KEY PARTNERS	KEY ACTIVITIES	KEY RESOURCE	VALUE PROPOSITIONS	CHANNELS	CUSTOMER SEGMENTS
Advertising Companies Companies that want to advertise their resources, representing a source of income and attracting users interested in their offerings. **Other Social Media Platforms** Interconnectivity with other platforms helps us attract new users and increase reach. **Data Analysis Companies** Partners with whom we exchange information to improve recommendations and provide valuable insights for their analysis. **Cloud Infrastructure Providers** Enable scalable, high-availability hosting and distributed data storage. **Moderation and NLP API Providers** External services that help detect hate speech, spam, and inappropriate content	**User Identity Verification** Implementation of secure identity verification using official documents based on the user's country, ensuring full compliance with data privacy regulations. **AI-Assisted Content Creation** Integration of artificial intelligence to assist users in improving the quality, relevance, and engagement of their posts. **Interest-Based Interaction Channels** Development of official interest spaces where users and companies can engage around shared topics and opportunities. **Interest-Based Interaction Channels** Development of official interest spaces where users and companies can engage around shared topics and opportunities. **Data Ingestion & Analytics** Constant ingestion of user interactions for real-time analytics and improved recommendations. **Recommendation Engine Management** Continuous refinement of algorithms that personalize user feeds based on behavior and preferences.	**Human Talent** Skilled developers and DevOps professionals proficient in modern technologies, responsible for continuous development, deployment, and maintenance of the platform. **Cloud Infrastructure** Scalable and reliable cloud services supporting multi-location access, fast queries, and high availability. **Data Storage and Processing Systems** Data centers and warehouses that ensure efficient handling of big data, supporting ingestion and retrieval at scale. **Business Intelligence & Analytics Tools** Systems and expertise for analyzing user behavior and market trends to refine recommendations and target content. **AI and Machine Learning Models** Models trained to enhance post quality, detect user interests, and power the recommendation system. **Security Frameworks** Resources and technologies to guarantee secure user authentication, identity verification, and privacy compliance.	We offer a personalized social media platform that connects users with shared interests through intelligent recommendations, AI-enhanced content creation, and secure identity verification. Our propuse fosters meaningful interactions between users and companies and continuously improves the experience using data analytics and business intelligence. **CUSTOMER RELATIONSHIPS** Direct relationships with users to foster trust and long-term engagement. Immediate and effective response to account-related issues to ensure a safe and smooth user experience. 24/7 support availability through chat and email for quick resolution of concerns. Feedback and interaction channels that allow users to report issues, suggest improvements, and feel heard.	**Core Platform** The Mobile and web applications serve as the main interface for users to interact with the platform. Through these channels, users can publish content, engage with others. **Distribution and Growth** We rely on global distribution alliances with key partners to expand our reach efficiently. In addition, integration with other social media platforms allows users to share content and attract new audiences organically. **Support and Communication** To ensure a responsive and user-centric experience, we offer immediate support through online communication channels such as in-app chat and email. We also provide topic-based channels where users and companies can interact around shared interests.	**General Audience** Our platform is designed for a broad audience, targeting anyone over the age of 15 who seeks to connect with others through shared interests, trends, and personalized content. **Users** They are the primary customers who engage daily with the platform, posting content, following others, and consuming media. Their needs revolve around usability, content relevance, privacy, and connection. **Companies** Businesses and service providers use the platform to advertise, engage with targeted audiences, and participate in interest-based channels. They seek visibility, analytics, and effective communication with users. **Personages** These are socially influential users, public figures, thought leaders, or content creator, who use the platform to amplify their reach and shape public opinion. Their needs include audience analytics, content promotion, and identity verification. **Members** Paying users who subscribe to premium features such as enhanced visibility, analytics, post boosts, or exclusive content. They expect added value and personalization for their investment.

COST STRUCTURE	REVENUE STREAMS
Data analysis and storage Major investments go toward processing and storing vast amounts of user data to deliver personalized experiences and accurate recommendations **Technology and network infrastructure** Costs include cloud services, high-speed connectivity, and computing power to ensure scalability, fast response times, and user interaction. **Server maintenance** Ongoing expenses involve maintaining server uptime, applying security patches, system monitoring, and ensuring platform availability 24/7.	**Membership subscriptions** Users pay for access to premium features such as exclusive content, performance analytics, and improved visibility on the platform. **Advertising** Companies and public figures invest in ad placements to reach specific audiences, increasing brand exposure and engagement. **Data insights services** Businesses pay for anonymized, aggregated analytics that help them understand trends and improve their strategies, respecting privacy standards.

