Use cases of “Streaming Platform”

1)

RQ01	**The system allows user registration**
Description	This use case allows a new user to create an account in the system.
Pre-condition	– User is not registered – The provided input data is valid (correct email format, unique username, etc.)
Post-condition	– User account is created – User data is saved in the system – The user receives confirmation of successful registration
Dependencies	– None
Basic path	1. The user opens the registration page. 2. The user enters the required information. 3. System validates input data. 4. The system verifies the uniqueness of the username and email. 5. The system hashes the password and creates a user account. 6. The system stores the user data in the database. 7. The system sends a confirmation of successful registration (e.g., via email). 8. The user receives confirmation and can log into the system.
Alternative path	2a. If email or name already exists, system returns an error.
Exceptional path	3a. If data validation fails, system prompts user to correct input. 6a. If a system error occurs while saving the user data (e.g., database is unavailable), the system returns an error.

2)

RQ02	**The system allows user authentication**
Description	This use case allows a registered user to log in to the system.
Pre-condition	– User is registered – The user provides valid login credentials (email/phone number and password)
Post-condition	– The user is successfully logged in – The system generates and returns an authentication token – The user gains access to authorized functionalities
Dependencies	– RQ01
Basic path	1. The user opens the login page. 2. The user enters login credentials. 3. System verifies credentials against repository. 4. The system generates an authentication token. 5. The system returns the authentication token to the user. 6. The user is successfully logged in and can access authorized features.
Alternative path	2a. If incorrect credentials, system returns an error.
Exceptional path	3a. If authentication service fails, system logs the error and denies login.

3)

RQ03	**The system allows watching a film.**
Description	This use case allows any user to watch a film through the system.
Pre-condition	– The film is available in the system – The user is authorized (if necessary for access)

Post-condition	– The film is played back in the appropriate quality
Dependencies	– RQ10 – RQ02 (if required)
Basic path	1. The user navigates to the film catalog or searches for a film. 2. The user selects a film to watch. 3. The system checks the availability of the film. a. Retrieves film metadata (title, duration, quality options, etc.). 4. The system determines the film source. a. If the film is stored in cache, the system retrieves it from the cache and starts playback. b. If the film is not cached, the system retrieves it from the repository and loads it. 5. The system checks the user's subscription. a. If the user has a **premium subscription**, the system checks if a **high-quality stream** is available and plays it. b. If the user does not have a premium subscription, the system plays the film in **standard quality**. 6. The film starts playing for the user.
Alternative path	2a. If film data is not in cache, system fetches from repository.
Exceptional path	3a. If film is not found, system returns an error. 5a. If the user does not have a **premium subscription**, the system plays the film in standard quality. 5b. If a high-quality version of the film is not available, the system displays an error.

4)

RQ04	**The system allows editing the user profile**
Description	This use case allows the user to change their profile details, except for mail.
Pre-condition	– User is logged in
Post-condition	– Profile data has been updated (except for mail)
Dependencies	– RQ02
Basic path	1. The user logs into their profile. 2. The user selects an option to edit the profile. 3. The system displays the current user data. 4. The user changes their data (e.g. first name, last name, password, photo, etc.). 5. The user confirms the changes. 6. The system saves the changes and updates the user profile.
Alternative path	2a. If the user cannot log in to the profile (e.g., not authorized), the system displays an error and requests authorization.
Exceptional path	4a. If a user attempts to change mail, the system displays an error informing that mail cannot be changed through this process.

5)

RQ05	**The system allows commenting on a film**
Description	This use case allows logged-in users to comment on a film.
Pre-condition	– The user is logged in – The film exists in the system
Post-condition	– The comment is successfully posted and visible to other users
Dependencies	– RQ02 – RQ03

Basic path	1. The user navigates to a film's page. 2. The user enters a comment in the input field. 3. The user submits the comment. 4. The system validates the comment (e.g., checks for empty content or prohibited words). 5. The system saves the comment to the repository. 6. The system displays the comment under the film, making it visible to other users. 7. The system confirms the action.
Alternative path	4a. If comment contains restricted content, system requests correction.
Exceptional path	4b. If comment system fails, error is returned.

