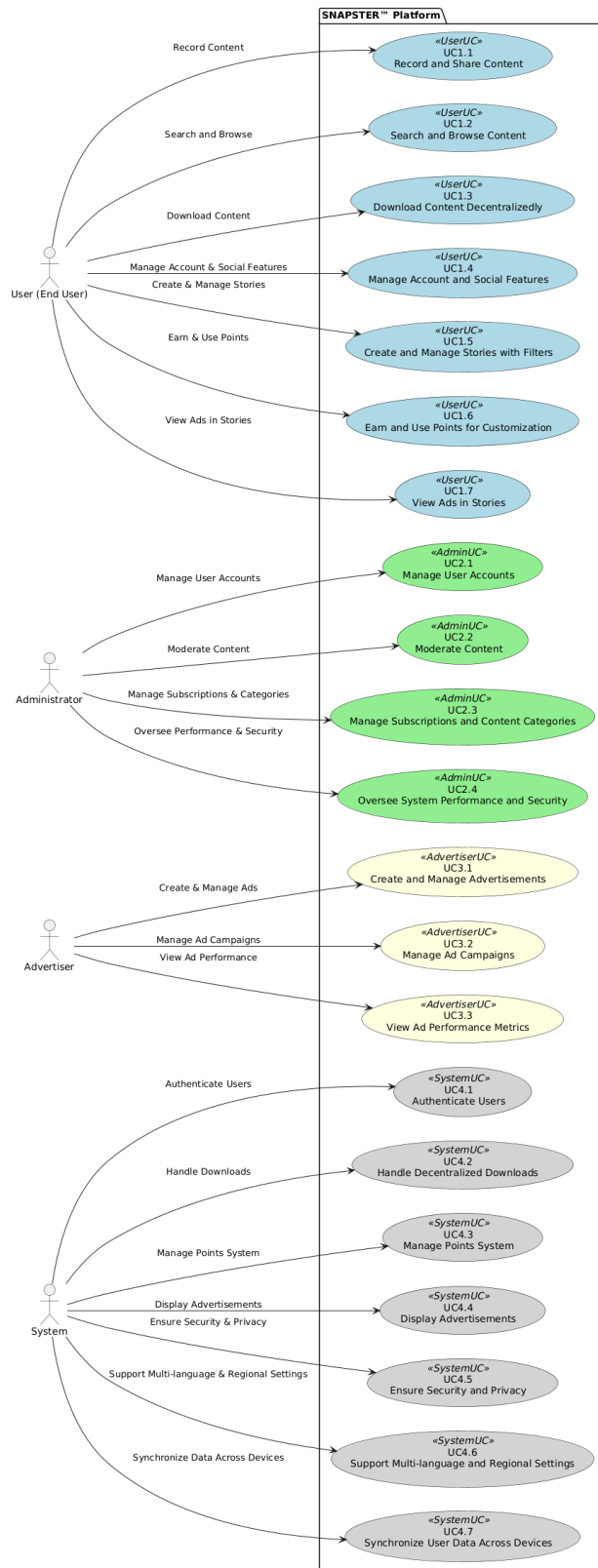


7. Use Cases



Actors and Use Cases for SNAPSTER™

Actor	Use Case ID	Use Case	Description
User (End User)	UC1.1	Record and Share Content	Users can record videos or audio clips using their mobile devices and share them with friends or publicly on the platform.
User (End User)	UC1.2	Search and Browse Content	Users can search for specific content using keywords or browse through various categories to discover new media.
User (End User)	UC1.3	Download Content Decentralizedly	Users can download content directly from other users' devices using a decentralized approach, utilizing multiple sources for faster and more efficient downloads.
User (End User)	UC1.4	Manage Account and Social Features	Users can create, update, and delete their accounts; add or remove friends; send and receive direct messages; and customize their avatars using earned or purchased points.
User (End User)	UC1.5	Create and Manage Stories with Filters	Users can create stories by recording content, applying visual or audio filters, and sharing them with selected friends or publicly.
User (End User)	UC1.6	Earn and Use Points for Customization	Users earn points by sharing popular content and can use these points to customize avatars or purchase additional points through in-app purchases.
User (End User)	UC1.7	View Ads in Stories	Users will occasionally see advertisements embedded within user stories and can interact with them, such as clicking through to the advertiser's page.
Administrator	UC2.1	Manage User Accounts	Administrators can create, update, deactivate, or delete user accounts to maintain platform integrity and user management.
Administrator	UC2.2	Moderate Content	Administrators review and remove inappropriate or violating content based on user reports or automated moderation tools to enforce community guidelines.

Actor	Use Case ID	Use Case	Description
Administrator	UC2.3	Manage Subscriptions and Content Categories	Administrators allow content providers to categorize and tag their content, support multiple languages and regional settings, and manage region-specific content and suggestions to enhance content discoverability.
Administrator	UC2.4	Oversee System Performance and Security	Administrators monitor platform performance metrics, ensure cross-platform accessibility and data synchronization, and ensure compliance with data privacy regulations like GDPR.
Advertiser	UC3.1	Create and Manage Advertisements	Advertisers design, create, and upload advertisements to be displayed within user stories on the platform.
Advertiser	UC3.2	Manage Ad Campaigns	Advertisers set up, configure, and manage their ad campaigns, including targeting criteria, budgeting, and scheduling to optimize ad performance.
Advertiser	UC3.3	View Ad Performance Metrics	Advertisers can access and analyze statistics related to their advertisements, such as impressions, clicks, and engagement rates to assess and optimize campaign effectiveness.
System	UC4.1	Authenticate Users	The system verifies user login credentials to ensure secure access to the platform.
System	UC4.2	Handle Decentralized Downloads	The system manages peer-to-peer connections for downloading content and optimizes download speeds by utilizing multiple sources simultaneously.
System	UC4.3	Manage Points System	The system tracks points earned by users for sharing content and handles point transactions for avatar customization and purchases.
System	UC4.4	Display Advertisements	The system inserts advertisements into user stories at predefined intervals and tracks user interactions with these ads for analytics purposes.
System	UC4.5	Ensure Security and Privacy	The system securely stores all user data, manages data privacy compliance, and encrypts data transmission to protect against unauthorized access.

