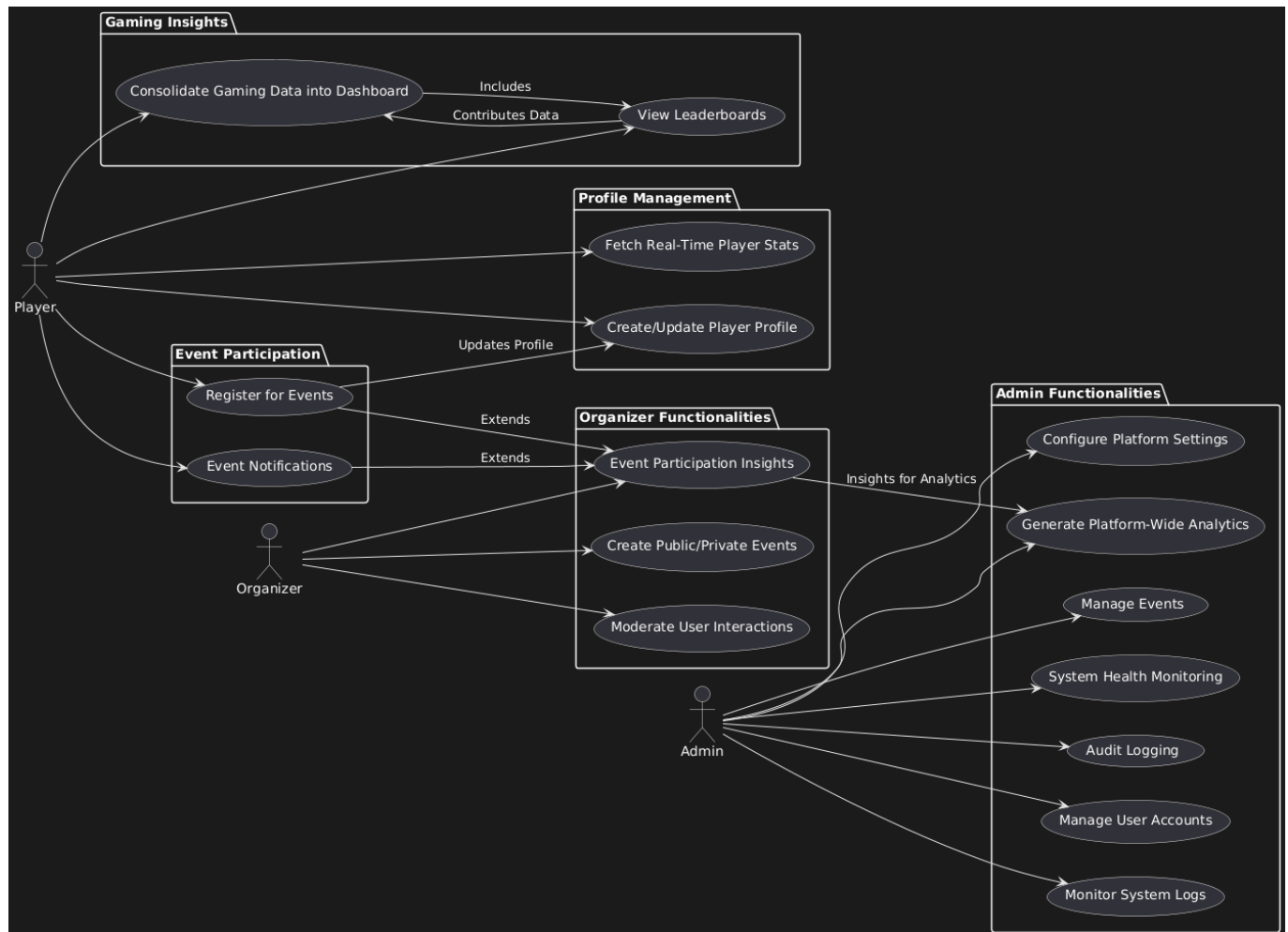# Use Case Diagram

Profile Management

1. **Create/Update Player Profile (U1)**

   - **Actor(s):** Player
   - **Description:** Players can create or modify their profile information, including username, avatar, preferences, and gaming history.
   - **Precondition:** Player must be logged into the platform.
   - **Postcondition:** The updated profile is saved and reflected across the system.

2. **Fetch Real-Time Player Stats (U2)**

   - **Actor(s):** Player
   - **Description:** Players can view their real-time performance stats, such as wins, losses, and rankings.
   - **Precondition:** Player has an active profile with participation history.
   - **Postcondition:** Stats are displayed on the player dashboard.

