Faster, a Localized Errand Request and Delivery App

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Description:

Faster is a user-friendly application that connects individuals who need errands done by reliable deliverers within their local area. This app aims to simplify daily tasks by offering a platform for posting, accepting, and fulfilling errand requests with ease. Unlike other currently existing food delivery apps like UberEats and DoorDash, *Faster* focuses on simple daily delivery requests. A request can be as simple as delivering an envelope or a plot of flowers. *Faster* allows users to have a larger flexibility in describing what they want deliverers to deliver and how deliverers deliver.

Business Requirements:

Notice: The business requirement below is under the assistance from ChatGPT version 4. With the prompt "I have the description (the description above), please generate a business requirement for me".

Nouns
Verbs

Faster is designed to seamlessly connect individuals requiring assistance with errands to dependable deliverers in their vicinity, streamlining the process of managing daily delivery tasks. To participate, both errand posters and deliverers are required to register and log in using their name and phone number, ensuring a secure and personalized experience. Users have the capability to detail their errand needs, specifying the item descriptions, desired delivery times, pickup and drop-off locations, compensation offers, and accompanying images for clarity. On the flip side, deliverers can accept these posts, selecting errands they are equipped to complete. Following the fulfillment of an errand, users are encouraged to provide feedback through ratings and comments on the deliverer's performance, fostering a culture of trust and accountability. In instances where a deliverer is unable to complete an errand as planned, they have the option to cancel, triggering a notification to the user and leaving the errand available for others to accept. Central to Faster's functionality is its integrated in-app wallet system, which displays balance amounts for both users and deliverers, facilitating direct compensation transfers from errand posters to deliverers upon the successful completion of an errand. This comprehensive approach to errand management underscores Faster's commitment to convenience, security, and community trust.

Nouns and Verbs:

Nouns:
- User
- Deliverer
- Name
- Phone number
- Description
- Desired delivery time
- Origin
- Destination
- Compensation
- Images
- Posts
- Ratings
- Comments
- Delivery History
- Balance amount

Verbs:
- Register
- Login
- Post
- Select
- Accept
- Complete
- Rate
- Comment
- Cancel
- Notify

Summary of Classes, Attributes and Associations:

User(class):
- userID(attribute)
- userName(attribute)
- phoneNumber(attribute)
- balanceAmount(attribute)
- register(method)
- logIn(method)

Poster(Inheritance from class User):
- posts(attribute)

- post(method)
- rate (method)
- comment (method)

Deliverer(Inheritance from class User):
- accept (method)
- complete (method)
- cancel (method)
- notifyUser(method)

Post(class):
- description(attribute)
- desiredDeliveryTime(attribute)
- origin(attribute)
- destination(attribute)
- compensation(attribute)
- image (attribute)

Target Audience:

- Individuals with busy schedules looking for assistance with daily errands. Those people are potential posters who request for errands to be accomplished.
- Freelancers or part-time workers seeking flexible earning opportunities through errand delivery. Those people are potential deliverers.

Rules:

- There are two types of users, posters and deliverers.
- All users must register with their real name and phone number.
- Posts must include description, desired delivery time, origin, destination, compensation, images.
- A post can have no or multiple images.
- Posts will be shown to the deliverer account only on a post board. Deliverers can accept the post which will then be removed from the board.
- A post can only be accepted by one deliverer.
- Deliverers can accept up to 2 errands at the same time.
- Whenever deliverers accept, cancel, or complete the delivery, users will be notified.
- Users can see who are their deliverers.
- When deliverers complete the errand requested, users must give a rating and comment before they can post the next errand.
- When the errand is accomplished, the declared compensation in the post will be transacted from the user's balance to deliverer's.

Challenge Questions:

- If there were disputes between deliverers and posters, should we provide a platform like a communication room for them to chat?
- How should we handle the situation when deliverers cancel the delivery other than just notifying users?
- Do we need to set a maximum amount of the errands a deliverer can accept?
- Can users cancel the delivery?
- Should we allow users to tip deliverers after they complete the errand?