Actor	Use Case ID	Use Case	Description
System	UC4.6	Support Multi-language and Regional Settings	The system provides language translations for user interfaces and delivers region-specific content and suggestions based on user preferences.
System	UC4.7	Synchronize User Data Across Devices	The system ensures that user data, including content, settings, and points, are consistently synchronized across all devices accessed by the user.

Normal Scenarios

Use Case: Record and Share Content

- **ID:** UC1.1
- **Actors:** User (End User)

Aspect	Details
Pre-conditions	<ul style="list-style-type: none"> - User must be logged into their SNAPSTER™ account. - User has granted the app permission to access the device's camera and microphone. - Device has sufficient storage space.
Flow of Events	<ol style="list-style-type: none"> 1. Navigate to Record Section: User opens the SNAPSTER™ app and navigates to the "Record" section. 2. Select Content Type: User chooses to record either a video or an audio clip. 3. Initiate Recording: User initiates the recording process by tapping the record button. 4. Record Content: User records the desired content, with the option to pause or stop as needed. 5. Preview Content: After recording, user previews the content to ensure satisfaction. 6. Choose Sharing Options: User selects whether to share the content with specific friends or make it public. 7. Upload Content: User confirms sharing, and the system uploads the content to the platform. 8. Notification: Friends or the public are notified about the new content based on sharing settings.
Post-conditions	<ul style="list-style-type: none"> - Recorded content is saved in the user's account. - Shared content is accessible to designated friends or the public. - Notifications are sent to relevant users about the new content.

Use Case: Search and Browse Content

- **ID:** UC1.2
- **Actors:** User (End User)

Aspect	Details
Pre-conditions	<ul style="list-style-type: none">- User must be logged into their SNAPSTER™ account.- Content must be available and properly categorized within the platform.- User has access to a stable internet connection.
Flow of Events	<ol style="list-style-type: none">1. Access Search/Browse Interface: User opens the SNAPSTER™ app and navigates to the search bar or browse section.2. Enter Search Keywords: If searching, user enters specific keywords related to desired content.3. Apply Filters (Optional): User applies filters such as genre, date, popularity, or other available criteria to refine search results.4. Initiate Search: User submits the search query or selects a category to browse.5. System Processes Request: SNAPSTER™ system processes the search or browse request, retrieving relevant content from the database.6. Display Results: System displays search results or categorized content to the user.7. Interact with Content: User selects content from the results to view details, watch, or download as desired.
Post-conditions	<ul style="list-style-type: none">- Relevant search results or categorized content are displayed to the user.- User can access and interact with the displayed content.- User can refine or modify search criteria for more accurate results.

Use Case: Manage Account and Social Features

- **ID:** UC1.4
- **Actors:** User (End User)

Aspect	Details
Pre-conditions	<ul style="list-style-type: none">- User must be logged into their SNAPSTER™ account.- User has access to account and social management sections within the app.- User has earned or purchased points for avatar customization.
Flow of Events	<ol style="list-style-type: none">1. Access Account Settings: User navigates to the "Account Settings" or "Social Features" section within the SNAPSTER™ app.2. Update Profile Information: User updates personal details such as name, bio, profile picture, etc., and saves changes.

Aspect	Details
	<p>3. Manage Friends List: User adds new friends by searching for their profiles or removes existing friends from their friends list.</p> <p>4. Send/Receive Messages: User composes and sends direct messages to friends or responds to received messages.</p> <p>5. Customize Avatar: User accesses the avatar customization section, selects desired customization options using earned or purchased points, and applies changes.</p> <p>6. Save Changes: User confirms and saves all updates, ensuring that changes are reflected in their profile and social interactions.</p>
Post-conditions	<ul style="list-style-type: none"> - User's profile information is updated as per the changes. - Friends list reflects additions or removals. - Messages are successfully sent and received between users. - Avatar is customized based on selected options and points used.

Use Case: Create and Manage Advertisements

- **ID:** UC3.1
- **Actors:** Advertiser

Aspect	Details
Pre-conditions	<ul style="list-style-type: none"> - Advertiser has an active account with access to ad creation tools. - Advertiser possesses necessary creative assets (images, videos, text) for advertisements. - Advertiser has a defined advertising budget.
Flow of Events	<ol style="list-style-type: none"> 1. Log into Advertiser Dashboard: Advertiser logs into their SNAPSTER™ account and navigates to the "Ad Management" section. 2. Initiate Ad Creation: Advertiser selects the option to create a new advertisement. 3. Upload Creative Assets: Advertiser uploads required creative materials, including images, videos, and textual content. 4. Define Targeting Criteria: Advertiser sets targeting parameters such as demographics, interests, geographic location, and other relevant criteria to reach the desired audience. 5. Set Budget and Schedule: Advertiser specifies the budget for the ad campaign and schedules the start and end dates for ad display. 6. Review and Submit Ad: Advertiser reviews all ad details, ensures compliance with platform guidelines, and submits the advertisement for approval. 7. Ad Approval and Scheduling: Upon approval, the system schedules the advertisement for display within user stories based on the defined timeline and targeting criteria. 8. Monitor Ad Status: Advertiser can monitor the status of the ad campaign, making adjustments as necessary.

Aspect	Details
Post-conditions	<ul style="list-style-type: none"> - Advertisement is created and queued for approval. - Once approved, the advertisement is scheduled for display within user stories. - Advertiser can track the status and performance of the ad campaign through the dashboard.

Abnormal Scenarios (Alternate Flows)

Use Case: Download Content Decentralizedly

- **ID:** UC1.3
- **Actors:** User (End User)

Aspect	Details
Pre-conditions	<ul style="list-style-type: none"> - User must be logged into their SNAPSTER™ account. - User has access to the download functionality. - Content is available for download. - User has sufficient storage space on their device.
Flow of Events	<ol style="list-style-type: none"> 1. Navigate to Content: User selects the content they wish to download. 2. Initiate Download: User taps the download button. 3. System Establishes Peer Connections: SNAPSTER™ system connects to multiple peers hosting the content. 4. Begin Download: Content starts downloading from connected peers. 5. Monitor Progress: User views download progress.
Extensions / Alternate Flows	<p>3a: Insufficient Peer Availability 3a1: The system fails to connect to enough peers to facilitate the download. 3a2: System notifies the user of limited availability. 3a3: User is prompted to retry later or choose different content.</p> <p>3b: Interrupted Download 3b1: Network instability causes the download to pause or stop. 3b2: System attempts to reconnect to peers. 3b3: If reconnection fails, system notifies the user of the interruption.</p>
Post-conditions	<p>3a: User is informed about peer availability issues and can attempt the download again later.</p> <p>3b: User is notified of the interrupted download and can choose to retry or cancel the download process.</p>