6)

RQ06	**The system allows viewing watch history**
Description	This use case allows logged-in users to view their watch history.
Pre-condition	– The user is logged in – The system has recorded watch history for the user
Post-condition	– The user can see a list of films they have watched
Dependencies	– RQ02 – RQ03
Basic path	1. The user logs into their account. 2. The user navigates to the "Watch History" section. 3. The system retrieves the user's watch history from the database. 4. The system displays a list of previously watched films, including relevant details. 5. The user views the watch history.
Alternative path	2a. The system detects that no history data is available for the user.

Exceptional path	3a. System fails to retrieve watch history.

7)

RQ07	**The system allows managing a subscription**
Description	This use case allows users to subscribe or cancel their subscription.
Pre-condition	– The user is logged in – The user either has an existing subscription or wishes to subscribe to a new one
Post-condition	– The user’s subscription is either created, activated, or canceled based on the actions performed
Dependencies	– RQ02
Basic path	1. User chooses a subscription plan. 2. System processes payment. 3. System activates subscription. 4. User's subscription is created or activated.
Alternative path	2a. If payment is delayed, subscription remains pending.
Exceptional path	2b. If payment fails, subscription is not activated. 3a. If user cancels, subscription is deactivated.

8)

RQ02	**The system allows managing player settings**
Description	This use case allows users to customize their media player settings, including volume, video quality, and other playback preferences.
Pre-condition	– No pre-condition is required for adjusting volume and selecting video quality below 1080p – The user must be logged in to set video quality above 720p

Post-condition	– The updated player settings are applied immediately – If applicable, the changes are saved to the user's profile for future sessions
Dependencies	– RQ02 – RQ03
Basic path	1. The user accesses the player settings menu. 2. The user modifies one or more settings. 3. The system validates the changes. 4. If the changes are applicable to future sessions, the system saves them to the user’s profile. 5. The system applies the updated settings to the media player in real time.
Alternative path	2a. If user restores defaults, settings revert to initial values.
Exceptional path	3a. If system error occurs, settings are not saved and user is notified.

9)

RQ09	**The system allows managing users**
Description	This use case allows an administrator to manage user accounts by changing roles, blocking or unblocking accounts, and viewing user details.
Pre-condition	– The administrator must be logged into the system – The administrator must have either the **ADMIN** or **GOD** role
Post-condition	– The user's role or account status is updated in the system
Dependencies	– RQ02
Basic path	1. Admin selects the **Manage Users** section. 2. The administrator searches for a specific user by username, email, or other identifier. 3. The system retrieves and displays the user's details.

	4. The administrator updates the user's role, blocks, or unblocks the account. 5. The system validates and saves the changes. 6. The user's updated status is applied in the system.
Alternative path	4a. If the user is already blocked, the system notifies the admin.
Exceptional path	3a. If the user is not found, the system returns an error.

10)

RQ10	**The system allows uploading a film**
Description	Allows an administrator to upload new films to the platform.
Pre-condition	– The administrator must be logged into the system – The administrator must have either the **ADMIN** or **GOD** role
Post-condition	– The film is uploaded and available for viewing
Dependencies	– RQ02
Basic path	1. Admin navigates to the **Upload Film** section. 2. Admin provides film details (title, description, genre, duration, quality). 3. Admin uploads the film file. 4. The system validates the file format and metadata. 5. The system stores the film and updates the database.
Alternative path	4a. If the film format is incorrect, the system requests correction.
Exceptional path	5a. If an upload error occurs, the system notifies the admin.

11)

RQ11	**The system allows editing film information**

Description	Allows an administrator to edit film details (title, description, genre, etc.).
Pre-condition	– The administrator must be logged into the system – The administrator must have either the **ADMIN** or **GOD** role
Post-condition	– Film information is updated in the system
Dependencies	– RQ02 – RQ10
Basic path	1. The admin navigates to the **Manage Films** section. 2. The admin selects a film to edit. 3. The system displays current film details. 4. The admin updates the necessary fields. 5. The system saves changes.
Alternative path	4a. If no changes are made, the system notifies the admin.
Exceptional path	3a. If the film is not found, the system returns an error.

