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<PINKTEREST> SYSTEM REQUIREMENTS DOCUMENT

DRAFT

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INTRODUCTION

The purpose of this document is to clarify the requirements needed to successfully create a Pinterest clone. It will contain five main topics: the description model, class diagram, system sequence chart, use case diagram, and use case descriptions. First, for the description model, we will use text to explain the system requirements and go into more detail about how everything should work. Next, for the class diagram, we will use Draw.io to show the system's attributes and methods. Similarly, we will create a use case diagram to show relationships along with use case scenarios covering exceptions, conditions, and triggers. Lastly, the document will have the system sequence charts to connect all the diagrams and show how everything works together.

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.

1. Output:

- a. Our system should display posts, comments, likes and shares
- b. Likes, comments, and shares will be updated continuously
- c. Deleted posts and comments will not appears on a users profile or home page
- d. Confirmation and undo buttons will popup when a user wants to delete a posts
- e. Search functions allows user to find content based on their current mood or a selected mood and selecting keywords

2. Input

- a. Users can input a text for messages, posts, comments, search
- b. Users should be able to tag content using “pink-tags”
- c. Click the icon for liking, sharing, commenting, and sharing posts.
- d. Users should be able to upload photos and videos to create content.
- e. Users should be able to apply time-locks on vault posts.

3. Process

- a. Likes should be updated upon click the like icon
- b. When deleting a post or comment, a confirmation button will popup. Afterward an optional undo button will popup.
- c. Time-locked posts will be hidden until a designated time and date
- d. The “Re-Pin” displays reposted content on a users page
- e. The search function will include a mood based search option and a keyword based search option

4. Performance

- a. Posts, likes, comments, and share will be updated in under 3 seconds
- b. Vault post will become unhidden after a designated set time and date
- c. System handles multiple users on the application at once preventing a slow down or a crash
- d. System process search requests and provide relevant content in under 4 seconds

5. Security

- a. Prevent spam or bots by using two-factor authentication and CAPTCHA
- b. Provide protection against data breaches
- c. Users can only delete their comments, posts, and pink-tags.
- d. Data such as login credentials, personal information, phone number, email and more, will be encrypted
- e. User authentication methods will be used during the account login process

The main functions of this project are like, comment, post, delete, share, and search.

Like: Users are able to like posts and comments. They are able to like posts and comments, including their own as well. The like icon will be a white heart, and when pressed, the icon will turn pink. Unlike a post or comment, a user must press the heart, and it will turn white again. The number of likes on a post or comment will be continuously updated.

Comment: Users are able to comment on posts of others as well as their own. Users can react to comments by liking them or using an emoji. Users can reply to comments made on their posts.

Posts: Users can upload photos or videos by clicking the “Create Post” button, adding captions, and pink tags (another name for hashtags). Users can only post content on their page. Vault posts that can be “time-locked,” remaining hidden until a designated set date or milestone to be posted. Users can post on their stories as well, which will be uploaded for only 24 hours. Lastly, users can save posts they find interesting. They can place it in multiple categories/folders.

Delete: Users can delete posts and comments. When a post or comment is deleted, all associated likes will be deleted as well. When deleting a post/comment, a confirmation popup will appear with options, “Delete” or “Cancel”. After deletion, another popup appears with an Undo option. When a post/comment is deleted, it will be permanently deleted from our system.

Share: The Share button called “Re-Pin” allows users to share and repost content. Users can “re-pin” posts to their pages showing the content they are interested in and inspired by. Users can share posts through PinkChats (the app’s messaging system), sharing content with followers and friends. Users also have the option to share posts through links, messages, emails, or other social media platforms.

Search: Pinktrest will have a normal search option allowing users to find posts, users, and hashtags. Pinktrest will also be implementing a mood-based search option alongside the normal search. This allows users to find content based on their current mood or a selected mood.