Use Case: Earn and Use Points for Customization

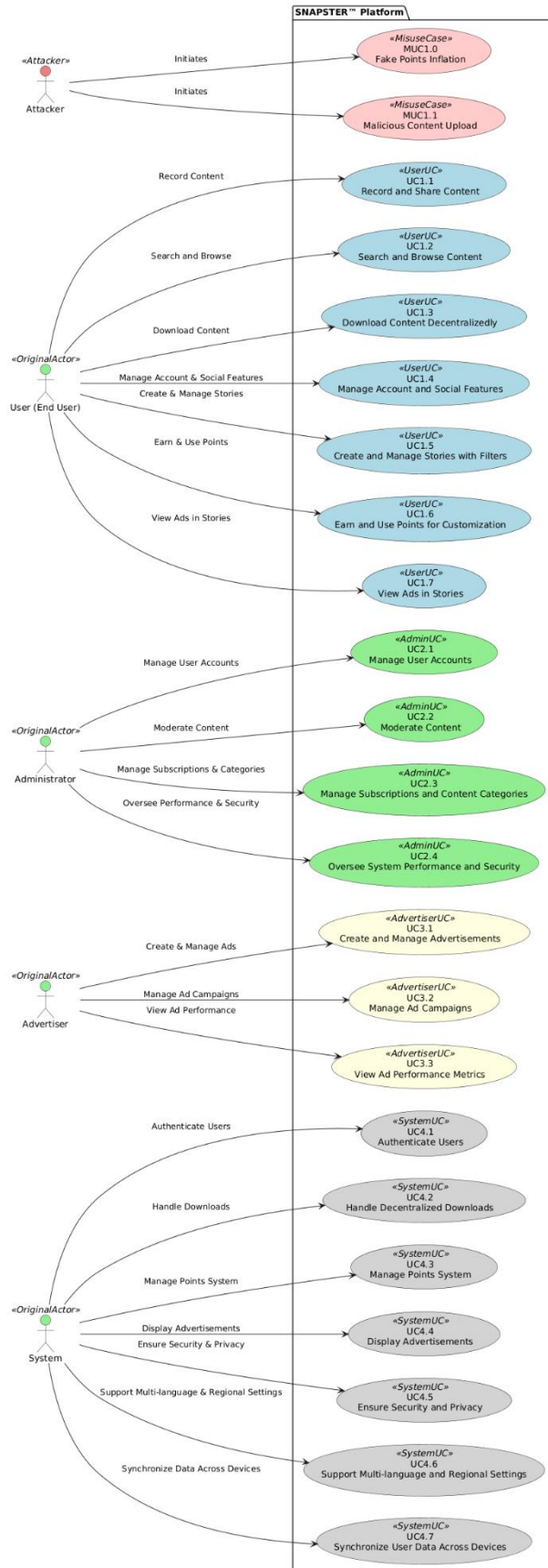
- **ID:** UC1.6
- **Actors:** User (End User)

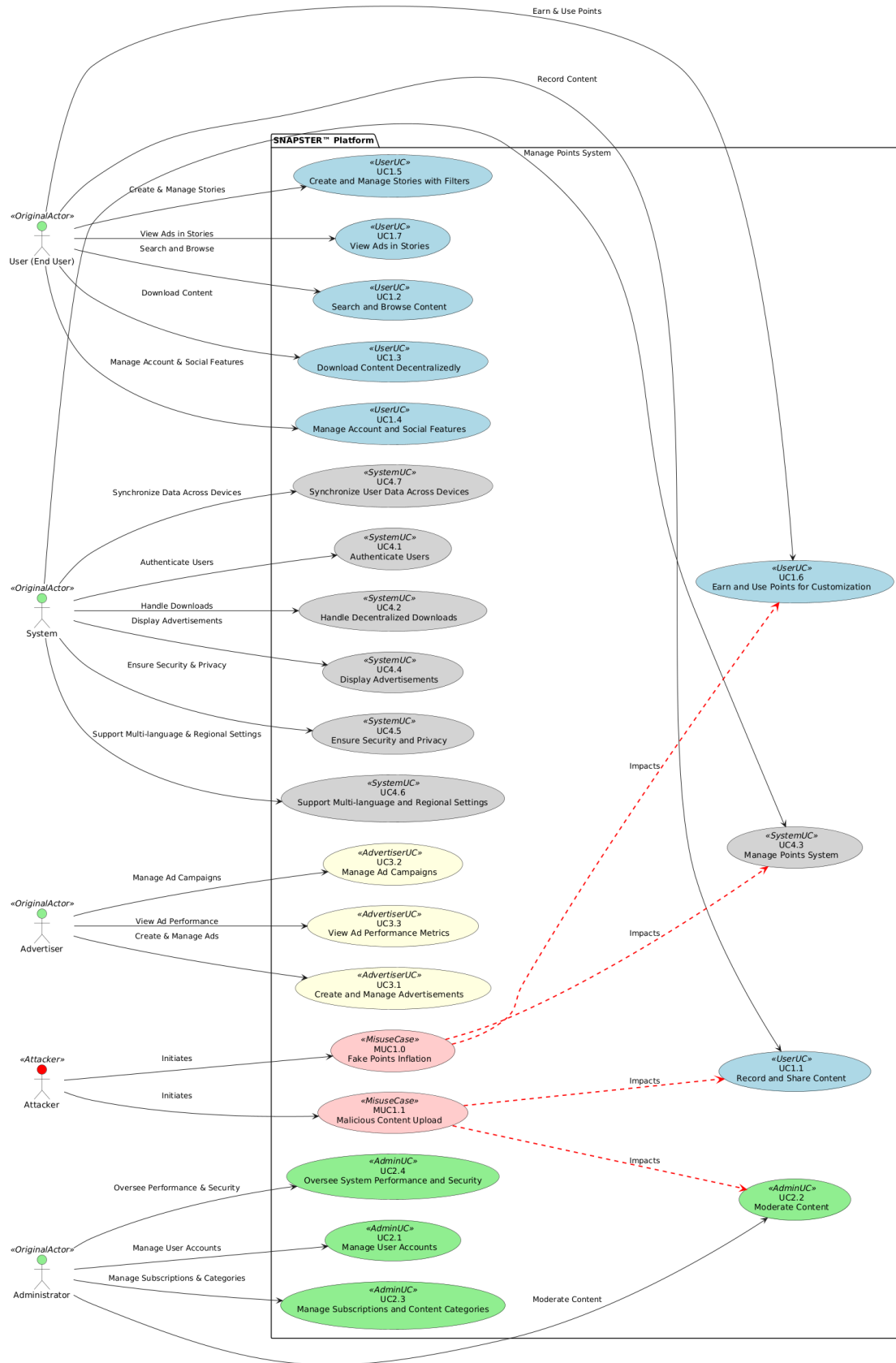
Aspect	Details
Pre-conditions	<ul style="list-style-type: none">- User must be logged into their SNAPSTER™ account.- User has engaged in activities that earn points (e.g., sharing popular content).- User has access to the points management and customization features.
Flow of Events	<ol style="list-style-type: none">1. Earn Points: User shares content that gains popularity, earning points based on engagement metrics.2. Access Points Dashboard: User navigates to the points management section.3. Select Customization Options: User chooses avatar customization options available for purchase with points.4. Redeem Points: User selects desired customization and redeems points.5. Apply Customization: System updates the user's avatar with the selected customization.6. Confirmation: User receives confirmation of successful customization.
Extensions / Alternate Flows	<p>3a: Invalid Customization Option 3a1: User selects a customization option that is no longer available or has been removed. 3a2: System notifies the user that the option is unavailable. 3a3: User is prompted to choose a different customization option.</p> <p>3b: Points Redemption Failure 3b1: During the redemption process, a system error occurs preventing points from being deducted. 3b2: System rolls back any partial transactions. 3b3: User is notified of the redemption failure and can attempt the process again later.</p> <p>3c: Insufficient Points 3c1: User attempts to redeem points for a customization option that exceeds their current points balance. 3c2: System alerts the user about insufficient points. 3c3: User can choose to earn more points or select a different customization option within their points balance.</p>

