Hungerger

System-Wide Requirements Specification

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# Introduction

This document presents the requirements for the Hungerger social media application. Which is a social media application that enables users to interact globally through the recipe-sharing functionality presented by the Hungerger application.

Even though there are recipe platforms, such systems seem to lack the motivational driver, which is being approved through the interactions and feedback from different users. Such interactions are expected to increase user satisfaction and collaboration with the system as well.

Another major differentiation point of the Hungerger social media application is that it enables a comprehensive cost calculation system. Such functionality is not entirely presented in any of the other platforms available on the internet as of now.

# System-Wide Functional Requirements

The System-Wide Functional Requirements can be listed below:

* 1. **HGG-USER-REGISTER:** The system shall enable users to register to the system by inquiring about their email, handle, avatar, and password to be used.
  2. **HGG-USER-LOGIN:** The system shall enable users to log in to the system by inquiring about their email and password.
  3. **HGG-USER-LOGOUT:** The system shall enable users to log out from the system.
  4. **HGG-USER-EDIT:** The system shall enable users to modify their account details. email, avatar and password.
  5. **HGG-USER-DELETE:** The system shall enable users to delete their account.
  6. **HGG-USER-VIEW-PROFILE:** The system shall enable users to view a profile.
  7. **HGG-USER-BROWSE:** The user can browse an ingredient, dietary preference, cost, and difficulty by filtering. They can also browse based on a recipe name. The system lists recipes that are related to the user input.
  8. **HGG-USER-INTERACT:** Users can interact with each other through DMs, comments, and ratings.
  9. **HGG-USER-REPORT:** Users can report misuse to the admin.
  10. **HGG-USER-RESET-PASSWORD:** The system shall enable users to reset their password.
  11. **HGG-USER-SETTINGS:** The system shall enable users to change their settings.
  12. **HGG-USER-VERIFIED-ACCOUNT:** The system shall enable users to send a request to be a verified account.
  13. **HGG-SYSTEM-NOTIFICATION:** The system shall send notifications to users when necessary.
  14. **HGG-SYSTEM-HOME:** The system will have a home page that will show recipes.
  15. **HGG-RECIPE:** The system shall enable users to post recipes by categories.
  16. **HGG-RECIPE-CREATE:** The system shall enable users to add an image, name, description, category, and ingredients to create a recipe.
  17. **HGG-RECIPE-DETAILS:** The system shall enable users to display recipe details of other users via a link to the recipe.
  18. **HGG-RECIPE-COST:** The system collects the prices of the ingredients from a marketplace and then calculates the costs of the ingredients and the recipe. The system shows the recipe on the user profile page and the home page.
  19. **HGG-RECIPE-UPDATE:** The system shall enable users to update their recipes.
  20. **HGG-RECIPE-DELETE:** The system shall enable users to delete their recipe.
  21. **HGG-RECIPE-SAVE**: The system shall enable users to save a recipe for offline viewing
  22. **HGG-FEED-FEED:** The system shall display a feed of recipes to an authenticated user.
  23. **HGG-FEED-LIST:** The system shall display a list of recipes to the users in their feed.
  24. **HGG-FEED-LIST-RECIPE-DETAILS:** The system shall display the recipe name, image, ratings, and recipe creator on the recipes in the feed.
  25. **HGG-FEED-LINK-RECIPE-DETAILS:** The system shall enable users to display recipe details on their feed.
  26. **HGG-FEED-RATE-RECIPE:** The system shall enable users to rate a recipe on their feed.
  27. **HGG-RECIPE-DETAILS-ITEMS:** The system shall display the handle of the recipe creator, recipe name, description, image, rate, price, and comments on the recipe details page.
  28. **HGG-RECIPE\_DETAILS-RATE:** The system shall enable users to rate a recipe on the recipe details page.
  29. **HGG-RECIPE\_DETAILS-COMMENT:** The system shall enable users to comment on the recipe on the recipe details page.
  30. **HGG-ADMIN-PREDEFINED:** The system shall have predefined admin users.
  31. **HGG-ADMIN-CREATE-USER:** The system shall enable admin users to create new admin users and regular users.
  32. **HGG-ADMIN-EDIT-USER:** The system shall enable admin users to modify every user’s details.
  33. **HGG-ADMIN-EDIT-RECIPE:** The system shall enable admin users to modify every recipe’s details.
  34. **HGG-ADMIN-DELETE-USER:** The system shall enable admin users to delete selected users.
  35. **HGG-ADMIN-DELETE-RECIPES:** The system shall enable admin users to delete selected recipes.
  36. **HGG-ADMIN-COMPLAINTS:** The system shall enable admin users to deal with complaints.
  37. **HGG-ADMIN-MONITOR:** The system shall enable admin users to view all user activity logs.
  38. **HGG-ADMIN-DASHBOARD:** The system shall enable admin users to have a dashboard for monitoring system metrics.
  39. **HGG-ADMIN-NOTIFICATIONS:** The system shall enable admin users to send system-wide notifications.
  40. **HGG-ADMIN-VERIFY:** The system shall enable admin users to verify account request.