UH - 1				
Database schema for development	PRIORITY	High	ESTIMATE	8

User Story:

As a developer

I want to have a database schema

so that I can develop the program's logic.

Acceptance Criteria:

There must be an entity-relationship diagram (ERD) that defines the tables and their relationships.

The schema must include primary keys, foreign keys, and indexes as needed.

Referential integrity rules must be in place to prevent inconsistencies.

UH - 2				
Microservices-based architecture	PRIORITY	High	ESTIMATE	8

User Story:

As a software architect

I want the application to be composed of independent microservices (authentication, posts, messaging, etc.)

to improve system scalability and maintainability.

Acceptance Criteria:

Microservices must communicate with each other via REST APIs.

An API Gateway must be defined to manage requests and centralized authentication.

Each microservice must have its own repository or a modular structure within a monorepo.

UH - 3				
Cloud storage for images and videos	PRIORITY	High	ESTIMATE	8

User Story:

As a developer

I want to integrate a cloud storage service (such as AWS S3 or Google Cloud Storage)

to store images and videos without affecting database performance.

Acceptance Criteria:

A cloud storage provider (AWS S3, Google Cloud Storage, or Azure Blob Storage) must be used.

Files must be uploaded with a proper permission system to prevent unauthorized access.

File URLs must be stored in the database instead of the files themselves.

UH - 4				
Deployment with Docker and Kubernetes	PRIORITY	High	ESTIMATE	8

User Story:

As a DevOps engineer

I want the application to be deployed in Docker containers and orchestrated with Kubernetes

to facilitate infrastructure management and scalability.

Acceptance Criteria:

All microservices must have an optimized Dockerfile for image generation.

The application must be deployable in a Kubernetes cluster using YAML manifests or Helm.

UH - 5				
Repository Creation and CI/CD Configuration	PRIORITY	High	ESTIMATE	8

User Story:

As a DevOps engineer
 I want to create a repository in GitHub/GitLab/Bitbucket with an organized structure and configure a CI/CD pipeline
to automate versioning, testing, and deployments across different environments

Acceptance Criteria:

The repository must have an organized structure with folders for backend, frontend, documentation, and infrastructure scripts.
A branching strategy based on Git Flow or Trunk-Based Development must be defined.

UH - 6				
Indexing and Query Optimization	PRIORITY	High	ESTIMATE	8

User Story:

As a database engineer
I want to implement indexes and partitions on critical tables
to improve performance in high-volume queries

Acceptance Criteria:

Critical tables that require optimization (users, posts, messages, etc.) must be identified.
Indexes must be added to columns used in filters and JOINs to improve query speed.
The use of composite indexes or full-text indexes must be analyzed as needed.

UH - 7				
User Registration	PRIORITY	High	ESTIMATE	8

User Story:

As a user
I want to register on the platform by providing my basic information
 so that I can access all the features of the social network.

Acceptance Criteria:

Given a visitor wants to create an account on the platform
When they submit the registration form with their name, email, password, and date of birth
Then the system must validate that:
• The email has a valid format and is unique
• The password meets security requirements (minimum 8 characters, including uppercase letters, numbers, and special characters)
• All required fields are completed
• And if all validations pass,
• Then the system should successfully create the user account and grant access to the platform's features

UH - 8				
User Login	PRIORITY	High	ESTIMATE	5

User Story:

As a user
I want to log in using my email and password or a third-party account
so that I can securely access the social network.

Acceptance Criteria:
Successful Login
Given a registered user has valid credentials or a linked third-party account
When they attempt to log in with their email and password or via the third-party provider
Then the system must authenticate the user and
And generate a JWT token with an expiration time
Invalid Credentials
Given a user enters an incorrect email or password
When they attempt to log in
Then the system must display a generic error message
And must not indicate whether the email exists or not
Account Lockout After Multiple Failed Attempts
Given a user repeatedly submits incorrect login credentials
When the number of failed attempts exceeds the defined threshold
Then the account must be temporarily locked to prevent further access attempts

UH - 9				
Secure Authentication Implementation	PRIORITY	High	ESTIMATE	8

User Story:
As a developer
I want users to log in using JWT and OAuth 2.0
to ensure secure authentication and third-party compatibility

Acceptance Criteria:
JWT Authentication
Given a user successfully logs in using their credentials or a third-party provider via OAuth 2.0
When the authentication process completes
Then the system must generate a JWT (JSON Web Token)
And the JWT must include a digital signature and an expiration time to ensure authenticity and prevent impersonation
OAuth Compatibility
When OAuth 2.0 authentication succeeds
When they attempt to log in
Then the system must issue a JWT in the same manner as with standard logins
And ensure the token adheres to security policies (signature and expiration included)

UH - 10				
Profile Editing	PRIORITY	Medium	ESTIMATE	5

User Story:
As a user
I want to be able to edit my profile (name, profile picture, biography, etc.)
to personalize my account on the social network.