Aspect	Details
Post-conditions	3a: User must select an alternative customization option. 3b: User is informed of the redemption failure and can retry later. 3c: User adjusts their redemption strategy based on their available points.

Misuse Case Scenarios

MUC ID	Misuse Case Name
MUC1.0	Fake Points Inflation
MUC1.1	Unauthorized Content Sharing





Misuse Case: Fake Points Inflation

- **ID:** MC1.0
- **Actors:** Attacker

Aspect	Details
Pre-conditions	<ul style="list-style-type: none">- SNAPSTER™ platform is up and running.- Attacker has access to automated scripts or bots.- Attacker has or creates multiple user accounts to perform actions that earn points fraudulently.
Flow of Events	<ol style="list-style-type: none">1. Attacker deploys automated scripts to perform actions that earn points without genuine engagement, such as repeatedly sharing content or artificially inflating likes and views.2. Scripts exploit vulnerabilities in the points earning mechanism to accumulate points rapidly.3. Attacker uses the inflated points to customize avatars or purchase premium features without real user engagement.
Post-conditions	<ol style="list-style-type: none">1. User points balances are fraudulently increased.2. SNAPSTER™'s points economy is disrupted, leading to unfair advantages and potential financial loss.3. Platform developers need to detect and fix vulnerabilities in the points system to prevent future attacks.

Misuse Case: Malicious Content Upload

- **ID:** MC1.1
- **Actors:** Attacker

Aspect	Details
Pre-conditions	<ul style="list-style-type: none">- SNAPSTER™ platform is up and running.- Attacker has access to the content upload feature, either through fake accounts or compromised legitimate user accounts.- The platform lacks robust automated content moderation tools.
Flow of Events	<ol style="list-style-type: none">1. Attacker uploads harmful, inappropriate, or copyrighted content disguised as legitimate user content.2. Malicious content is shared within user stories, potentially spreading malware or violating platform policies.3. The malicious content becomes accessible to other users, leading to user harm or platform liability.

Aspect	Details
Post-conditions	1. Harmful or violating content is present on the platform. 2. Legitimate content may be overshadowed or affected by the malicious content. 3. Administrators and developers need to implement stricter content moderation and automated detection mechanisms to prevent such uploads in the future.

Affected Normal Use Cases

1. Fake Points Inflation (MC1.0)

- **Affected Use Cases:**
 1. **UC1.6 Earn and Use Points for Customization**
 2. **UC4.3 Manage Points System**

Aspect	Details
UC1.6 Earn and Use Points for Customization	- Impact: Fraudulent accumulation of points disrupts the fairness and integrity of the points system. - Description: Users can earn and spend points to customize avatars or purchase additional points, which becomes exploited by attackers.
UC4.3 Manage Points System	- Impact: Points system is vulnerable to manipulation, requiring enhanced security measures. - Description: The system tracks points earned by users and handles transactions, which attackers can exploit to gain excessive points.

2. Malicious Content Upload (MC1.1)

- **Affected Use Cases:**
 1. **UC1.1 Record and Share Content**
 2. **UC2.2 Moderate Content**

