NOVEMBER 19, 2024 SUBSTACK+ SYSTEM REQUIREMENTS DOCUMENT DRAFT

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Introduction (SW)

The purpose of this document is to outline the functional requirements for the Substack+ app, designed to provide a user-friendly and customizable experience for both content creators and users. It details the key features, including messaging tools, content creation and scheduling, notifications, user management, and security protocols. The purpose of this document is to serve as a comprehensive guide for the development and implementation of the app, ensuring all necessary features are addressed to deliver a seamless and engaging experience for all users.

DESCRIPTION MODEL(SW)

1. User Interface

Intuitive Design: The Substack+ app must feature an intuitive, easy-to-navigate interface that enhances the user experience.

- 1. **Light/Dark Mode**: The app should provide a toggle for light and dark modes, allowing users to switch between them through the settings menu.
- 2. **Navigation Pane**: A collapsible left-side navigation panel provides quick access to critical app functions, such as the inbox, active chats, settings, search for new authors, and account details.
- 3. **Responsiveness**: The app must adapt to various screen sizes (smartphones, tablets, desktops) while maintaining usability and ease of access.

2. COLLABORATION AND MESSAGING

Private Messaging: Users must be able to send and receive messages, including text, audio, video, and files within group chats or individual conversations.

- 1. **Message Privacy**: All messages should be encrypted and accessible only to the intended recipients, ensuring confidentiality and security.
- 2. Message Types:
 - a. Text
 - b. Audio
 - c. Video
 - d. Files (documents, images, etc.)
- 3. **Group Chat Features**: Users can join existing chats or be invited to participate. Group members can freely share messages within the group, with the option to restrict or allow media sharing.
- 4. **Security**: Messages should be encrypted and protected from unauthorized access. Access to chat groups must be restricted by invitations or user joining requests.

3. CONTENT CREATION & SCHEDULING

Multi-Format Content Creation: The app must allow content creators to post text, audio, and video content in a variety of formats.

- 1. **Content Scheduling**: Publishers can schedule posts to be published on specific dates and times, with the flexibility to select which groups will receive the content.
- 2. **Content Distribution**: The app must support targeting specific groups and sending posts via email notifications to those groups.

4. Notifications System

Integrated Notifications: Notifications should be linked to both content creation and messaging features to ensure users are promptly informed of updates.

- 1. **Prioritization**: Users must be able to mark certain messages or authors as important, ensuring they receive timely alerts for critical updates.
- 2. **Mute Options**: Users should have the ability to mute notifications from specific authors or groups, offering control over the information flow.
- 3. **Filter Content**: Content should be filterable by publisher, content type, or specific topics to improve discovery and relevance.

5. User Account & Authentication

Login and Security: Users must be required to log in to access personalized content and interact with published posts. The authentication process should include secure password handling, multi-factor authentication, or single sign-on for enhanced security.

- 1. **Account Settings**: Users must have the ability to manage account details, preferences, and notification settings within the app.
- 2. **User Profiles**: Users should be able to update their profiles with personal details and preferences for content consumption.
- 3. **User Feedback System**: A feature for users to provide feedback, rate content, or suggest improvements should be available within the app.

6. CONTENT DISCOVERY

Search Functionality: A robust search feature must be available, allowing users to search for new authors, groups, or specific content types across the platform.

1. **Sorting and Filtering**: Users must be able to filter search results by author, date, content type, or other relevant criteria.

7. SECURITY & PRIVACY

- 1. **Data Protection**: All user data, including messages, content, and personal information, should be securely stored with encryption and comply with relevant data privacy regulations (e.g., GDPR).
- 2. **Access Control**: Only authorized users should be able to access certain content or participate in specific chats, ensuring privacy and preventing unauthorized access.

8. Performance & Scalability

- 1. **Efficient Content Delivery**: The app should handle large volumes of content and messages, with minimal delays in post scheduling, message delivery, and notifications.
- 2. **Scalability**: The app should be designed to scale seamlessly, supporting a growing number of users, chats, and content distribution needs.

Class Diagram(SW)

ClassDiagram.pdf

Use Case Diagram (SW)

UseCaseDiagram.pdf

Use Case Scenarios (SW & OA)

UseCaseScenerio.pdf

System Sequence Charts (SW)

SSC.pdf