TODO: PREVIOUSLY ^ BUILD UPON (make it easier on ourselves)

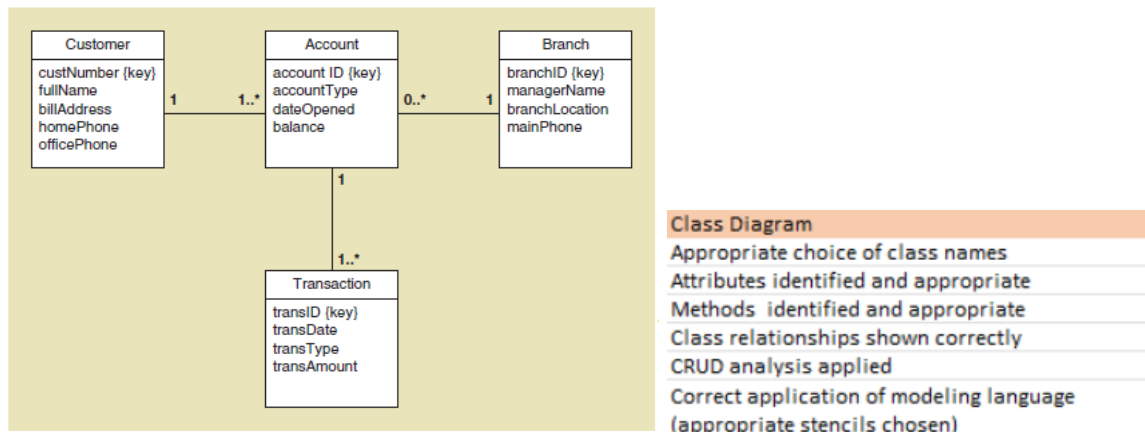
Description Model	
Understanding of textual requirement demonstrated	
Input requirements identified	
Output requirements identified	
Security requirements identified	
Performance requirements identified	
All functionality addressed	

CLASS DIAGRAM

Create a class diagram. The Class Diagram should contain all of the system objects, their attributes, and any known methods. This diagram may be included as a separate file – it does not need to be inserted into this Word document.

- Link: <https://drive.google.com/file/d/13GxcofqXnagPtG4E3LXisrBICg9W7lcd/view?usp=sharing>
- file:///Users/makutaallen/Downloads/CLASS%20DIAGRAMforProject.drawio.pdf
-

TODO: EXAMPLE



Ideas:

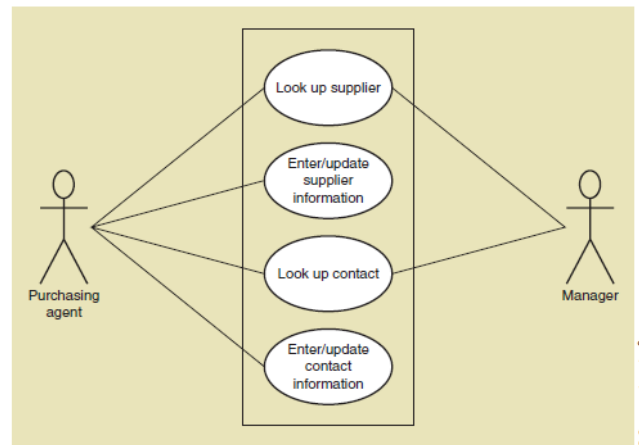
Class	User	Comment	Interaction	Search	Post
Attribute	username email password	username text date	username likeAmount	filter	username title content description image link date
Method	signUp() login()	addComment() deleteComment() editComment() reportComment()	likePost() unlikePost() reportPost() followPost()	findPost() findUser() findComment()	createPost() deletePost() editPost() sharePost()

USE CASE DIAGRAM

Create a Use Case Diagram for all of the "uses" of your system. This diagram may be included as a separate file – it does not need to be inserted into this Word document.

File to Diagram:

<https://drive.google.com/file/d/1FSZSnyJMNbQQzygRs0ktqzj3Uhxkj54q/view?usp=sharing>



TODO: EXAMPLE

Use Case Diagram

Use cases are in action form (verb-object)

All functionality included

Relationships are properly identified

Correct application of modeling language
(appropriate stencils chosen)

Ideas:

Entity: User(contributor), User(follower), Admin

	Posts (create, delete, edit)	Search	Manage (ban request, reports, complains)	Sign up / Login	Comment	Like
User	X	X		X	X	X
Guest		X		X		
Admin			X			

USE CASE SCENARIOS

Create a full description Use Case Scenario (detailed descriptions) for each use case of the system. This full scenario should include an enumerated list of steps involved in the activity as well as any exception conditions.

