INTRODUCTION

Describe the purpose of this requirements document and outline what it contains.

This document defines the system requirements for the Reddit platform. It outlines the intended functionality, performance, security, and operational features required to achieve the goals specified in the project plan. The primary goal is to create an organized and user-friendly forum platform for users worldwide to engage in discussions, share ideas, and interact with likeminded communities. This document contains the following:

Functional and non-functional requirements.

Input, output, process, performance, and security specifications.

Detailed descriptions of the system's operations and anticipated outcomes.

This document serves as a guide for developers, stakeholders, and testers to ensure the Reddit platform meets user needs while delivering a seamless experience.

DESCRIPTION MODEL

Using text, describe the requirements for your system. Expand on the function section from your project plan. Include requirements for the following categories: Output, Input, Processes, Performance and Security.

The Reddit platform is designed as a community-driven forum where users can post content, engage in discussions, and explore specific topics of interest through Subreddits. Below are the requirements categorized into output, input, processes, performance, and security.

Output Requirements

Display Subreddits, threads, and comments sorted by relevance or user preferences (e.g., trending, new, or top-rated).

Generate personalized user feeds based on subscribed Subreddits and interaction history.

Deliver notifications for new messages, replies, or upvotes.

Provide analytics for moderators, such as user activity and content performance metrics.

Input Requirements

Allow users to create accounts and log in securely.

Enable users to submit threads, comments, and replies within Subreddits.

Provide options to upvote, downvote, or report content.

Facilitate subreddit creation and customization by moderators.

Process Requirements

Sort and prioritize content based on user interactions (upvotes, downvotes) and system algorithms.

Moderate content using automated tools and manual oversight by subreddit moderators.

Facilitate user profile updates, including avatar uploads and account preferences.

Manage subreddit configurations, including membership rules and content filters.

Performance Requirements

Ensure seamless navigation and content loading times of less than 2 seconds.

Handle concurrent users with minimal downtime, scaling up to 1 million active users.

Optimize algorithms for efficient sorting and retrieval of content.

Security Requirements

Implement secure user authentication via password encryption and optional multi-factor authentication (MFA).

Protect user data and ensure compliance with privacy laws such as GDPR.

Prevent spam, malicious content, and unauthorized access through content filtering and robust moderation tools.

Secure data transmission using HTTPS protocols.