# **EmoVerse Requirement Document**

## **Chapter 1-Introduction:**

EmoVerse aims to provide an online platform that allows users to search, upload, and download emoticons, providing users with a wide selection of emoticons. The vision of EmoVerse is to create a space full of creativity, entertainment, and social interaction, providing convenience and fun for users.

### **Chapter 2-Project Background:**

In the digital age, emoticons have become an important component of online and mobile communication. They not only provide users with a richer way to express emotions, but also enable entertainment and easy online communication. However, despite the increasingly widespread use of emoticons, finding a suitable emoticon pack is still a very difficult task. At the same time, various emoticons are scattered across different platforms and applications, and users need to switch between multiple applications to find and use emoticons, which poses some obstacles to users. In addition, many users have the desire to create their own emoticons, but lack a convenient platform to achieve this wish. That's why we decided to create EmoVerse.

The emoticon universe not only concentrates various emoticon packages on one platform, but also provides a friendly creation and sharing environment to meet the various needs of users. We believe that EmoVerse will become an online community full of vitality, creativity, and social interaction.

This requirement document aims to define and provide a detailed description of the functions and requirements of the EmoVerse to ensure the successful implementation of the project.

## **Chapter 3-User Requirements:**

We first need to collect user needs and design our platform based on them. Here are the user requirements we have collected so far:

- 1. Search for specific emotional expressions: Users need to be able to search for emoticons that are suitable for their specific emotions or scenarios through keywords or classifications.
- 2. Collection of emoticons: Users hope to be able to browse, search, and download various emoticons to expand their collection of emoticons.
- 3. Emotion Pack Creation: Users hope to easily upload their created emoji packs and share them with others. They need a simple tool to edit and customize emoticons.
- 4. Personalized recommendation: Users hope that the platform can recommend relevant emoticons to them based on their interests and preferences, so that they can discover new content.
- 5. Social interaction: Users who wish to interact with other users can leave comments, likes, share emoticons, and establish social connections.
- 6. Security and privacy protection: Users are concerned about their personal data and privacy, and they hope that the platform takes appropriate measures to protect their information from abuse.

## **Chapter 4-Project Function:**

The project functions are composed of core functions and extended functions from the perspective of user needs. The core functions are the functions that the project must complete, while the extended functions are the functions that the project will complete in the future.

#### 1.Core functions:

- 1. Account registration and login: Users can create personal accounts to manage uploaded emoticons and their own favorites.
- 2. Search: Users can search for various types of emoticons on the platform, such as smiley faces, moods, animals, movies/TV, celebrities, etc. They can use keywords, tags, or categories to find the desired emoticons.
- 3. Upload: Users can create their own emoticons and upload them to the platform, providing images, tags, and related descriptions. They can also choose to set the emoticon pack for public sharing or private use.
- 4. Download and bookmark: Users can download their favorite emoticons or add them to their favorites for easy use at any time.

#### 2.Extended functions:

- 1. Social interaction: Users can leave likes, comments, and shares on emoticons to interact with other users and establish social connections.
- 2. Advanced filtering and recommendation: Provide advanced filtering options to help users more accurately find the emoticons they want. Machine learning algorithms can also be used to recommend relevant emoticons to users.
- 3. Emotion Pack Editor: Provides an online emoticon pack editing tool that allows users to customize and edit existing emoticons, add text, special effects, and more.
- 4. Analysis and Statistics: Provide statistical data on the use of emoticons to help users understand which emoticons are popular and how to improve their creativity.

### **Chapter 5-Functional requirements:**

Next, we will analyze and summarize the functional requirements based on user needs and project functions. Here are the results:

- 1. Account registration and login
  - (1) Allow users to create personal accounts, including username, email address, and password.
  - (2) Allow users to manage personal information, upload avatars, and change account settings (avatars, passwords, etc.).
  - (3) Allow users to upload emoticons and manage their favorites through their personal account.
- 2. Search and browse emoticons
  - (1) Provide a search bar that allows users to search for emoticons through keywords, tags, and categories.
  - (2) Allow users to browse various emoticons and view detailed information such as the author of the emoticons.
- 3. Uploading and editing emoticons
  - (1) Allow users to upload their own created emoticons, including images, tags, descriptions, and related information.
  - (2) Provide an online emoticon editor that allows users to customize emoticons, add text, special effects, and filters.

- 4. Download and share emoticons
  - (1) Allow users to bookmark and download their favorite emoticons.
  - (2) Provide social sharing function, allowing users to share emoticons with others through links.
- 5. Social interaction
  - (1) Allow users to leave comments, likes, and shares on the emoticon page, and interact with other users.
  - (2) Provide a profile interface that allows users to display their uploaded emoticons.
- 6. Emotion pack recommendations and trends
  - (1) Use machine learning algorithms to analyze user preferences and recommend relevant emoticons to them.
  - (2) Display the most popular emoticons and trends so that users can discover new content. Non functional requirements.

## **Chapter 6-Non-functional Requirements**

### 1.Performance requirements:

- 1. Response time: The platform should respond within seconds after the user requests to ensure a smooth user experience.
- 2. Number of concurrent users: The platform should support simultaneous concurrent users to meet the needs of high traffic periods.
- 3. Stability: The platform should have high stability to minimize crashes and service unavailability time.
- 4. User growth: The platform should be able to accommodate future user growth and have the ability to expand horizontally.

### 2.Security requirements:

- 1. Data encryption: Users' personal information and communication should be protected through encryption methods.
- 2. Identity verification: The user's identity should undergo valid identity verification to ensure that only legitimate users can upload and edit emoticons.
- Copyright compliance: The platform should comply with copyright regulations and ensure that the emoticons uploaded by users do not infringe on the intellectual property rights of others.
- 4. Reporting mechanism: Provide a reporting mechanism to address inappropriate or illegal content.