

HCI Group 25



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Problem Statement

Students at IIITD often find college equipment and books to be expensive & unavailable in nearby markets. Most of the equipment is seasonal and only required for one semester. On the other hand, the procedure of selling unwanted equipment is also time taking and boring for college seniors, who are already burdened by academic pressure.

Solution

Share Buddy is a marketplace platform focussed at IIITD students to help them connect with each other. College juniors can rent / buy college equipment, books at nominal prices from seniors. Share Buddy is a convenient solution that helps college students save time and money.

Personas

Name:

Aditi Sharma

Age:

18

Occupation:

1st year undergrad at IIITD(fresher)

Description or quote:

-New to Delhi and doesn't know the popular and cheap markets.
-Can't get books from the library when she needs them.
-There are many requirements for different instruments like Arduino boards, raspberry pi, etc. about which a new student might not be knowledgeable enough to compare and buy between different variants available, also these things are not available in normal markets.
Quote: "I want to be able to buy the books and equipment before I'm burdened by the next semester."

Picture:



Goals:

To be able to obtain course books and other requirements for the course in a particular semester as fast as possible for a cheap price and from the convenience of her hostel room.

Frustrations: (pain points)

- 1) Taking out time from hectic college schedule.
- 2) Travelling multiple times to various shops searching for an instrument with exact specs is a tough task

Needs and Expectations:

An efficient service to obtain all the necessary course requirements such as books and kits for the semester without having to explore a completely new city all by herself and while being able to take time out for deadlines and other college needs.

Name:

Aditya Aggarwal

Age:

22

Occupation:

Fourth year undergraduate student at IIITD

Description or quote:

Aditya is a fourth year undergraduate student pursuing computer science and engineering at IIITD. During his free time, He works as a freelance developer in an attempt to ease the financial burden on his family.

Quote: "I am tired of going to crowded markets to sell books and other belongings that I don't need any more. The rates are low and the experience is frustrating."

Goals:

1. To be able to dispose off College books, notes and other hostel survival kits & unnecessary equipment, that he collected during his life as a hosteller. These items take unnecessary extra space and are no longer important to him.
2. To save Up On time, money & effort while being able to sell his equipment at a reasonable price

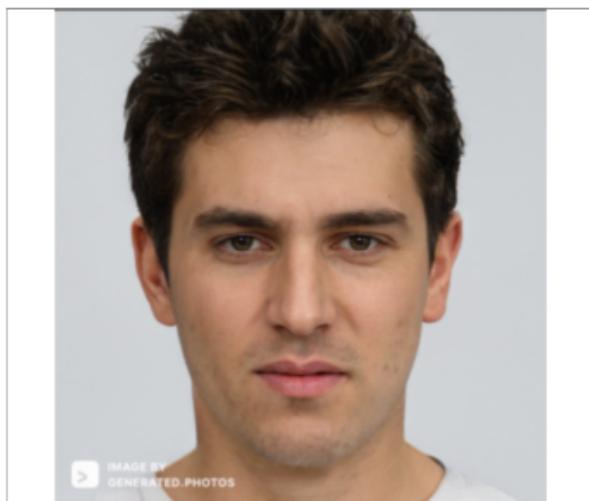
Frustrations: (pain points)

1. Time taking and frustrating process
2. Irritated by "low ballers"
3. Malicious users / Spammers on OLX / Quikr

Needs and Expectations:

1. An efficient service that is considerate of his busy schedule.
2. To get a fair price for his belongings without haggling.
3. To be able to sell his items reasonably fast.

Picture:



Scenarios

Scenario for Buyer(Aditi):

Aditi has finally started with her college life but now the study pattern has changed. It is more practical based now as compared to what she used to do in school. Now most of the courses taught to her in the first sem require practical knowledge over the use of different instruments in a particular course. In order to get hands-on experience she needs to arrange for personal instruments so that she can practice but there is a variety of instruments available in the market with the same name. Also as she is not from Delhi she is facing a major difficulty in figuring out where she can get such uncommon instruments. As she is very new to this study pattern of this new college life she is not yet comfortable with managing this new hectic schedule of studies so this adds on to the difficulty of managing and taking out time for exploring markets to get the required instrument. Now she is stuck in middle as for the first time in her life she is all by her own as now her parents are not here to arrange good for her and she has to manage her travelling and the stuff all by her own. In such conditions our app **Share Buddy** comes as a saviour as the seniors who are not using those instruments now and are totally useless for them. It is a great time saver for all the freshers as now they do not have to explore markets in a new city also they are getting these instruments at lower rates than market in addition to that they cannot be cheated now and also getting the exact instrument that is relevant to their course.