12)

RQ12	**The system allows deleting comments**
Description	This use case allows a moderator to remove comments that violate platform rules, particularly those that have been reported.
Pre-condition	– The user is logged into the system – The user has a **MODERATOR** or **GOD** role – The comment has been reported – The comment still exists in the system
Post-condition	– The comment is permanently removed from the system
Dependencies	– RQ02 – RQ05 – RQ14

Basic path	1. The moderator is notified of a report on a comment. 2. The moderator reviews the comment and any associated reports. 3. T The moderator decides whether to delete the comment or leave it. 4. If the moderator decides to delete the comment, the system removes it from the platform.
Alternative path	2a. If the comment is already deleted, the system notifies the moderator. 4a. If the moderator decides that the comment does not violate the rules, the moderator will leave the comment.
Exceptional path	4b. If a comment cannot be deleted, the system displays an error.

13)

RQ13	**The system allows banning users**
Description	This use case allows a moderator to ban users who violate platform policies, preventing them from accessing the platform.
Pre-condition	– The moderator is logged into the system – The moderator has a **MODERATOR** or **GOD** role
Post-condition	– The user is banned, and their access to the platform is revoked
Dependencies	– RQ02
Basic path	1. The moderator navigates to the **User Moderation** section. 2. The moderator searches for a specific user by username, email, or other identifier. 3. The system retrieves and displays the user’s information. 4. The moderator selects the option to ban the user. 5. The system updates the user’s status to **banned**, restricting their access.

Alternative path	4a. If the user is already banned, the system notifies the moderator.
Exceptional path	3a. If the user is not found, the system returns an error.

14)

RQ14	**The system allows reporting a comment**
Description	This use case allows users to report inappropriate comments.
Pre-condition	– The user is logged into the system
Post-condition	– The report is sent to moderators
Dependencies	– RQ02 – RQ05
Basic path	1. The user selects the comment he wants to report. 2. The user clicks on the “Complaint” button under the comment. 3. The system asks the user for the reason for the complaint (e.g., insults, spam, etc.). 4. The user selects or enters the reason for the report. 5. The system saves the report and notifies the moderator of the new report.
Alternative path	2a. If the comment is not found, the system displays an error that the comment does not exist. 3a. If the user cannot submit a report (e.g., not authorized), the system displays an error.
Exceptional path	2b. If the user does not have permission to submit a report, the system displays an error. 5a. If the comment is already reported, the system does not duplicate the report.

15)

RQ15	**The system allows rating a film**

Description	This use case allows users to rate movies by assigning a score, which contributes to the film’s overall average rating.
Pre-condition	– The user must be logged into the system
Post-condition	– The film’s average rating is updated based on the new user rating
Dependencies	– RQ02 – RQ03
Basic path	1. The user selects a movie and provides a rating (1-5 stars). 2. The system saves the rating in the database. 3. The system recalculates and updates the movie’s average rating.
Exceptional path	2a. If a user has already given a rating, the old one is updated.

16)

RQ16	**The system allows reporting a player issue to support**
Description	This use case allows users to report issues with the media player, such as a black screen, loading errors, or playback malfunctions.
Pre-condition	– The user is logged into the system – The media player is experiencing an issue
Post-condition	– The issue report is saved and sent to technical support – The user receives confirmation that the report has been submitted
Dependencies	– RQ02 – RQ03
Basic path	1. The user notices that the media player is not functioning correctly (e.g., black screen, loading error). 2. The user clicks the **"Report a Problem"** button in the player interface.

	3. The system prompts the user to describe the problem. 4. The user confirms that the message has been sent. 5. The system saves the report and notifies technical support. 6. The user receives an acknowledgement that the message has been received.
Alternative path	3a. The user chooses not to submit the report and exits the reporting interface.
Exceptional path	5a. If an error occurs while saving or sending the report, the user is notified with an error message.