1. **System Qualities**

The System Qualities can be listed below:

* 1. **HGG-AVAILABILITY:** The system shall be able to react to 99% of the requests at all times.
  2. **HGG-PERFORMANCE:** The system shall be able to react to every request under 1 second.
  3. **HGG-SECURITY-DATABASE:** The system keeps user passwords with a secure hashing algorithm in an encrypted database.
  4. **HGG-SECURITY-HTTPS:** The system shall use an HTTPS connection between client and server.
  5. **HGG-USABILITY:** A feedback mechanism presented to early-stage users of the system should represent at least above-average satisfaction results.
  6. **HGG-RELIABILITY:** The system shall have a backup server and load balancers in the architecture.
  7. **HGG-SUPPORTABILITY:** The system shall enable users to report faulty behavior to admin users.
  8. **HGG-DEVELOPMENT:** The system is written in Python programming language. It uses MySql as a database.
  9. **HGG-SERVER:** System’s Servers will run on Linux and/or Windows-based servers
  10. **HGG-BROWSER**: The system runs on the following browsers  (Chrome, Edge, Mozilla, Opera, Safari).
  11. **HGG-MOBILE:** The app should support Mobile platforms (Android and IOS).
  12. **HGG-LANGUAGE:** The app will support three languages (English, Turkish, and Arabic).

1. **System Interfaces**

## User Interfaces

### **Look & Feel**

### **HGG-FEEL:** The software interface should be enjoyable for the user whilst providing a striking design for recipe photos and statuses.

### **HGG-COLOR:** The software should follow a coloring pattern that includes a range of colors between white and shades of purple.

### **Layout and Navigation Requirements**

### **HGG-USER-PROFILE:** Every user should have a profile where they can set a profile picture, update their personal information, and view their posts and activities. Access to user profiles should be intuitive, often through a user's username or profile picture.

### **HGG-RECIPE-FEED:** The home screen should display a personalized recipe feed that shows recipes, updates, and content from the users or groups a user follows. Users should be able to scroll through their feeds and engage with recipes (rate, comment, share, etc.).

### **HGG-NAVIGATION-BAR:** Include a prominent navigation bar that provides easy access to core features like the news feed, notifications, messaging, user profiles, and more.

### **HGG-SEARCH-FUNCTIONALITY:** Implement a search bar that allows users to find other users or recipes by keywords, hashtags, or usernames. Provide filters for more precise searches.

### **HGG-NOTIFICATIONS:** Display notifications for rating operations, comments, mentions, follow requests, and other relevant activities. Ensure notifications are easily accessible from the app's main interface.

### **HGG-PRIVATE-MESSAGING:** Users should be able to send and receive private messages with other users. Conversations should be organized and easy to access. Implement features like reading receipts, typing indicators, and multimedia sharing.

### **HGG-RECIPE-INTERACTIONS:** The system shall include options to rate, comment on, and share recipes. Users should be able to follow/unfollow other users.

### **Consistency**

* + - 1. **HGG-VISUAL-CONSISTENCY:** Maintain a consistent visual design, including colors, typography, icons, and layout throughout the app. Use a recognizable brand identity. Ensure that the app's design is coherent across different platforms and devices (e.g., web, mobile, tablet).
      2. **HGG-NAVIGATIONAL-CONSISTENCY:** Keep the navigation structure consistent across the app. Users should be able to find core features in predictable locations (e.g., the navigation bar). Use standard icons and symbols for actions (e.g., a heart icon for liking posts and a speech bubble for comments) to ensure users can easily understand and interact with content.
      3. **HGG-INTERACTION-CONSISTENCY:** Standardize interactions and gestures, such as tapping to view content, double-tapping to like, swiping to navigate between screens, or deleting items. Maintain consistency in how users can interact with content, such as liking, commenting, sharing, or reporting.
      4. **HGG-TERMINOLOGY-CONSISTENCY:** Use consistent and clear terminology throughout the app. For example, if you use the term "post" in one part of the app, stick to that terminology rather than switching to "update" or "status" in other sections.
      5. **HGG-FEEDBACK-CONSISTENCY:** Provide consistent feedback to user actions. When a user performs an action, such as liking a post, make sure the feedback (e.g., animation, sound, or notification) is uniform and predictable.
      6. **HGG-ERROR-HANDLING-CONSISTENCY:** Develop a consistent approach to error messages, such as network errors, authentication issues, or content that can't be displayed. Make error messages clear, helpful, and uniform in appearance and tone.
      7. **HGG-CONTENT-CONSISTENCY:** Enforce content guidelines and policies consistently to maintain a safe and positive community. Ensure that reporting and moderation processes are consistent and transparent.
      8. **HGG-USER-SUPPORT-CONSISTENCY:** Ensure that customer support and user assistance are consistently available and responsive, whether through in-app help options or external support channels. Consistency is essential for building trust and loyalty with users. It helps users feel comfortable and confident when using your social media app. Regular user testing and feedback collection can help you identify areas where you may need to improve and maintain consistency.