Tasks:

- 1) Create an account and fill in essential information such as address within the hostel(if hosteller), contact number, IIITD roll number and his picture.
- 2) Personalise her account by answering a few questions.
- 3) Proceed to check all the available resources relevant to a particular course.
- 4) If no one has listed the resource she wants, she proceeds to the requests tab to enter a request for that particular resource.
- 5) If she finds the resource she needs, she proceeds to enter a buy request and starts chatting and negotiating with the seller.
- 6) Make the payment once the deal is finalised.
- 7) Meet up with them and ask them the item for the negotiated price.
- 8) Take the items.

Scenario for seller(Aditya):

8th semester results have just been announced and Aditya has finally graduated from IIITD. He gets an email from the hostel admin to vacate his hostel within a month. Aditya quickly loses the smile on his face as he realises the cumbersome task ahead of him. He'll have to gather 3 years worth of books, kits, electronics and other items that he won't use anymore and will have to roam around in different markets trying to sell them off for a reasonable price as they're all very valuable. He's done this once before, after his first year ended, and had been putting it off for the last 3 years owing to how long it takes. Fortunately, one of his batchmates informs him about a recent app made by IIITD students called **Share Buddy** and tells him he'll be using that to sell off his items. Aditya decides to check this app out.

Tasks:

- 1) Create an account and fill in essential information such as address within the hostel(if hosteller), contact number, IIITD roll number and his picture.
- 2) Wait to get verified as a member of IIITD.
- 3) Proceed to list the items he wants to sell and their respective price.

- 4) Check the “Requests” tab to see if any student has requested for an item that he wants to sell.
- 5) Proceed to wait until he is contacted by students/anyone affiliated with IIITD who wants one of his listed items.
- 6) Meet up with them and give them the item for the negotiated price.
- 7) Take the remaining few items left back home after a month as it is now easier to sell them off in the market.

Scenario Mapping

Seller(Aditya Aggarwal)

Steps	Aditya decides to sell his books after his exams	He has to login/signup if he's not already logged in	Checks if an item he wants to sell is already listed as a request	List the items he wants to sell and can potentially sell inside IIITD	Check if anyone responded to his offer	Proceed to sell the item to the respective buyer		
Doing/Tasks	Downloads and opens the share buddy app	Fills in his details for identification	Checks the requests tab to see if anyone has already requested for an item he has and wants to sell	Enters a brief description of the items he wants to sell and their price and lists them	Checks his notifications to see if anyone has responded to his offer to sell	Meets up with the buyer and sells the item at the negotiated price and removes the listing		
Thinking	"I hope I'm able to sell off my items much faster on this app than I would in the market"	"This is a rigorous process so I guess its safe"	"What if no one requested for the items I want to sell because they don't want it?"	"I hope my item is recognizable"	"I hope someone buys my item"	"Should I increase the price? If there are more offers?"	"One less item to worry about"	"It would've taken me too long to sell this in the market"
Feeling	Helpless	Impatient	Anxious, unsure, Curious	Concerned, Hopeful	Confused, Surprised, Frustrated		Happy, Relieved, Excited	
Ideas & Suggestions	App can send notifications after every exam season as a reminder	Sign in using social accounts would be useful	He can scan the barcode on his IIITD ID and information will be autofilled	can chat with the requester about the item get notified whenever the requested item gets added from any seller	The process to create an ad should be quick Allow supporters multiple video images for the product	A sound notification for every response would be helpful	A dedicated page for all the offers would make it easier to navigate	A reminder screen with upcoming meetings for deals would be great.

