**Group N**

**Mini Twitter Project**

**Software Requirements Specification**

**For Front-end and Back-end**

**Version 1.0**

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| **10/25/2023** | **1.0** | **Identified which technologies we are going to use for front-end and back-end. Planned who is going to do which part. Initialized our work.** | **Ayon Kumar Das**  **DimosthenisTsingounis**  **Da Yuan Zhao**  **Jinfeng Ouyang**  **Xinwei Wu** |
|  |  |  |  |
|  |  |  |  |

**Table of Contents**

1. Introduction
   1. Purpose 4
   2. Scope 4
   3. Definitions, Acronyms, and Abbreviations 4
2. Overall Description
   1. Use-Case Model Survey 5
   2. Assumptions and Dependencies 5
3. Specific Requirements
   1. Use-Case Reports 5
   2. Supplementary Requirements 5
   3. Required Features 6

1.1 Purpose

The purpose of this Software Requirements Specification (SRS) is to define the functional and non-functional requirements for the Mini Twitter system, which is built using React for the frontend and MySQL for the backend.

1.2 Scope

The Mini Twitter project aims to create a social media platform with various user types, message features, and user interactions. This document outlines the specific requirements for this system.

1.3 Definitions, Acronyms, and Abbreviations

Super User: SU

Corporate User: CU

Trendy User: TU

Ordinary User: OU

2.1 Use-Case Model Survey

The use-case model for the Mini Twitter application includes various user types (Super-user, Corporate-user, Trendy-user, Ordinary-user, Surfer) and their corresponding actions within the system.

2.2 Assumptions and Dependencies

The development of the Mini Twitter project assumes that developers are familiar with React for building the front-end components and MySQL for managing the database. Dependencies include libraries, packages, and external resources required for development.

3.1 User Types and Features

1. Super-user (SU): who can warn/add/delete any users and/or messages

2. Corporate user (CU): who can post ads and job openings.

3. Trendy-user (TU): the subset of ordinary users who were a) subscribed to by more than10 users, and b) received more than $100 tips or more than 10 likes or dislikes, and c) author of at least 2 trendy messages.

4. Ordinary user (OU): besides having all features for a surfer, who can post or delete, comment, tip, like or dislike, complain, follow messages, and subscribe to other users.

5. Surfer: who can only view or search the messages and report or complain to the super-user about the misinformation.

3.2 Message Characteristics

1. Carry the author, time and date and up to 3 keywords chosen by the author

2. Show the number of times others read it, number of likes/dislikes, and number of complaints

3. If there are 1 or 2 tabooed words (taboo word list is managed by SU), the words are changed to corresponding number of asterisks; if >2, the msg is blocked automatically and the author is warned once automatically

4. Any message with >10 reads, #likes-#dislikes>3 will be promoted to “trendy post” shown in the “trending tab”.

3.3 Required Features

1. When a surfer visit the system, the top 3 most liked messages and the top 3 trendy-users will be featured in the top page; the surfer is given the choice of applying to be an ordinary or corporate user with their chosen id.

2. The super-user processes user applications with accept or deny: if accept, a temporary password is sent to the user and the user must change it when first login, and an amount of money should be deposited to the system; if denied, a justification should be provided.

3. When a TU/OU/CU logins, the system will suggest accounts for the user to follow based on this user’s reading/liking/tipping/following history.

4. A TU/OU/CU can construct their own profiles, which again is subjected to comments/reports by others, same warning policy will apply if the profile contains misinformation.

5. TU/OU can post messages with <=20 words (an image is equivalent to 10 words, while a video is equivalent to 15 words) for free, any message >20 words will be billed by the system automatically with the amount (#-20)\*$0.1; a CU’s message is billed #\*$1 without free ones. If the user does not have enough money in the account, a warning is issued and when the user logging will be automatically directed to the payment page.

6. Any user receiving warning can dispute with the SU: if winning the dispute, the warning is removed: if the warning is initialized by another user, the user who reported/complained will be warned once; if the warning is by a surfer, the complained user is rewarded by 3 likes from the SU. Any CU/OU with 3 outstanding warnings will be given the choice of paying out the fine to remove the complaints or removed from the system. Any TU with 3 outstanding warnings will be demoted to OU with no warnings.

7. All users can search for messages based on author, keywords, with/without images and or videos, #of likes/dislikes.

8. CU is allowed to post ads and job applications that other users can click and apply, CU will pay the system (SU) by $0.1 for each click and application.

9. Any TU/OU who post ads or job opportunities will be fined $10 and one warning.

10. A creative feature of your team’s choice worthy of 10% of the system, super-creative features will receive a special bonus.