### **User Personalization & Customization Requirements**

* + - 1. **HGG-PROFILE-PERSONALIZATION:** Users should be able to create and edit their profiles, including adding a profile picture, cover photo, bio, and other personal information. Allow users to customize their profile settings, such as privacy settings, notification preferences, and security options.
      2. **HGG-CONTENT-PERSONALIZATION:** Enable users to customize their content feed by following or unfollowing other users, topics, or groups. Implement content filtering and sorting options, allowing users to see content based on their interests, relevance, or recency.

## Interfaces to External Systems or Devices

### **Software Interfaces**

### **4.2.2** Hungerger should enable a cost system integrated with various online shopping applications and local markets that serve as online retailers. The data of product costs and product availability on the previously mentioned online shopping applications and local markets will be acquired through their APIs.

### **Hardware Interfaces**

Hungerger does not have any Hardware Interfaces.

### **Communications Interfaces**

Hungerger does not have any Communications Interfaces.

# Business Rules

## Improper Usage of Hungerger

If users violate guidelines for acceptable content, including prohibitions on hate speech, harassment, nudity, violence, and other inappropriate content. There will be legal or software penalties for users who violate content guidelines, including warnings, temporary suspensions, or permanent bans.

## Influencer Bonuses

### **Plongeur/Marmiton (Kitchen Porter) Bonus:** Users who obtain a follower count greater than or equal to 10K will be rewarded with 5$ per month as long as they share one recipe weekly and keep the follower count above the given threshold.

### **Commis Chef (Junior Cook) Bonus:** Users who obtain a follower count greater than or equal to 100K will be rewarded with 25$ per month as long as they share one recipe weekly and keep the follower count above the given threshold.

### **Chef de Partie (Chief of the Group) Bonus:** Users who obtain a follower count greater than or equal to 1M will be rewarded with 100$ per month as long as they share one recipe weekly and keep the follower count above the given threshold.

### **Sous Chef (Under Chef) Bonus:** Users who obtain a follower count greater than or equal to 2.5M will be rewarded with 500$ per month as long as they share one recipe weekly and keep the follower count above the given threshold.

### **Chef de Cuisine (Chief of the Kitchen) Bonus:** Users who obtain a follower count greater than or equal to 5M will be rewarded with 1000$ per month as long as they share one recipe weekly and keep the follower count above the given threshold.

# System Constraints

**1. Adherence to Legal and Regulatory Constraints:**

Constraint: Follow legal and regulatory requirements, such as data protection laws (e.g., GDPR) and intellectual property rights (e.g., DMCA).

Purpose: Mitigate legal risks and maintain the platform's reputation.

**2. Content Moderation Constraints:**

Constraint: Enforce automated or manual moderation of content for compliance with community guidelines.

Purpose: Ensure the platform remains a safe and respectful environment by removing inappropriate or harmful content.

**3. Image and Video Upload Constraints:**

Constraint: Limit the size and format of images and videos that can be uploaded.

Purpose: Maintains performance and prevents abuse of system resources.

**4. Character Limitation for Posts:**

Constraint: Limit the maximum number of characters for each recipe detail to 280.

Purpose: Encourages concise and focused communication while preventing excessively long or spammy posts.

**5. Username Unique Constraint:**

Constraint: Usernames must be unique across the platform.

Purpose: Ensures that each user has a distinct identifier and helps prevent impersonation.

# System Compliance

## Licensing Requirements

**1. Software Licenses:**

We ensure that all software components and libraries used in the application development are properly licensed and comply with open-source licenses (e.g., GPL, MIT, Apache License) if applicable.

**2. Copyrighted Content:**

Users must comply with copyright laws when posting content. Enforce a policy that prohibits users from uploading copyrighted material without permission. DMCA takedown requests will take place during such a scenario.

**3. User-Generated Content Licensing:**

When users create a recipe, they give other users or establishments the authority to use it.

**4. Third-Party APIs and Services:**

Since the application integrates with third-party APIs or services, ensure compliance with their terms and licensing agreements.

**5. Brand and Trademark Usage:**

When people on the internet use Hungerger branding and trademarks, including any licensed logos or icons. They may face legal action based on their utilization of the brand’s assets.

## Legal, Copyright, and Other Notices

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Since the application integrates with third-party APIs or services, ensure compliance with their terms and licensing agreements.

## Applicable Standards

The development of the Hungerger software will comply with ISO/IEC 12207 standard during development.

# System Documentation

Users will find documentation throughout the usage of the Hungerger application by hovering over info bubbles that are available in their respective areas on the page (these bubbles can sometimes cover the whole page).