Acceptance Criteria:
General Profile Update
Given a logged-in user accesses their profile settings
When they update their name, biography, profile picture, or cover photo
Then the system must save the changes immediately
And notify the user that the profile was successfully updated

Biography Character Limit			
Given a user enters a biography that exceeds the allowed character limit			
When they attempt to save it			
Then the system must prevent the update			
And display an error message indicating the character limit			

Sensitive Data History			
Given a user updates sensitive profile data such as their email or username			
When the change is saved			
Then the system must store a history of the change for audit or recovery purposes			

UH - 11			
Posting	PRIORITY	High	ESTIMATE	8

User Story:

As a user
I want to be able to write and post up to 500 characters
to share ideas, thoughts, and updates with my followers.

Acceptance Criteria:

Creating a Post
Given a user is authenticated on the platform
When the user accesses the post field and writes a message of up to 500 characters
Then the system should allow the text input
And enable the publish button

Character Limit
Given a user tries to write more than 500 characters in the text field
When they continue typing
Then the system should prevent additional characters from being entered
Or display an error message indicating the maximum character limit has been exceeded

Successful Publishing
Given a user writes a valid message within the character limit
When they click the publish button
Then the message should be saved in the system
And it should appear on the user's profile
And be visible in their followers' timeline

UH - 12			
Add MultiMedia to Post	PRIORITY	Medium	ESTIMATE	8

User Story:

As a User
I want to create posts with text and media
so that I can share updates with my followers.

Acceptance Criteria:

Given I am logged into my account
When I write a message and optionally attach media
Then the post should be published to my profile and appear in my followers' feeds.

UH - 13			
Follow Other Users	PRIORITY	High	ESTIMATE	5

User Story:

As a user

I want to be able to follow other users

to see their posts in my timeline and stay up-to-date with their activity.

Acceptance Criteria:

Following a User

Given the user has found another user in the search results

When they click the "Follow" button

Then the selected user should be added to the "Following" list

And the number of "Following" should increase on the user's profile

Viewing Posts from Followed Users

Given the user follows at least one other user

When a followed user publishes a post

Then that post should appear in the follower's timeline

Displaying Followers and Following Count

Given a user profile is opened

When it is viewed by any user

Then the number of followers and following should be visible on the profile

UH - 14				
Unfollow Users	PRIORITY	Medium	ESTIMATE	5

User Story:

As a User

I want to follow and unfollow other users

so that I can personalize my content feed

Acceptance Criteria:

Given I am viewing another user's profile

When I click the "Follow" or "Unfollow" button

Then my feed should update accordingly, and the action should be recorded.

UH - 15				
Interact with Posts	PRIORITY	Medium	ESTIMATE	5

User Story:

As a user

I want to be able to interact with posts and have the ability

to easily find them later.

Acceptance Criteria:

Interacting with a Post

Given the user is logged into the platform

When they press the interaction button (e.g., like, favorite) on a post

Then the interaction count on the post should increase by one

And the visual state of the interaction button should change to reflect the interaction (e.g., highlighted icon)

Viewing Interacted Posts

Given the user has interacted with one or more posts

When they navigate to the section for "Interacted Posts" or "Favorites"

Then the system should display a list of all posts the user has interacted with

UH - 16

Comment on Posts		PRIORITY	High	ESTIMATE	8
User Story:					
As a User I want to comment on posts so that I can engage in conversations.					
Acceptance Criteria:					
Given I am viewing a post When I type a comment and click "Send" Then the comment should appear below the post and notify the original author.					
UH - 17					
Share Post		PRIORITY	Low	ESTIMATE	3
User Story:					
As a user I want to be able to interact with posts and have the ability to easily find them later.					
Acceptance Criteria:					
Sharing a Post Given a user is logged in and viewing a post from another user When they click the "Share" button Then the post should be re-published to the sharing user's profile timeline And be visible to their followers based on the sharer's privacy settings					
UH - 18					
Edit a Post		PRIORITY	Medium	ESTIMATE	5
User Story:					
As a user I want to be able to edit a post after publishing it to correct errors or add additional information.					
Acceptance Criteria:					
Editing a Post Given a user is logged in and viewing one of their own posts When the user selects the option to edit the post Then the system should allow the content to be modified in an editable text field And the user should be able to save the changes					
Edited Indicator Given a post has been modified after it was originally published When it is displayed on the platform Then the post should include an "edited" label or indicator					
UH - 19					
Configure Post Privacy		PRIORITY	Medium	ESTIMATE	8
User Story:					
As a user I want to be able to choose whether my posts are public, only for my followers, or private to have control over who can see them.					
Acceptance Criteria:					