Dimensions with Ranks for Posters:

1. **People live in urban area *vs* people live in rural area**
2. **Young people *vs* old people**
3. Busy people *vs* people with leisure time
4. People have daily errands *vs* people who do not
5. People who prefer human service *vs* people who rely on themselves

User Persona for Posters:

Bob 👨
He is an old software engineer who lives in an urban area. His wife loves flower. He wants to use *Faster* to schedule a daily flower delivery request from different local flower shops for his wife at home so that his wife will be happy.

old

Amy 👩
She is a mid-aged housewife who lives in a rural area. She wants to use *Faster* to deliver bento box made by her to his son in boarding school daily because he wants his son to eat healthy home-made food.

urban

rural

Mike 👨‍🎓
He is a college student lives in an urban area. He wants to use *Faster* to deliver love letters to his girl friend as surprise. He wants to use *Faster* because it is fast and cheap. He does not waste time on transportation in this traffic-heavy city.

young

Tom 👱
He is 15-years-old high school teenager. He wants to use *Faster* to deliver his car toys to his best friends in the village so that they can exchange their toys and share the same joy. He does not want to walk by himself because the road in the rural area is not well-constructed.

User Story for Posters:

- As **an old software engineer who lives in an urban area**, *Bob* wants to **post an errand about fresh flower delivery from different local flower shops to his wife at home with detailed information, especially delivery time**, so that **his wife who loves flowers will be happy**.
- As **a 15-year-old high school teenager living in a rural area**, *Tom* wants to post images of his car toys to be delivered so that **he can make sure his friend will receive the intact toys from him**.
- As **a college student who just falls in love with his girlfriend**, *Mike* who lives in a traffic-heavy urban area wants to **save money and time from transportation himself to deliver love letters to his girlfriend**. **He wants to make sure the delivery will have a tag so that he can categorize his errand.**
- **As a mid-aged housewife who lives in a rural area**, *Amy* **needs someone to deliver her home-made food to her son in boarding school**. She wants to **rate and comment on an errand request, so that others know about her experience**.

Dimensions with Ranks for Deliverers:

1. **Full time worker *vs* freelancer**
2. **People who drive *vs* people who do not**
3. Young people *vs* old people
4. Busy people *vs* people with leisure time
5. People who have flexible schedule *vs* people who have fixed schedule

User Persona for Deliverers:

Adam 🧑
He is a full-time home designer who drives to work everyday. He wants to use *Faster* to make some extra earnings by completing some delivery requests on his way to work weekly, so that he does not waste extra gasoline in delivery.

drive

Kate 👩
She is a freelancer who drives. She wants to use *Faster* to earn some money. She has plenty of leisure time so that she can accept many delivery requests daily. She wants to try to accept errands with highest compensation.

full-time

freelancer

Peter 👨
He is a local boarding elementary school teacher who rides bike to school daily. He wants to use *Faster* to make extra earnings by carrying out simple delivery requests not too far away when he returns to home from school. He knows lots of students need to deliver things to their parents.

John 👴
He is a poor freelancer who only has a bicycle. He wants to use *Faster* to make some basic earnings for living. He wants to accept errands nearby so that he can complete the delivery by bike.

do not drive

User Story for Deliverers:

- As **a full time home designer who drives to work everyday**, *Adam* wants to **filter errands that have origin near his home and destination near his company**, so that **he can complete the delivery on his way to work and make extra earnings**.
- As **a local elementary school teacher who rides a bike**, *Peter* wants to **have the option to cancel the errand he accepts**, so that **he can forfeit current errands in situations where he needs to take extra care of his students or he cannot complete them in time with a bike**.
- As **a freelancer who owns a car**, *Kate* wants to **accept more than one errand at once** so that **she can earn more money since delivery by a car is fast**.
- As **a poor freelancer who only has a bicycle**, *John* wants to **have a rating**, so that **he can convince other users to trust him to deliver securely by bicycle**.

Interface Low-Level Mockups:

User Main page:

Post a Delivery Errand

title

tag

description

delivery time

origin

destination

compensation

image

Post

Errand Board

Title	Title	Title
Description	Description	Description
Tag	Tag	Tag
Delivery time	Delivery time	Delivery time
Origin	Origin	Origin
Destination	Destination	Destination
Compensation	Compensation	Compensation
image	image	image
Accept Now	Accept Now	Accept Now

Title	Title	Title
Description	Description	Description
Tag	Tag	Tag
Delivery time	Delivery time	Delivery time
Origin	Origin	Origin
Destination	Destination	Destination
Compensation	Compensation	Compensation
image	image	image
Accept Now	Accept Now	Accept Now

Accepted Errands

Title	Title
Description	Description
Tag	Tag
Delivery time	Delivery time
Origin	Origin
Destination	Destination
Compensation	Compensation
image	image
Cancel	Cancel
Complete	Complete