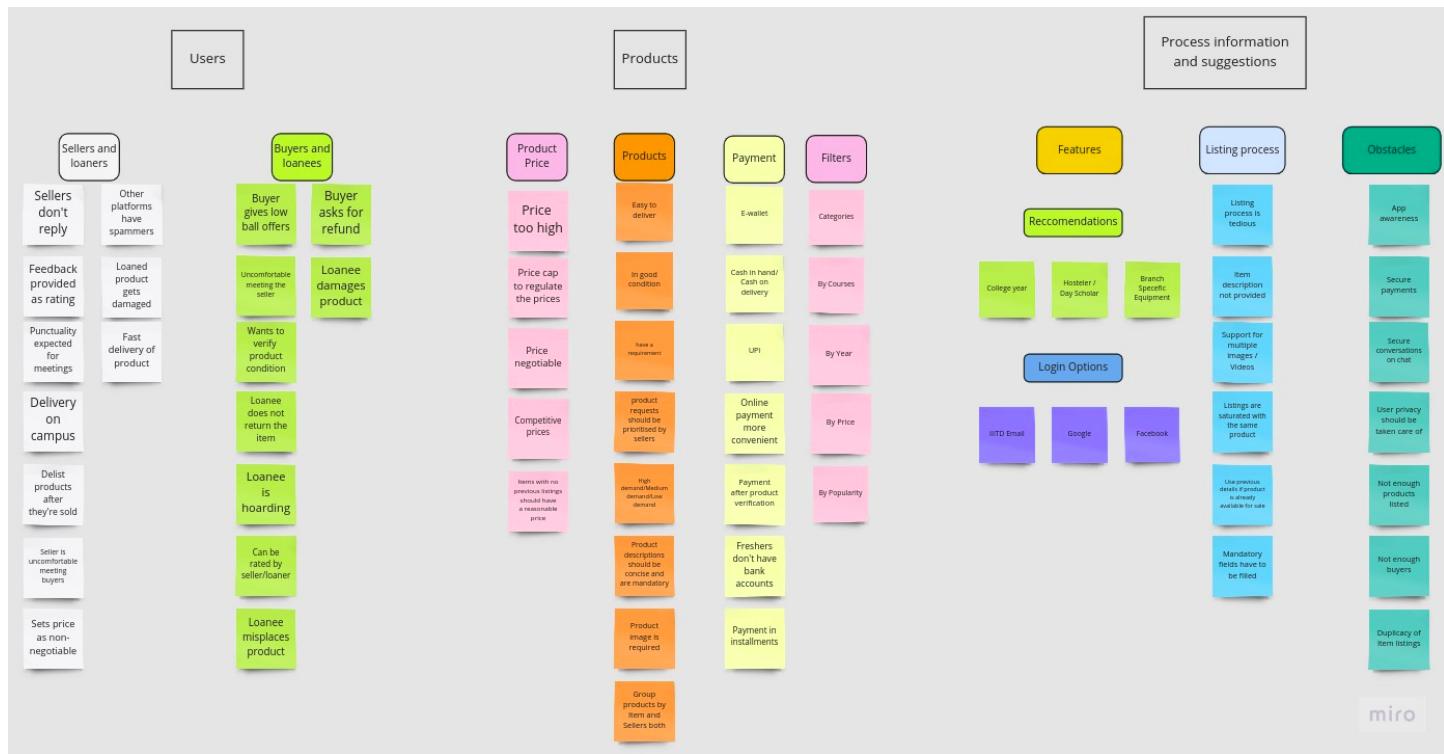
Buyer(Aditi Sharma)

Steps	Aditi wants to buy some instruments needed in her course	She has to login/signup if she is not already logged in	Checks if an item she wants to buy is already listed	Check the items she wants to buy and can potentially buy inside IIITD	Check if anyone responded to her buy request	Proceed to buy the item from the respective seller	
Doing / Tasks	Aditi Downloads and opens the share buddy app	Aditi Fills in her details for identification	Checks the availability tab to see if the required item is available or not .	Enters a brief note about the items she wants to buy if that product is listed in a different way and she cannot figure it out	Checks her notifications to see if anyone has responded to her offer to buy	Meets up with the seller and buys the item at the negotiated price and the seller removes the listing	
Thinking	"I hope I'm able to buy all the needed items much faster on this app than I would in the market"	"This is a rigorous process so I guess its safe"	"What if the item needed is not available with any of the listing?"	"I hope my item is available"	"I hope someone has listed the item"	"Should I increase the price? If there are many offers?"	"One less item to worry about"
Feeling	Helpless	Impatient	unsure, Curious, Anxious	Hopeful, Concern	Frustrated, Surprised, Confused	Happy, Relieved, Excited	
Ideas & Suggestions	App can send reminders after every semester to get rid	Sign in using social accounts would be useful	She can scan the barcode on his IIITD ID and information will be autofilled	She can request an item using the requests tab if she can't find it listed on the app	She can also ask to loan items that she might only need for a very short duration	A sound notification for every response would be helpful	Can maybe provide feedback and rating to the seller.

Miro Board link for scenario maps of the two above scenarios,1 for each persona:

https://miro.com/app/board/o9J_IULRJqA=/

Affinity Diagram



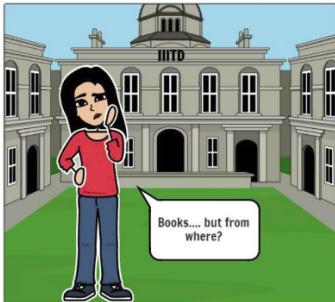
Miro Board link for the Affinity Diagram: https://miro.com/app/board/o9J_IULQwV4=/

Storyboard

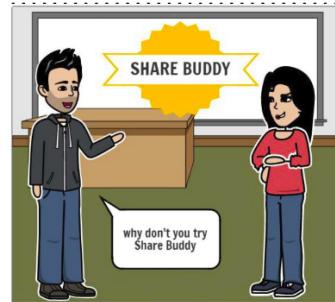
Storyboard - Share Buddy



Aditi, a DASA student at IIITD, is new to Delhi and is not aware of the local markets to buy college books and other important equipment required for her college life.