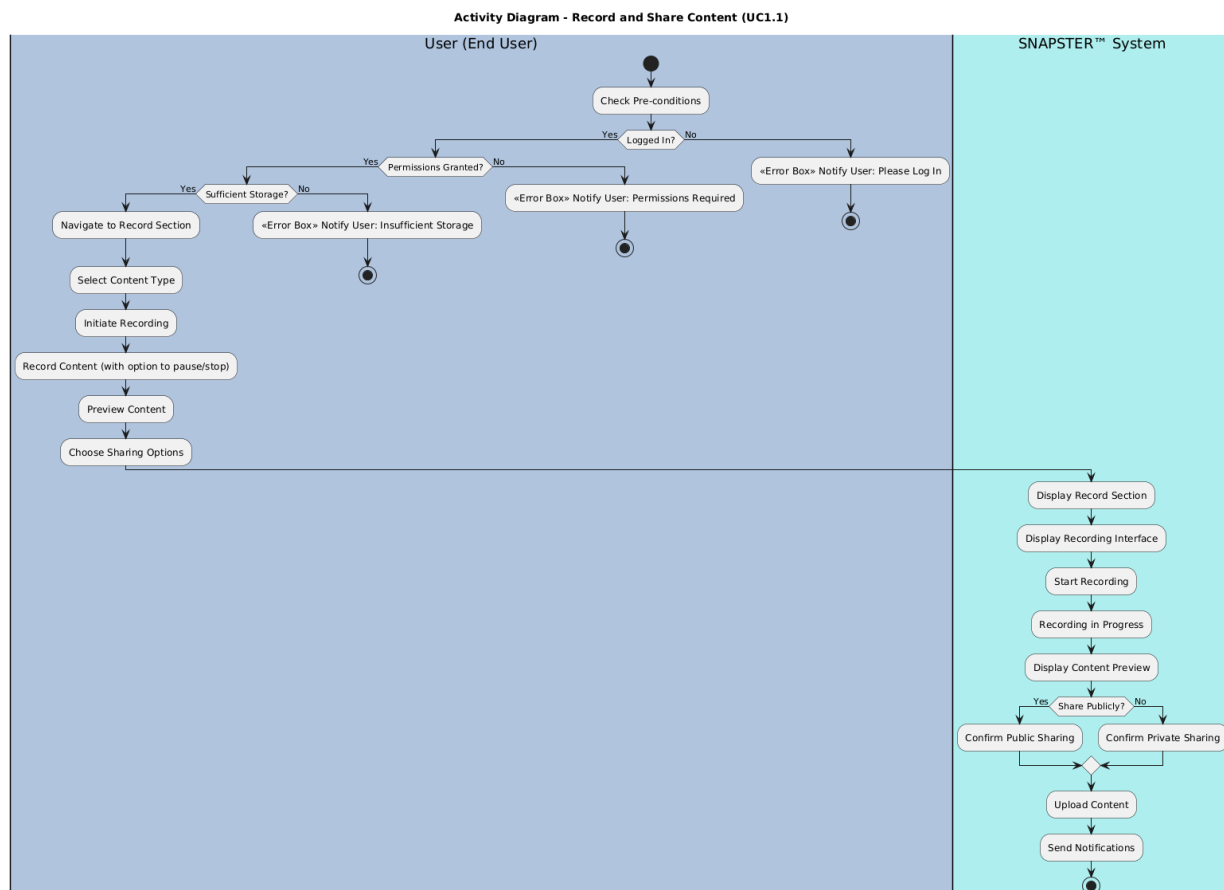
Aspect	Details
UC1.1 Record and Share Content	- Impact: Platform integrity is compromised by harmful content. - Description: Users can record and share videos or audio clips, which attackers exploit to upload malicious or inappropriate content.
UC2.2 Moderate Content	- Impact: Increased burden on moderation tools and potential for delayed removal of harmful content.

Aspect	Details
	- Description: Administrators review and remove inappropriate content, which becomes more frequent and sophisticated due to attacks.

8. Activity Diagrams

1. Normal Scenario Activity Diagram

Use Case: Record and Share Content (UC1.1)



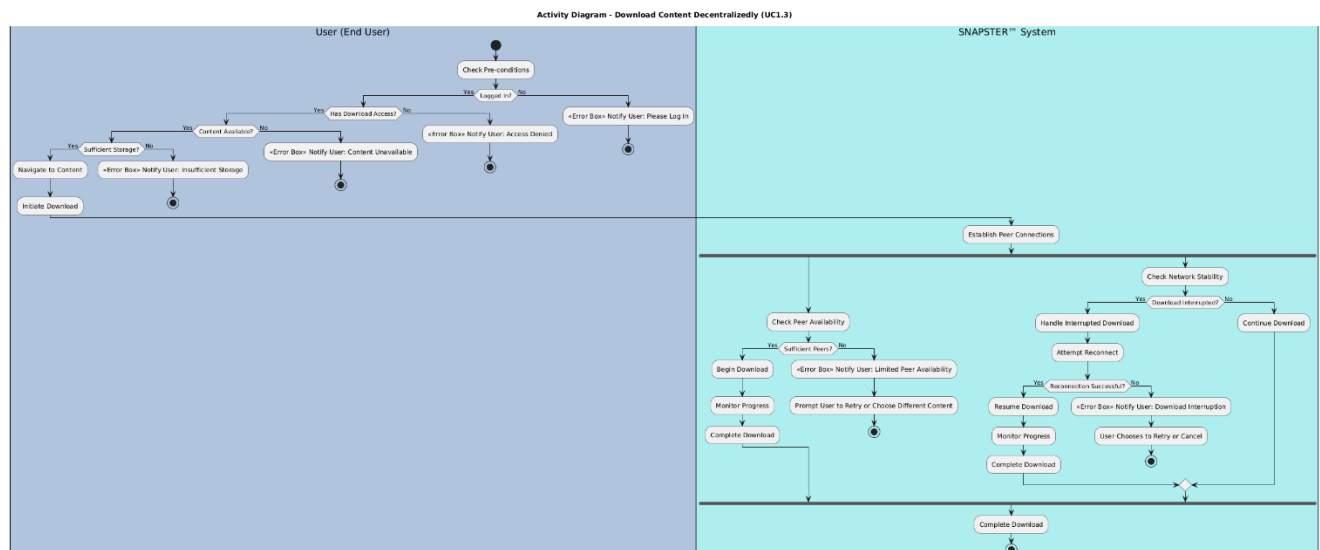
Process:

1. **Start** node in the **User (End User)** swimlane.
2. **User** checks pre-conditions:
 - Logged In?

- Permissions Granted?
 - Sufficient Storage?
3. If all pre-conditions are met, the **User** navigates to the record section, selects content type, initiates recording, records content, previews it, and chooses sharing options.
 4. The flow then moves to the **SNAPSTER™ System** swimlane where the system displays the recording interface, starts recording, handles the recording process, and displays the content preview.
 5. A decision point determines whether the user shares publicly or privately.
 6. The system uploads the content and sends notifications accordingly.
 7. **Stop** node signifies the end of the process.