Completed Post List

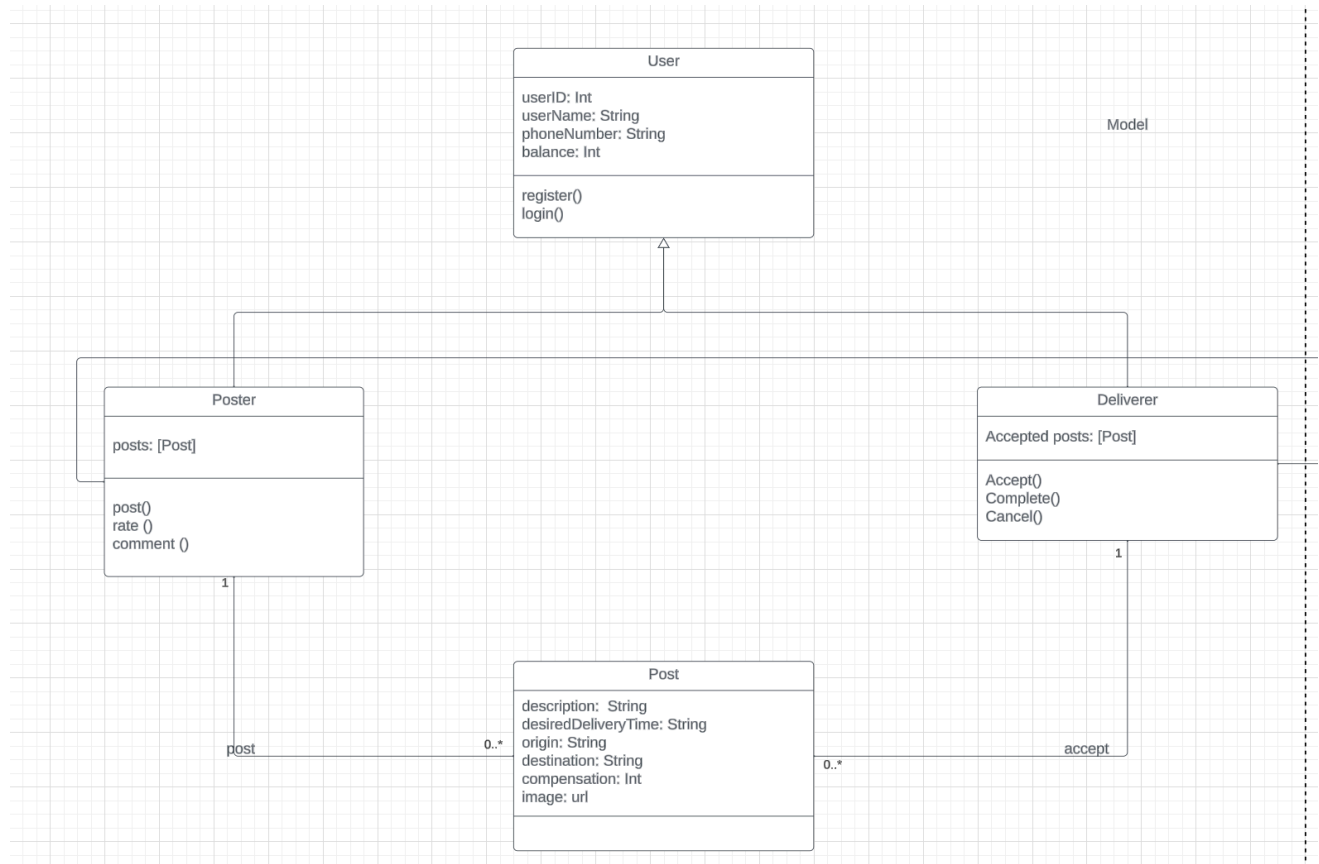| Title	Title	Title
Description	Description	Description
Tag	Tag	Tag
Delivery time	Delivery time	Delivery time
Origin	Origin	Origin
Destination	Destination	Destination
Compensation	Compensation	Compensation
image	image	image
rate & comment	**rate & comment**	**rate & comment**
rating	rating	rating
comment	comment	comment
Submit	Submit	Submit