With her class quizzes and midsems around the corner, Aditi wonders where she could purchase books for her courses and an arduino kits for PIS Labs.



Anxious for her midsems, Aditi approaches a cool senior Yash, who recommends her to download the Share Buddy app on her phone.



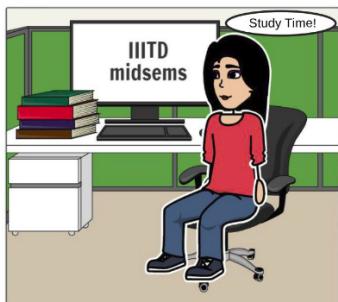
Exhausted by her classes and deadlines, Aditi retires to her room and searches for the book Linear Algebra - David Lay on Share Buddy.



Aditi is easily able to find many seniors interested to sell their copy of the book. She starts chatting with Roma and sets a meeting with her.



Roma gives Aditi the books for a mutually accepted amount and guides her for the upcoming midsems.



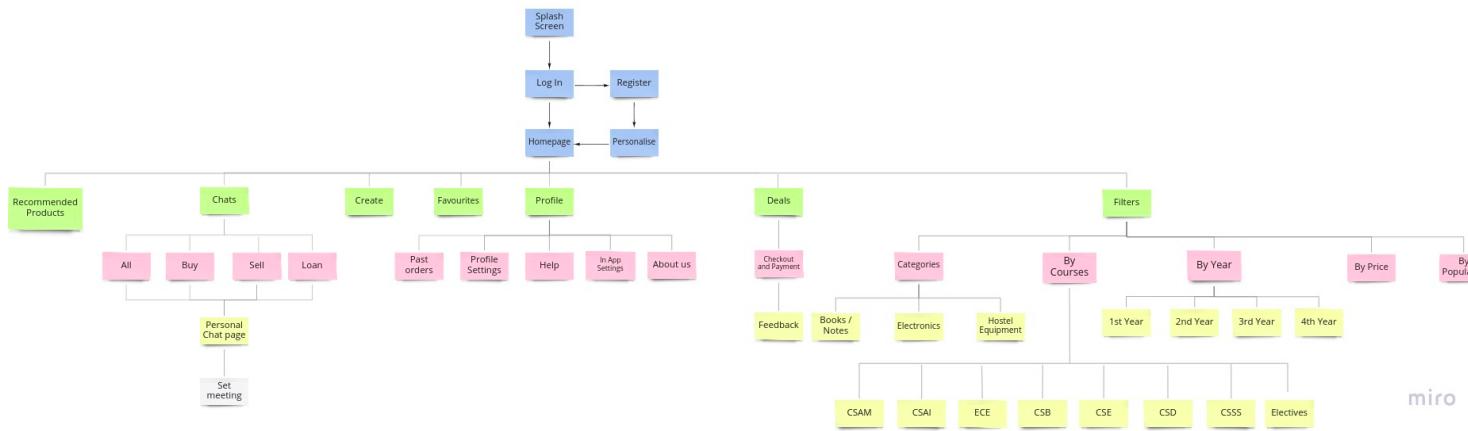
Aditi studies for her midsems and is able to complete all course preparation well in advance with the help of her coursebooks.



Elated with her midsem performance, Aditi enjoys her midsem break on a vacation with her newfound friends - Yash and Roma.