2. Abnormal Scenario Activity Diagram

Use Case: Download Content Decentralized (UC1.3)



Process:

1. **Start** node in the **User (End User)** swimlane.
2. **User** checks pre-conditions:

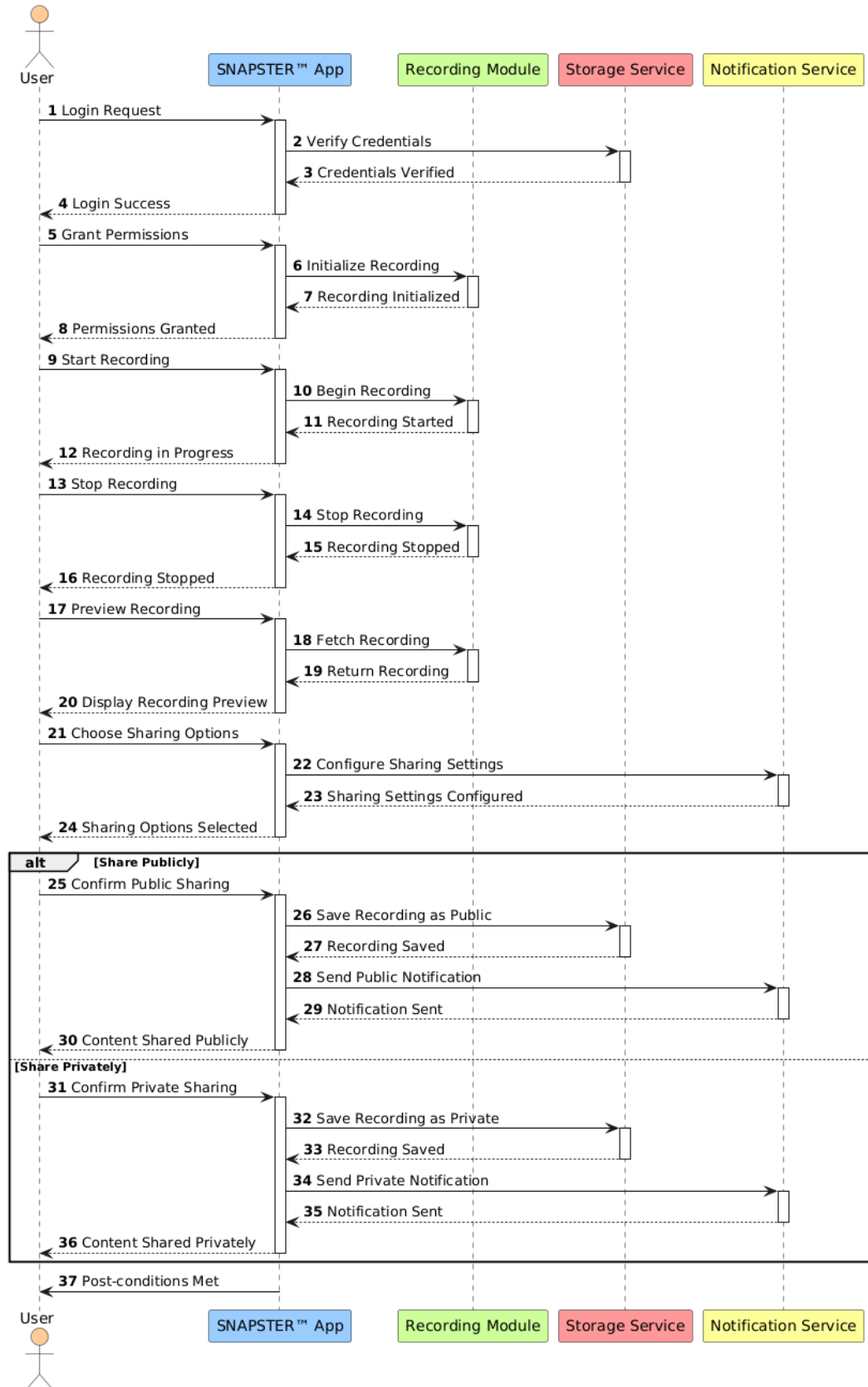
- Logged In?
 - Has Download Access?
 - Content Available?
 - Sufficient Storage?
3. If all pre-conditions are met, the **User** navigates to the content and initiates the download.
 4. The flow moves to the **SNAPSTER™ System** swimlane where the system establishes peer connections.
 5. The process forks into two parallel paths:
 - **Peer Availability Check:**
 - Sufficient Peers?
 - **Yes:** Begin Download → Monitor Progress → Complete Download
 - **No:** Notify User of Limited Peer Availability → Prompt to Retry or Choose Different Content → **Error Box** (Red) → **Stop**
 - **Network Stability Check:**
 - Download Interrupted?
 - **Yes:** Handle Interrupted Download → Attempt Reconnect
 - Reconnection Successful?
 - **Yes:** Resume Download → Monitor Progress → Complete Download
 - **No:** Notify User of Interruption → User Chooses to Retry or Cancel → **Error Box** (Red) → **Stop**
 - **No:** Continue Download
 6. After both parallel paths complete successfully, the system marks the download as complete.
 7. **Stop** node signifies the end of the process.

9. Sequence Diagrams

Normal Use-case: Record and Share Diagram Explanation

- **Participants:**
 - **User (End User):** Initiates actions such as logging in, granting permissions, starting/stopping recording, and choosing sharing options.
 - **SNAPSTER™ App:** Acts as the intermediary between the user and backend services.
 - **Recording Module:** Handles all recording-related functionalities.
 - **Storage Service (Database):** Verifies credentials, saves recordings, and manages storage.
 - **Notification Service:** Sends out notifications based on sharing settings.
- **Flow of Messages:**
 - **Outgoing Messages:** Solid arrows (->) represent actions initiated by actors or systems.
 - **Return Messages:** Dashed arrows (-->) represent responses or acknowledgments.
- **Activation Bars:**
 - Represented by activate and deactivate commands, indicating when a participant is processing a request.
- **Decision Points:**
 - The alt block handles the decision between **Public** and **Private** sharing options.