Setting Privacy When Posting
Given a user is composing a new post
When they select a privacy option (Public, Followers only, or Private)
Then the system should save the selected privacy level along with the post
And only users with the appropriate access should be able to view the post
Enforcing Privacy Settings
Given a post has been published with a specific privacy setting
When another user tries to view the post
Then the system must check the privacy rules
And only allow access if the user is authorized (e.g., a follower for "Followers only", or the post owner for "Private")

UH - 20				
Reported Post	PRIORITY	Medium	ESTIMATE	5
User Story:				
As an admin				
I want to review reported content				
so that I can moderate and maintain community standards				
Acceptance Criteria:				
Given I am in the moderation dashboard				
When I select a reported post				
Then I should see the report details and available actions (e.g., delete, ignore, ban user)				

UH -21				
Reported Users	PRIORITY	Medium	ESTIMATE	5
User Story:				
As an admin				
I want to suspend users who violate the rules				
so that the platform remains safe and respectful				
Acceptance Criteria:				
Given I have reviewed a user's violation history				
When I choose to suspend the account				
Then the user should lose access and receive a notification about the suspension				

UH - 22				
Verification Process	PRIORITY	High	ESTIMATE	8
User Story:				
As an admin				
I want to manage verification requests				
so that we can ensure credibility for public accounts.				
Acceptance Criteria:				
Given I am on the list of pending verification requests				
When I approve or reject a request				
Then the decision should be saved and reflected on the user's profile				

UH - 23				
Boost Post	PRIORITY	High	ESTIMATE	5

User Story:					
As a member					
I want to boost my posts					
so that they reach a larger audience.					
Acceptance Criteria:					
Given I have an active premium subscription					
When I choose to boost a post					
Then the post should be prioritized in timelines and marked as promoted					
UH - 24					
Advanced Analytics to Members		PRIORITY	Low	ESTIMATE	5
User Story:					
As a member					
I want to access advanced analytics					
so that I can evaluate the impact of my content					
Acceptance Criteria:					
Given I am a premium user					
When I access the analytics section from my profile					
Then I should see statistics like impressions, engagement rate, and audience demographics					

FR-001	User Registration
Version: 1	28/April/2025
Dependency:	• Database • Authentication service
Description:	The system must allow a new user to register using an email or an external authentication provider (OAuth).
Specific data:	• Username • Email address • Password or external auth token
Priority:	High
Status:	In development
Comments:	The system must validate that the email is not already in use.

FR-002	Create Post
Version: 1	28/April/2025
Dependency:	• Database • Media service • AI suggestion engine
Description:	The system must allow users to create and publish messages with text, images, or videos, using AI suggestions to enhance post quality.
Specific data:	• Post content (text) • Media files (optional) • Timestamp of publication
Priority:	High
Status:	In development
Comments:	Content filtering and quality checks should be applied before publishing.

FR-003	Follow/Unfollow Users
Version: 1	28/April/2025
Dependency:	• Database • Notification service
Description:	The system must allow users to follow or unfollow other users, modifying their personalized feed accordingly.
Specific data:	• Follower user ID • Followed user ID • Timestamp of the action
Priority:	High

Status:	In development
Comments:	A notification should be sent if the followed user has this setting enabled.

FR-004	**Like and Repost Content**
Version: 1	28/April/2025
Dependency:	• Database • Notification system
Description:	The system must allow users to like or repost content created by others.
Specific data:	• User ID • Post ID • Type of interaction (like or repost) • Timestamp
Priority:	High
Status:	In development
Comments:	Notifications should be generated for the content creator.

FR-005	**Comment on Posts**
Version: 1	28/April/2025
Dependency:	• Database • Moderation system
Description:	The system must allow users to write and publish comments on existing posts.
Specific data:	• Comment text • Post ID • Commenting user ID • Timestamp
Priority:	High
Status:	In development
Comments:	Comments must pass a content validation process before being displayed.

FR-006	**Report Content**
Version: 1	28/April/2025
Dependency:	• Database • Moderation engine
Description:	The system must allow users to report posts they consider inappropriate, offensive, or harmful.
Specific data:	• Report reason

	• Post ID • Reporting user ID • Timestamp
Priority:	High
Status:	In development
Comments:	Reports should trigger a review process by moderators.