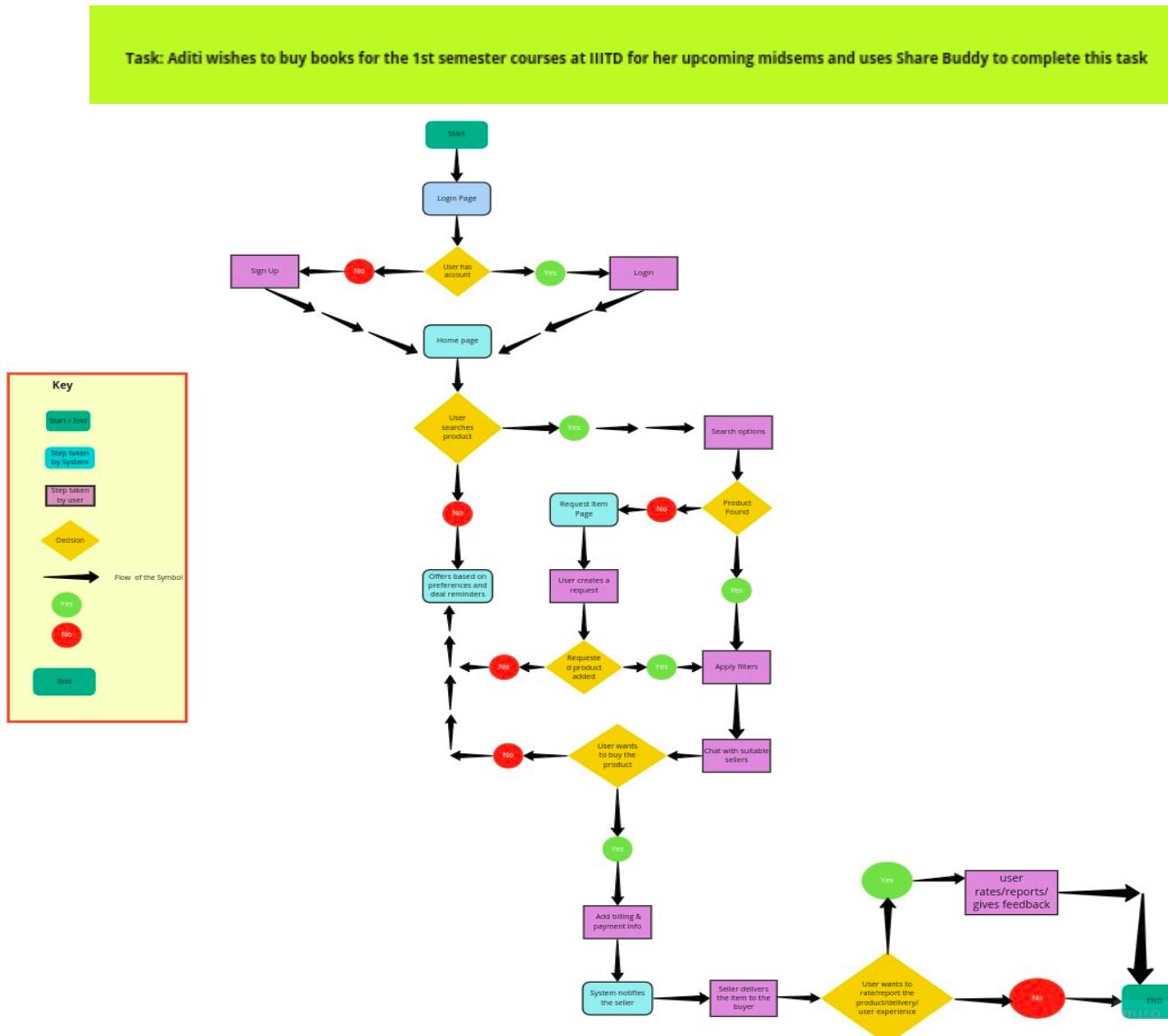
Information Architecture

Broad and Shallow



Miro Board link https://miro.com/app/board/o9J_lGoLnBI=/

Narrow and Deep