Sequence Diagram - Record and Share Content (UC1.1)



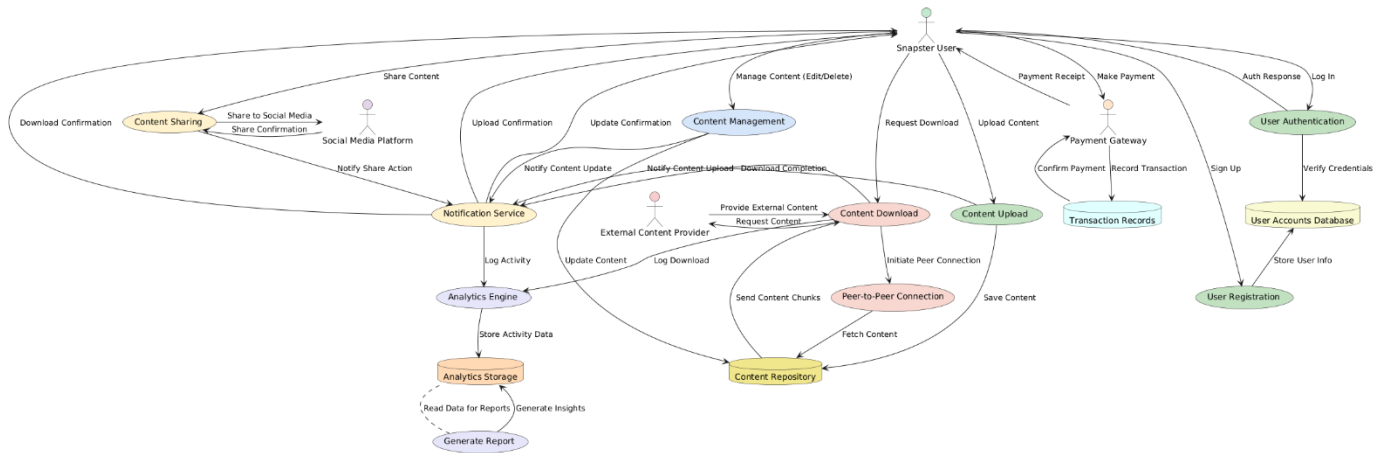
Abnormal Use-case

Diagram Explanation

- **Participants:**
 - **User (End User):** Initiates actions such as logging in, navigating to content, and initiating downloads.
 - **SNAPSTER™ App:** Acts as the intermediary between the user and backend services.
 - **Peer Connection Service:** Manages connections to multiple peers hosting the content.
 - **Download Manager:** Handles the download process and interacts with the storage service.
 - **Storage Service (Database):** Verifies credentials, saves downloaded content, and manages storage.
 - **Notification Service:** Sends out notifications based on download statuses.
 - **Reconnect Service:** Attempts to re-establish connections in case of download interruptions.
- **Flow of Messages:**
 - **Outgoing Messages:** Solid arrows (->) represent actions initiated by actors or systems.
 - **Return Messages:** Dashed arrows (-->) represent responses or acknowledgments.
- **Activation Bars:**
 - Represented by activate and deactivate commands, indicating when a participant is processing a request.
- **Decision Points:**
 - **Sufficient Peer Availability?** handled using an alt block.
 - **Download Interrupted?** handled using another alt block.
- **Error Boxes:**
 - Represented using note with a light red background (#FFCCCC) and labeled as <<Error Box>> to indicate failure paths.



10. Data Flow Diagram



11. Functional Requirements

FR1. Record & Share Videos/Audio

FR1.1	Users shall be able to record videos and audio using their mobile devices.
FR1.2	Users shall be able to share recorded videos or audio with other users within the platform.
FR1.3	Users shall be able to allow their friends to download shared content directly from their devices.
FR1.4	The platform shall support various video and audio formats for recording and sharing.

FR2. Search & Browse Content

FR2.1	Users shall be able to search for specific content using keywords or phrases.
FR2.2	Users shall be able to browse content through predefined and user-generated categories.
FR2.3	The system shall provide filters to refine search results based on content type, popularity, and upload date.

FR3. Decentralized Downloading

FR3.1	Files shall be downloaded directly from other users' devices without relying on central servers.
FR3.2	The system shall utilize multiple sources to facilitate faster downloads of popular content.
FR3.3	Users shall receive notifications about the number of sources available for their download requests.

FR4. User Accounts & Social Features

FR4.1	Users shall be able to create, update, and delete their accounts.
FR4.2	Users shall be able to add and remove friends within the platform.
FR4.3	Users shall be able to send and receive direct messages to/from their friends.
FR4.4	Users shall be able to customize their avatars with various customization options.
FR4.5	The platform shall allow users to view friends' online statuses.

FR5. Stories & Filters

FR5.1	Users shall be able to record videos or audio clips to create stories.
FR5.2	Users shall be able to apply a variety of filters to their content before sharing.
FR5.3	Users shall have the option to share stories with selected friends or make them public.
FR5.4	Users shall be able to view, like, and comment on friends' stories.

FR6. Points & Customization

FR6.1	Users shall earn points by sharing content that gains popularity (e.g., downloads, likes).
FR6.2	Users shall be able to use earned points to customize their avatars with special outfits or accessories.
FR6.3	Users shall have the option to purchase points through in-app purchases or other payment methods.
FR6.4	The system shall track and display users' point balances and history.

FR7. Ads in Stories

FR7.1	The platform shall display advertisements within user stories at predefined intervals.
FR7.2	Advertisements shall be relevant to users based on their content preferences and interactions.
FR7.3	Users shall have the option to interact with ads, such as clicking through to the advertiser's page.

FR8. Subscription Management

FR8.1	Users shall be able to customize their preferences, including content recommendations and notifications.
FR8.2	Users shall have the option to subscribe and manage content providers.
FR8.3	Content providers shall be able to categorize and tag their content to enhance discoverability.

FR9. Language and Regional Preferences

FR9.1	The platform shall support a minimum of five different languages for user interfaces.
FR9.2	Users shall be able to select their preferred language from the supported options.
FR9.3	Users shall be able to set their region to receive region-specific content and suggestions.

FR10. Security and Privacy

FR10.1	All user data, including viewing history and personal information, shall be stored securely to prevent unauthorized access.
FR10.2	User sessions shall be automatically logged off after a defined period of inactivity.
FR10.3	The platform shall provide clear data usage policies and obtain user consent, complying with data privacy regulations such as GDPR.

FR11. Cross-Platform Accessibility

FR11.1	Users shall be able to access their content and accounts seamlessly from various devices, including mobile phones, tablets, and desktops.
FR11.2	The platform shall ensure constant synchronization of user data across all devices.

12. Non-Functional Requirements

NF1. Performance

NF1.1	The platform shall respond to user activities, such as content search and playback, in less than 3-5 seconds.
NF1.2	The platform shall support at least 100,000 concurrent users during periods of high demand.
NF1.3	The system shall handle simultaneous uploads and downloads efficiently without significant performance degradation.