File:

https://docs.google.com/document/d/18K8nRqUg3EZAhdYMe5P2C_dYJKZ77JqPnTLZBLO0qzc/edit?usp=s haring

TODO: EXAMPLE

Use Case Template		
Name, description	Brief description of the process (what is happening) in the use case	
Actors	List all actors (people, systems, etc.) associated with this requirement	
Pre-condition	What must occur before the use case begins	
Post-condition	What has occurred as a result of the use case	
Main Success Path (primary flow)	Description of the sequence of activities in the most commonly completed path or flow. The main flow is the most routine path from the pre- to the post-conditions.	
Actor Actions	System Responses	
1. List the actor steps here	1.1 List the system steps here	
2.	2.1	
Alternate Path	A1	List the description here, and the less common sequences below that get to the post-conditions. Include any triggers, and where the use case resumes after this flow.
Actor Actions	System Responses	
1. List the actor steps here	1.1 List the system steps here	
2.	2.1	
Exception Path	E1	List the description here, and the sequence of actions that prevents getting to the post-conditions. Include any triggers.
Actor Actions	System Responses	
1. List the actor steps here	1.1 List the system steps here	
2.	2.1	
Scenarios (Insert additional rows for each scenario)		
Scenario	Post-Conditions	Flow

Use Case Descriptions

One description per use case

Main scenario includes user interactions and system responses

Exceptions identify main scenario step and response to exception

Preconditions are steps prior to main scenario

Postconditions are the results after the main scenario is complete

Trigger kicks off main scenario steps

Ideas:

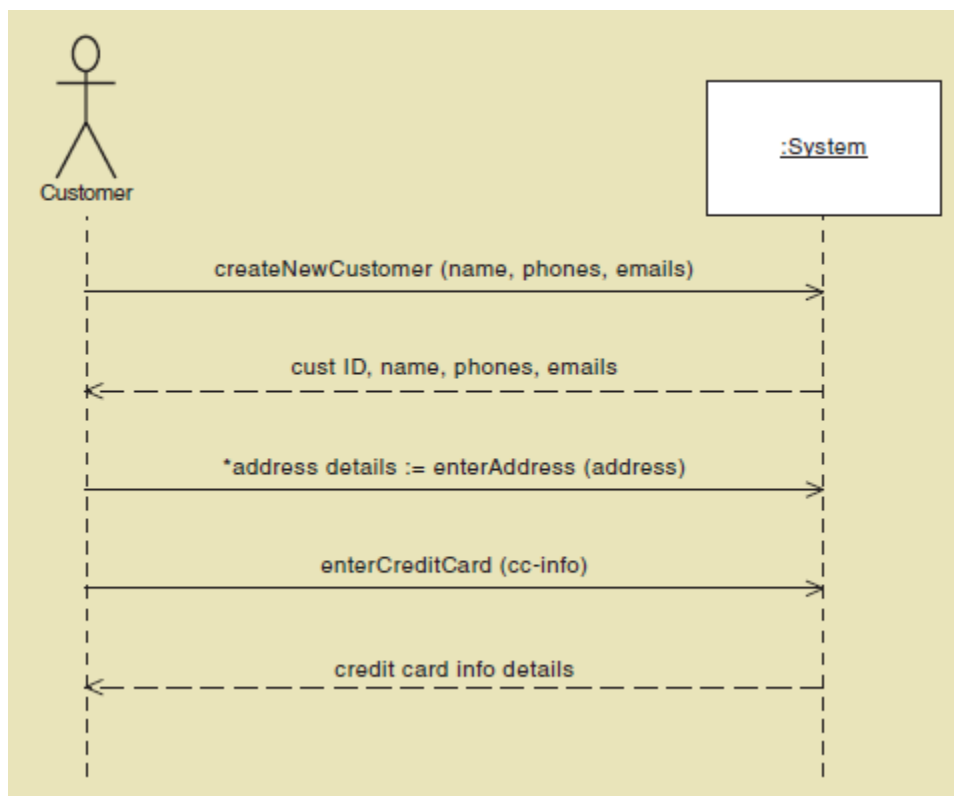
need ones for comment, interaction, search, post, etc