Miro Board link https://miro.com/app/board/o9J_lGoJM3k=/

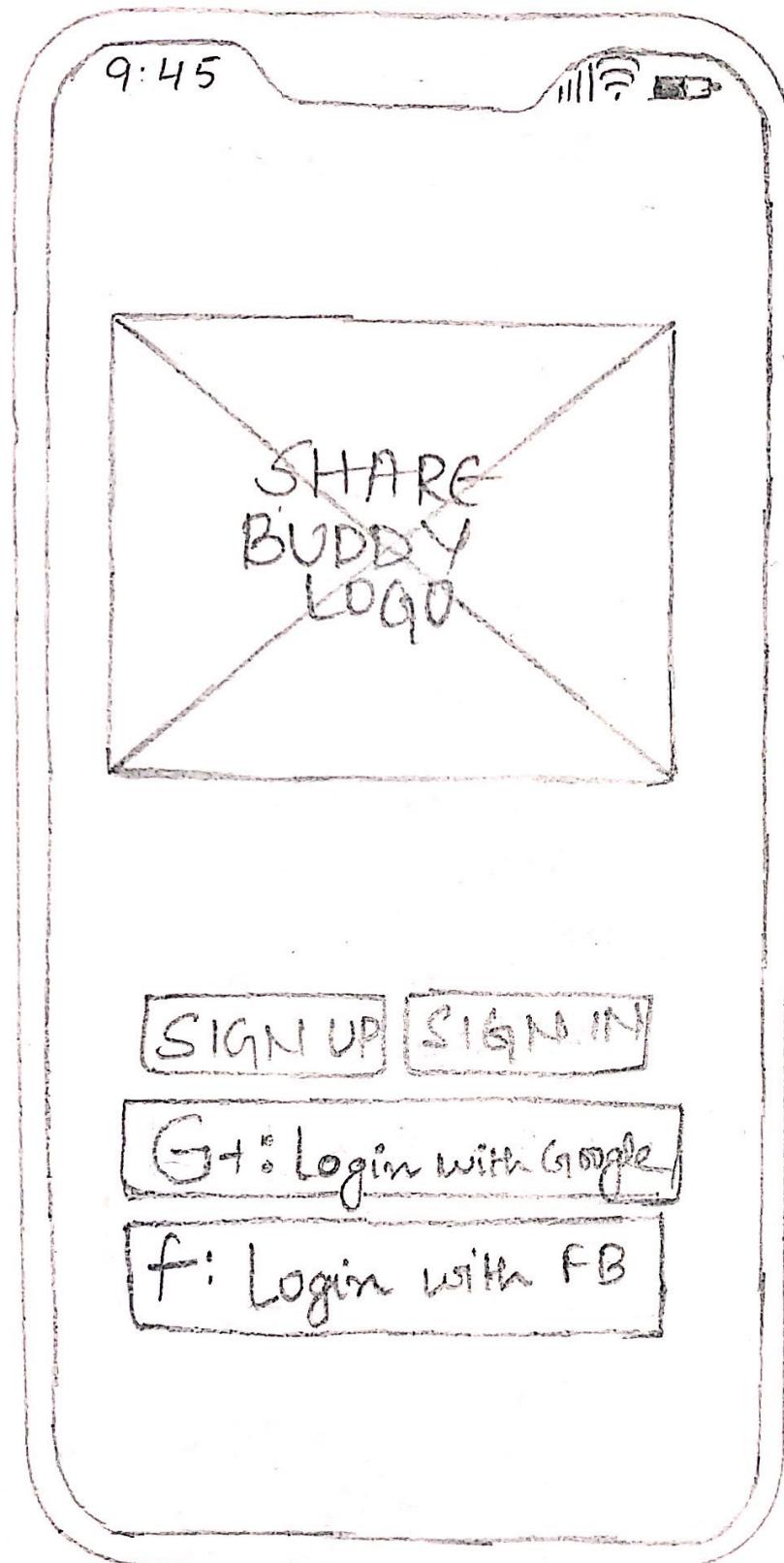


**SHARE
BUDDY**

LowFi

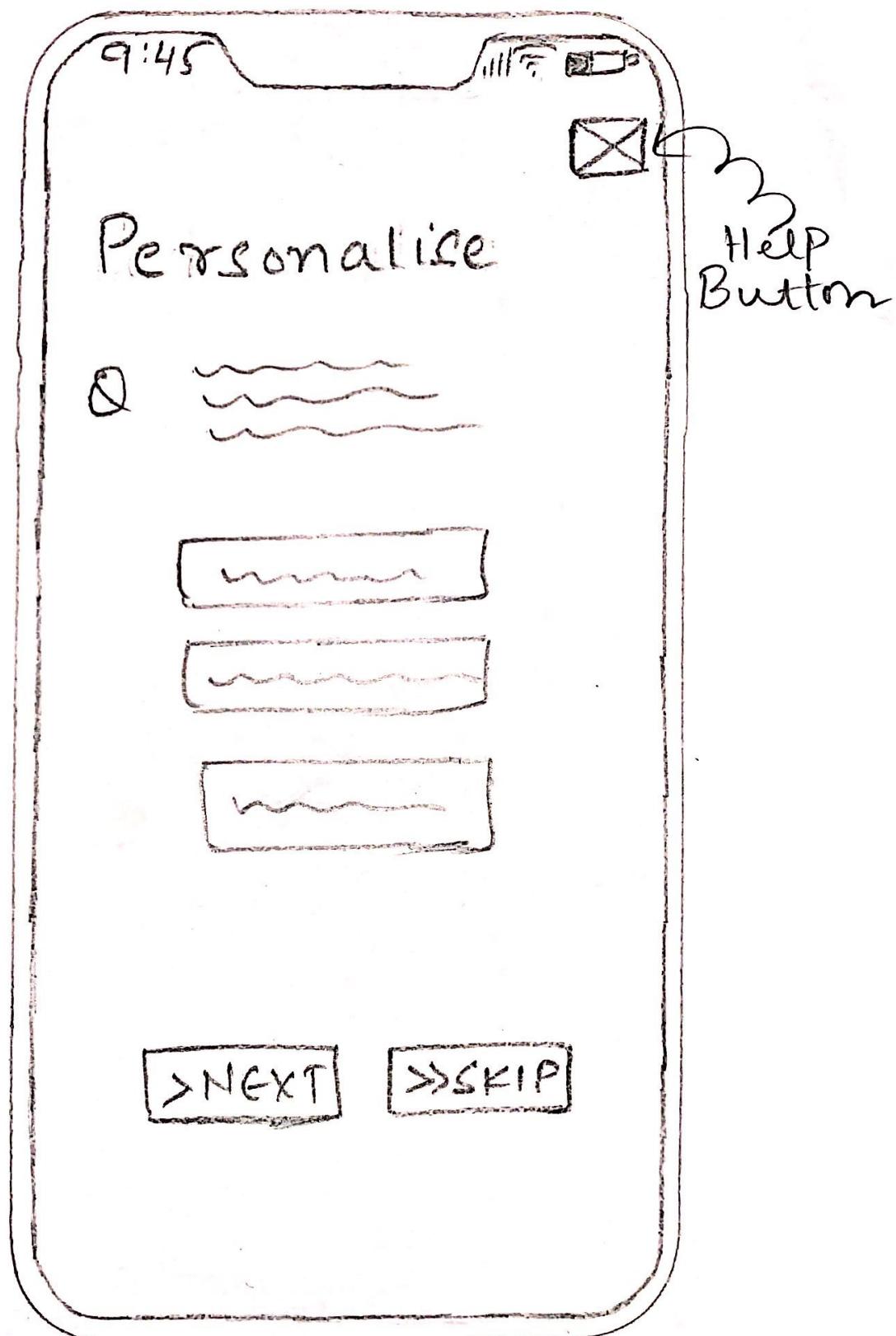