NFR-001	Performance for Search
Version: 1	28/April/2025
Dependency:	• Database •Caching engine
Description:	The system must ensure that search queries and timeline loading are executed in under 100 milliseconds.
Specific data:	• Search engine response time • Timeline fetch latency
Priority:	High
Status:	Planned
Comments:	Response time must be validated under peak load conditions.

NFR-002	Scalability
Version: 1	28/April/2025
Dependency:	• Cloud infrastructure • Load balancer
Description:	The system must support elastic scaling to handle traffic surges during peak activity periods.
Specific data:	• Auto-scaling policies • Concurrent user support
Priority:	High
Status:	Planned
Comments:	Stress testing should be performed before deployment.

NFR-003	High Availability
Version: 1	28/April/2025
Dependency:	• Infrastructure as Code • Group of geographically distributed servers
Description:	The system must guarantee 99.9% uptime with regional redundancy to minimize service disruption.
Specific data:	• Regional server replicas • Downtime tolerance
Priority:	High
Status:	Planned
Comments:	Use of failover systems and availability zones is required.

NFR-004	Security Standards
Version: 1	28/April/2025
Dependency:	• OAuth provider • Encryption layer
Description:	The platform must enforce encrypted data storage and secure authentication via OAuth, with API rate limiting.
Specific data:	• Encryption algorithm • Auth flow compliance • API rate thresholds
Priority:	High
Status:	Planned
Comments:	Must comply with GDPR and platform privacy standards.

NFR-005	Real-Time Data Ingestion
Version: 1	28/April/2025
Dependency:	• OAuth provider • Encryption layer
Description:	The platform must enforce encrypted data storage and secure authentication via OAuth, with API rate limiting.
Specific data:	• Encryption algorithm • Auth flow compliance • API rate thresholds
Priority:	High
Status:	Planned
Comments:	Must comply with GDPR and platform privacy standards.

NFR-006	Multi-Region Access
Version: 1	28/April/2025
Dependency:	• Global CDN • Data replication system
Description:	User data must be accessible from different regions with low latency, using synchronized replicas.
Specific data:	• Regional replication delay • Access latency
Priority:	High
Status:	Planned
Comments:	Ensure consistency and data integrity across replicas.

NFR-007	Real-Time Data Ingestion
Version: 1	28/April/2025
Dependency:	• ML engine • Data pipeline
Description:	The system must implement content-based and collaborative filtering algorithms for user feed
Specific data:	• User interaction data • Embedding vectors
Priority:	Medium
Status:	Planned
Comments:	Must comply with GDPR and platform privacy standards.

NFR-008	Business Intelligence Module
Version: 1	28/April/2025
Dependency:	• Data warehouse • BI tool (Superset/Power BI)
Description:	The system must integrate a BI module for generating insights on user engagement, content performance, and
Specific data:	• User metrics • Post interactions • Regional trends
Priority:	Medium
Status:	Planned
Comments:	Dashboards must be accessible to managers and admins.

report_user

id: int
date_report:date
reason: string(50)
add_comment: string(300)
fk_report_to_user: int
fk_report_by_user: int

user_add_data

id: int
profile_description: string(100)
phone: string(10)
social_media: string(100)
fk_user_id: int

follower

id: int
date_begin_follow: date
fk_follower_user: int
fk_followed_user: int

cat_reaction

id: int
reaction: string(6)
label: string(10)
description: string(10)
date_reaction: date

user_account_conected

facebook_key
google_key
fk_user_id: int

user

id: int
date_create: date
date_modificate: date
date_delete: date
status: string(6)
nickname: string(10)
name: string (50)
date_birth: date
password: string(15)
email: string(30)
profile_image: file
fk_typer_user: string(6)

reaction

id: int
date_reaction: date
fk_user_react_id: int
fk_post_id: int
fk_reaction_id: int

attached_multimedia

id: int
name: string(30)
format: string(4)
size: string(10)
characteristics: string(100)

cat_type_user

id: int
type: string(6)
label: string(10)
description: string(30)

comment

id: int
text_comment: string(800)
date_create: date
date_modificate: date
date_delete: date
status: string(6)
fk_user_comment_id: int
fk_post_id: int

post

id: int
date_post: date
text_post: string(800)
date_create: date
date_modificate: date
date_delete: date
status: string(6)
visibility_type: string(6)
fk_user_id: int

historical_post

date_modificate: date
text_version: string(800)