Use case title	account creation
Primary actor	user, guest
Stakeholders	user, guest
Precondition	guest login
Postcondition	member login
Trigger	guest wants to sign up and contribute
Main success scenario	1 person has a post they want to share 2 person sign up with email, password, username

	3 person login and become an user _____
Exceptions	1 bad credentials 2 account already exist

SYSTEM SEQUENCE CHARTS

For each Use Case Scenario, provide a sequence diagram. Use your class diagram, use case diagram and scenarios to create the corresponding System Sequence Diagram.



System Sequence Chart

Message names are appropriate

System responses are represented as data

Messages correspond with methods from Class Diagram

Parameters included in messages

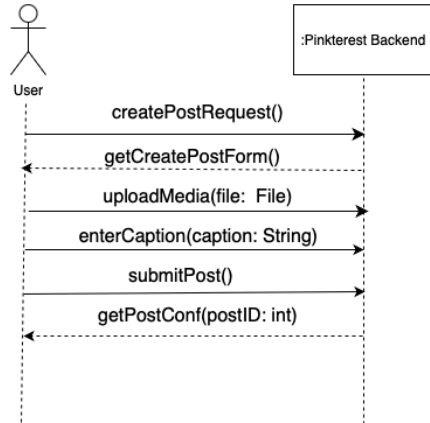
One SSD per use case

Interactions are use case based

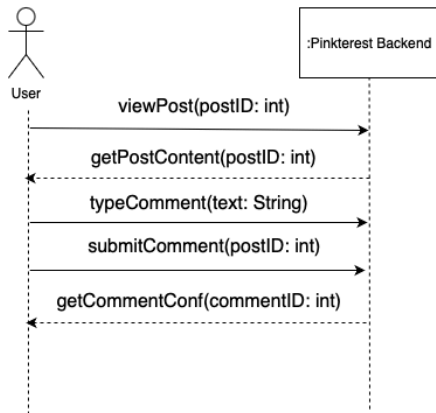
Actor and system is named

Correct application of modeling language
(appropriate stencils chosen)

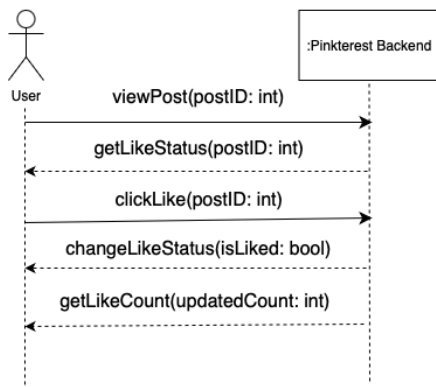
Creating a Post



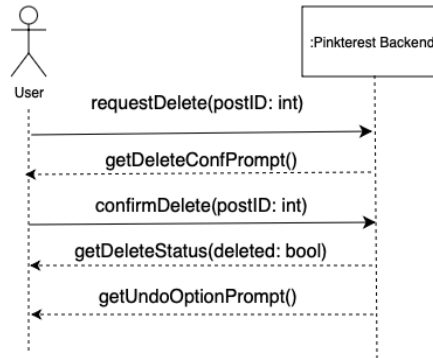
Commenting on a Post



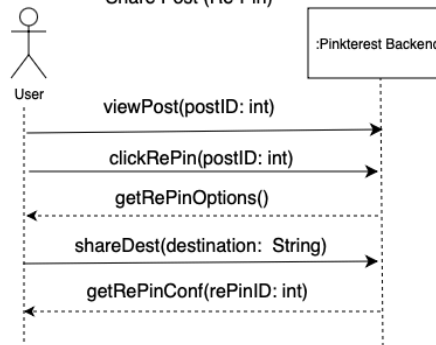
Liking a Post



Deleting a Post



Share Post (Re-Pin)



Search