Prototype

Login Page



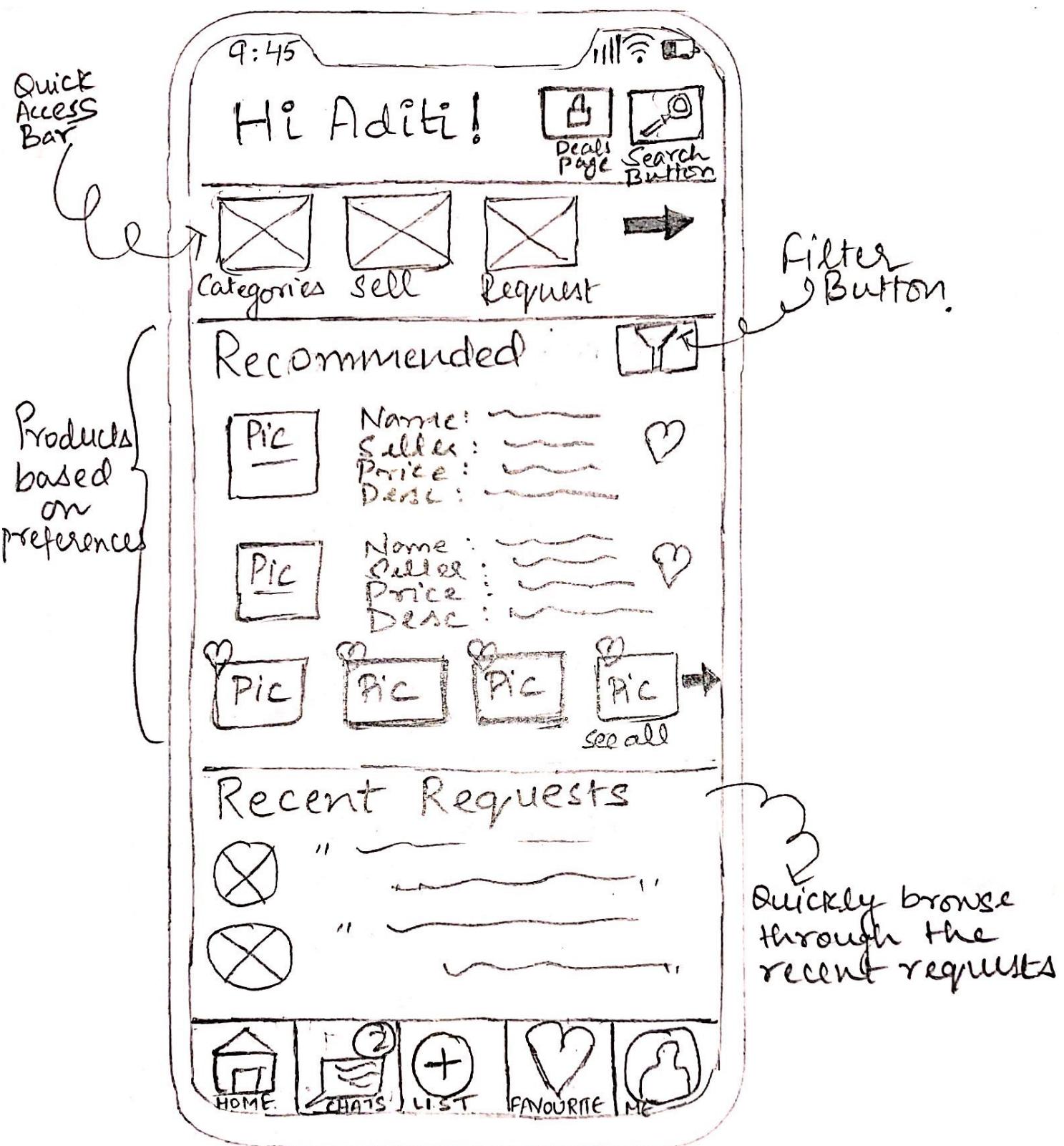
The user is greeted by the app logo followed by options logging in/signing up to use the app.