Gaming Insights

3. **Consolidate Gaming Data into Dashboard (U3)**

- ○ **Actor(s):** Player
- ○ **Description:** Players can view their consolidated performance data in a personalized dashboard.
- ○ **Precondition:** Player has completed at least one game or event.
- ○ **Postcondition:** A dynamic dashboard is displayed with updated insights.

4. **View Leaderboards (U4)**

- ○ **Actor(s):** Player
- ○ **Description:** Players can view leaderboard rankings and compare their performance against others.
- ○ **Precondition:** At least one game or event must have been completed.
- ○ **Postcondition:** Leaderboard data is retrieved and displayed.
- ○ **Includes:** Consolidate Gaming Data into Dashboard (U3).

Event Participation

5. **Register for Events (U5)**

- ○ **Actor(s):** Player
- ○ **Description:** Players can register for upcoming public or private events.
- ○ **Precondition:** Event registration must be open.
- ○ **Postcondition:** Player is added to the event participant list.
- ○ **Extends:** Event Participation Insights (U8).
- ○ **Updates:** Player profile with participation history.

6. **Event Notifications (U6)**

- ○ **Actor(s):** Player
- ○ **Description:** Players receive notifications for upcoming events, updates, and reminders.
- ○ **Precondition:** Player has opted in for notifications.
- ○ **Postcondition:** Notifications are delivered to the player.
- ○ **Extends:** Event Participation Insights (U8).

Organizer Functionalities

7. **Create Public/Private Events (U7)**

- ○ **Actor(s):** Organizer
- ○ **Description:** Organizers can create and manage public or private events for players.
- ○ **Precondition:** Organizer must have a valid account.
- ○ **Postcondition:** Events are created and published.

8. **Event Participation Insights (U8)**

- ○ **Actor(s):** Organizer
- ○ **Description:** Organizers can view participant statistics, such as registration trends and player performance.
- ○ **Precondition:** Event must have at least one registered participant.
- ○ **Postcondition:** Insights are displayed to the organizer.

- **Links to:** Platform-wide Analytics (U11).

9. **Moderate User Interactions (U9)**

   - **Actor(s):** Organizer
   - **Description:** Organizers can moderate interactions between players within events, ensuring compliance with community guidelines.
   - **Precondition:** Event must have ongoing player interactions.
   - **Postcondition:** Moderator actions are logged and applied.

Admin Functionalities

10. **Manage User Accounts (U10)**

    - **Actor(s):** Admin
    - **Description:** Admins can create, update, suspend, or delete user accounts.
    - **Precondition:** Admin must be authenticated.
    - **Postcondition:** Account changes are saved and reflected.

11. **Generate Platform-Wide Analytics (U11)**

    - **Actor(s):** Admin
    - **Description:** Admins can generate detailed analytics across the platform, including participation and engagement statistics.
    - **Precondition:** Platform activity data is available.
    - **Postcondition:** Analytics reports are generated.

12. **Monitor System Logs (U12)**

    - **Actor(s):** Admin
    - **Description:** Admins can monitor system logs for activities, errors, and anomalies.
    - **Precondition:** Logs must be generated by the system.
    - **Postcondition:** Logs are reviewed, and anomalies flagged.

13. **Configure Platform Settings (U13)**

    - **Actor(s):** Admin
    - **Description:** Admins can modify global platform settings, such as themes, notification preferences, and system-wide configurations.
    - **Precondition:** Admin access is required.
    - **Postcondition:** Settings are updated.

14. **Manage Events (U14)**

    - **Actor(s):** Admin
    - **Description:** Admins can oversee and manage events created by organizers, including cancellations or edits.
    - **Precondition:** Event must exist in the system.
    - **Postcondition:** Event changes are applied.

15. **System Health Monitoring (U15)**

- ○ **Actor(s):** Admin
- ○ **Description:** Admins can monitor the platform's server health, usage metrics, and system performance.
- ○ **Precondition:** Monitoring tools must be operational.
- ○ **Postcondition:** Health data is retrieved and displayed.

16. **Audit Logging (U16)**

- ○ **Actor(s):** Admin
- ○ **Description:** Admins can review detailed activity logs for audit purposes, ensuring transparency and security.
- ○ **Precondition:** Logs must be generated by the system.
- ○ **Postcondition:** Logs are reviewed and archived.