NF2. Availability

NF2.1	The platform shall maintain a service availability rate of at least 99.9%, excluding planned maintenance periods.
NF2.2	The system shall implement redundancy measures to minimize downtime and ensure continuous service.

NF3. Scalability

NF3.1	The system architecture shall be scalable to accommodate an increasing number of users and content providers.
NF3.2	The platform shall efficiently manage growing volumes of data without compromising performance.

NF4. Usability

NF4.1	User interfaces shall follow best usability practices to ensure an intuitive and user-friendly experience.
NF4.2	The platform shall conduct user testing to verify compliance with usability standards.
NF4.3	The platform shall provide accessible features to accommodate users with disabilities, adhering to accessibility guidelines.

NF5. Security

NF5.1	The platform shall ensure secure transmission of data between users' devices using encryption protocols.
NF5.2	The system shall implement robust authentication mechanisms to protect user accounts.
NF5.3	Regular security audits shall be conducted to identify and mitigate potential vulnerabilities.

NF6. Privacy

NF6.1	The platform shall allow users to control the visibility and sharing settings of their content.
NF6.2	User data shall be anonymized where possible to enhance privacy.
NF6.3	The platform shall comply with all applicable data privacy regulations, including GDPR and CCPA.

NF7. Reliability

NF7.1	The platform shall implement error handling and recovery mechanisms to maintain system stability.
NF7.2	The system shall ensure data integrity during uploads, downloads, and transfers.

NF8. Maintainability

NF8.1	The platform's codebase shall be modular and well-documented to facilitate updates and maintenance.
NF8.2	The system shall support easy integration of new features and technologies without disrupting existing functionalities.

NF9. Compatibility

NF9.1	The platform shall be compatible with major mobile operating systems (iOS and Android) and web browsers.
NF9.2	The system shall support integration with third-party services and APIs as needed.

NF10. Localization

NF10.1	The platform shall adapt content and interfaces based on users' regional settings.
NF10.2	The system shall handle various date, time, and currency formats according to user preferences.

13. Traceability Table

Use Case ID	Use Case Name	Higher-level Functional Requirements	Lower-Level Functional Requirements	Non-Functional Requirements
UC1.1	Record and Share Content	FR1	FR1.1, FR1.2, FR1.3, FR1.4	NF1.1, NF1.2, NF2.1, NF4.1, NF5.1, NF6.1, NF9.1, NF10
UC1.2	Search and Browse Content	FR2	FR2.1, FR2.2, FR2.3	NF1.1, NF1.2, FR2.1, FR3.1, FR4.1, FR9.1, FR10
UC1.3	Download Content Decentralizedly	FR3	FR3.1, FR3.2, FR3.3	NF1.1, NF1.3, FR3.1, FR4.1, FR5.1, FR5.2, FR6.1, FR9.1
UC1.4	Manage Account and Social Features	FR4	FR4.1, FR4.2, FR4.3, FR4.4, FR4.5	NF4.1, NF5.1, NF5.2, NF8.1, NF9.1
UC1.5	Create and Manage Stories with Filters	FR5	FR5.1, FR5.2, FR5.3, FR5.4	NF1.1, NF1.3, FR3.1, FR4.1, FR6.1, FR9.1
UC1.6	Earn and Use Points for Customization	FR6	FR6.1, FR6.2, FR6.3, FR6.4	NF1.1, NF1.2, FR2.1, FR4.1, FR6.1, FR8.1, FR10
UC1.7	View Ads in Stories	FR7	FR7.1, FR7.2, FR7.3	NF1.1, NF1.2, FR4.1, FR5.1, FR6.1, FR7.1, FR9.1
UC2.1	Manage User Accounts	FR4	FR4.1	NF5.1, NF5.2, NF8.1, NF10
UC2.2	Moderate Content	FR5, FR4	FR5.4, FR4.2	NF4.1, NF5.1, FR7.1, FR8.1, FR10

Use Case ID	Use Case Name	Higher-level Functional Requirements	Lower-Level Functional Requirements	Non-Functional Requirements
UC2.3	Manage Subscriptions and Content Categories	FR8	FR8.1, FR8.2, FR8.3	NF4.1, FR8.1, FR9.1, FR10
UC2.4	Oversee System Performance and Security	FR10	FR10.1, FR10.2, FR10.3	NF1.1, NF2.1, FR3.1, FR5.1, FR5.2, FR5.3, FR5.4, FR7.1, FR10
UC3.1	Create and Manage Advertisements	FR7, FR8	FR7.1, FR7.2, FR7.3, FR8.3	NF4.1, NF5.1, FR7.1, FR8.1, FR9.1, FR10
UC3.2	Manage Ad Campaigns	FR7	FR7.1, FR7.2, FR7.3	NF1.1, NF1.2, FR3.1, FR4.1, FR8.1, FR9.1, FR10
UC3.3	View Ad Performance Metrics	FR7	FR7.1, FR7.2, FR7.3	NF1.1, NF1.2, FR2.1, FR4.1, FR5.1, FR6.1, FR7.1, FR8.1, FR9.1
UC4.1	Authenticate Users	FR10	FR10.1, FR10.2, FR10.3	NF1.1, NF5.1, NF5.2, NF6.1, NF10
UC4.2	Handle Decentralized Downloads	FR3	FR3.1, FR3.2, FR3.3	NF1.1, NF1.3, FR3.1, FR4.1, FR5.1, FR5.2, FR6.1, FR9.1
UC4.3	Manage Points System	FR6	FR6.1, FR6.2, FR6.3, FR6.4	NF1.1, FR2.1, FR4.1, FR6.1, FR8.1, FR10
UC4.4	Display Advertisements	FR7	FR7.1, FR7.2, FR7.3	NF1.1, NF1.2, FR4.1, FR5.1, FR6.1, FR7.1, FR9.1
UC4.5	Ensure Security and Privacy	FR10	FR10.1, FR10.2, FR10.3	NF5.1, NF5.2, FR10.3, NF6.1, FR10
UC4.6	Support Multi-language and Regional Settings	FR9	FR9.1, FR9.2, FR9.3	NF4.1, FR10.1, FR10.2, FR9.1
UC4.7	Synchronize User Data Across Devices	FR11	FR11.1, FR11.2	NF1.1, FR1.3, FR2.1, FR3.1, FR4.1, FR5.1, FR6.1, FR8.1, FR9.1, FR10