players see a tutorial upon first login; returning players can access it from the main menu.
- **Dependencies:** The system must identify new or returning players.