PikYak Requirements Document

Version 1, draft

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1 Introduction

1.1 Purpose

The purpose of this Requirements Document is to specify the software requirements of PikYak, an anonymous picture sharing social media platform. The document will help to define the concept and functionality of PikYak for development.

1.2 Definitions, Acronyms, and Abbreviations

post: A message, containing only a single picture, submitted to the public PikYak server for other users to view.

up-vote: A single positive vote that users can give to a post to signify that they enjoy the content.

down-vote: A single negative vote that users can give to a post to signify that they do not enjoy the content.

score: The value of the sum of a post's downvotes subtracted from the sum of its upvotes. This measure provides a rough indication of how popular a post is.

conversation: A grouping of posts that are made in reply to one another. Creating a new post either creates a new conversation or replies to an existing one.

1.3 References

IEEE Std. 830-1998, IEEE Recommended Practice for Software Requirements Specifications, Institute for Electrical and Electronic Engineers, Piscataway, New Jersey, 1998.

2 System Overview

2.1 Purpose

PikYak will be an anonymous picture sharing application that allows users to exchange images with other users that are local to each other. The application will allow users to comment, upvote, and downvote images.

3 Specific Requirements

3.1 Post Picture (Required)

3.1.1 Description

The user would like to create a conversation by uploading a picture.

3.1.2 Actors

- User

3.1.3 Steps

1. The user launches the PikYak client application on their device.

2. The application displays a list of recent conversations, with a thumbnail of the most recent image in each conversation. In the top right there is an icon to create a conversation.

3. The user taps the icon.

4. The camera opens and the user is allowed to take a picture.

5. The application shows a preview of the picture asks the user to confirm that they want to post it.

6. The image is submitted and a conversation is created.

3.2 Up-vote Picture (Required)

3.2.1 Description

The user would like to up-vote a conversation they like.

3.2.2 Actors

- User

3.2.3 Steps

1. The user launches the PikYak client application on their device.

2. The application displays a list of recent conversations, with a thumbnail of the most recent image in each conversation.

3. The user will choose one of the conversations by tapping it.

4. The application will display the recently posted pictures in the conversation, with an up-arrow and a down-arrow.

5. The user will tap the up-arrow.

6. The application will immediately advise the server of the user's action, and all other clients' devices will be updated immediately.

7. Each post's score will be displayed next to the post.

3.3 Down-vote Picture (Required)

3.3.1 Description

The user would like to down-vote a conversation they dislike.

3.3.2 Actors

- User

3.3.3 Steps

1. The user launches the PikYak client application on their device.

2. The application displays a list of recent conversations, with a thumbnail of the most recent image in each conversation.

3. The user will choose one of the conversations by tapping it.

4. The application will display the recently posted pictures in the conversation, with an up-arrow and a down-arrow.

5. The user will tap the down-arrow.

6. The application will immediately advise the server of the user's action, and all other clients' devices will be updated immediately.

7. Each post's score will be displayed next to the post.

8. If the post's score reaches -5, the server will replace the post with a message that it has been deleted.

3.4 Subscribe to Updates (Medium)

3.4.1 Description

The application would alert the user when a new picture was posted in a conversation in which they were participating.

3.4.2 Actors

- User

3.4.3 Steps

1. In the client application, the user posts a picture, either in the main feed, or as a reply to another picture.

2. The application subscribes the user to the conversation.

3. Upon reply, the client application posts a notification to the Android system's notification area. The notification contains a thumbnail of the image.

4. The user can do one of the following:

5. The user can tap the notification to launch the application and navigate to the conversation.

6. The user can swipe the notification to dismiss it.

Appendix A: User Interface

TODO

Appendix B: Initial Task and Role Assignments

Initial presentation assignments are as follows.

Requirements: Kevin Stephens
Design: Collin Kelso
Final: George Hilliard

Initial task assignments are as follows.

Server Backend: Kevin Stephens
Server Frontend: Collin Kelso
Android client application: George Hilliard