If unclear to see the details, please refer to the link:
https://www.figma.com/file/Zntjc8tw3kt30HEs2XIdmV/Wireframing-(Copy)?type=design&node-id=0%3A1&mode=dev&t=0I7iX2V7L7bhGbx7-1
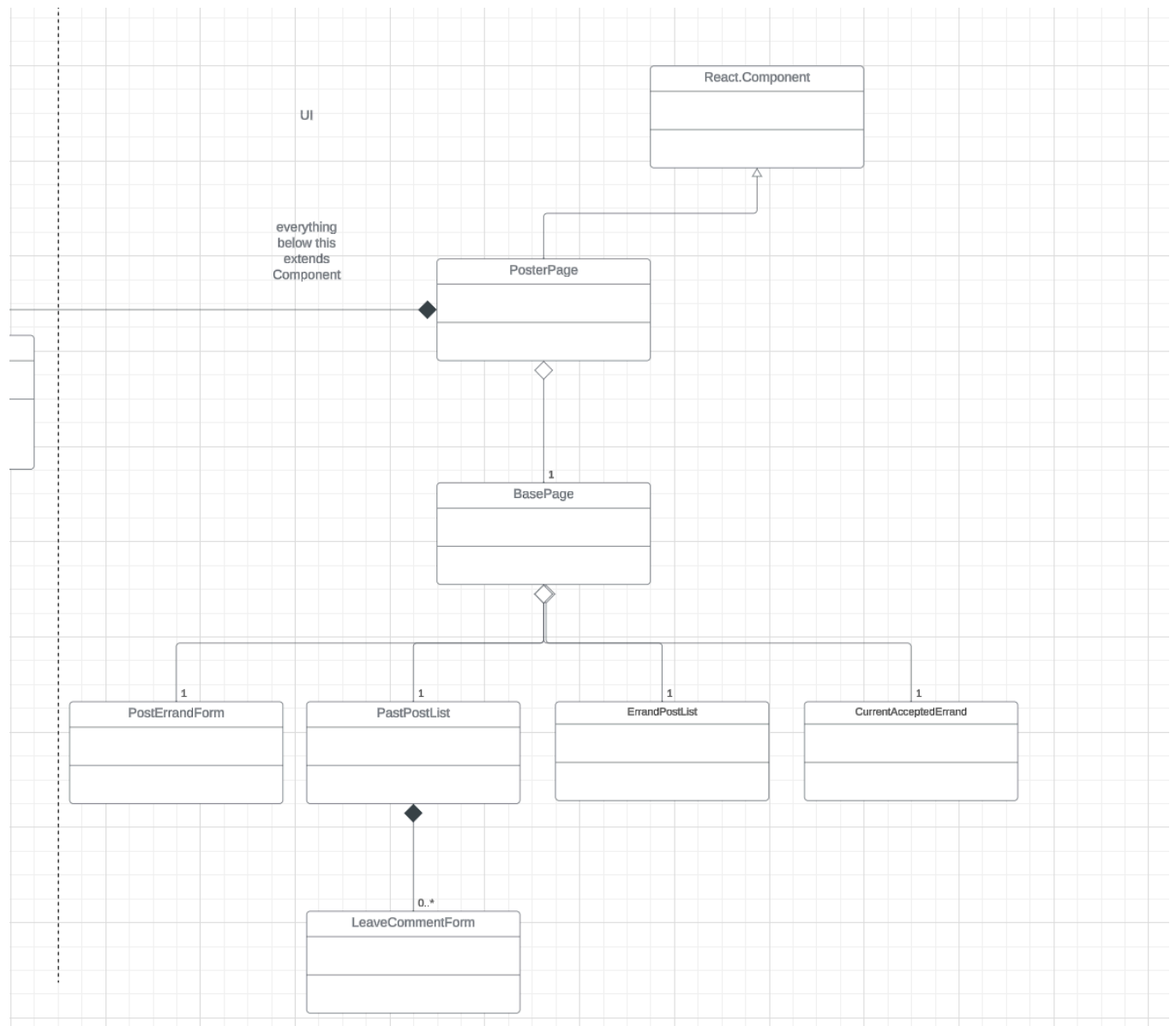
UML Class Diagram:

If unclear to see the details, please refer to the link:

https://lucid.app/lucidchart/7a1b89a5-ea78-4e91-9335-4ac8dc6c6213/edit?viewport_loc=-6286%2C401%2C3057%2C1472%2C0_0&invitationId=inv_fe198a8f-9c19-408d-a03b-be98f5336a63

Models:

UI:

Overall:

User
userID: Int
userName: String
phoneNumber: String
balance: Int

register()
login()

Model

UI

React.Component

everything below this extends Component

Poster
posts: [Post]

post()
rate ()
comment ()

Deliverer
Accepted posts: [Post]

Accept()
Complete()
Cancel()

PosterPage

Post
description: String
desiredDeliveryTime: String
origin: String
destination: String
compensation: Int
image: url

post   0..*

accept   0..*

1

BasePage

1

PostErrandForm   1

PastPostList   1

ErrandPostList   1

CurrentAcceptedErrand   1

LeaveCommentForm   0..*