Personalise Page



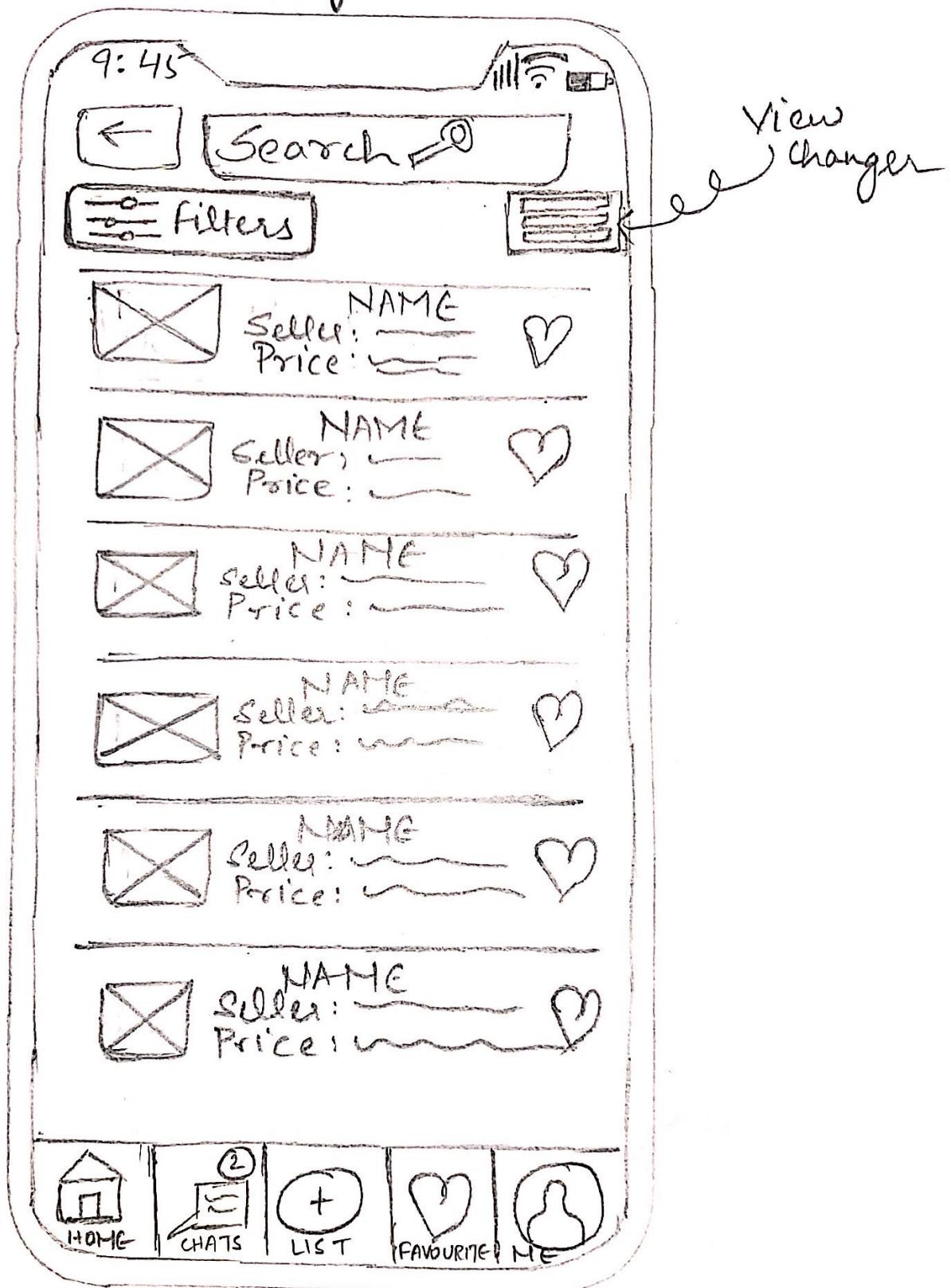
As soon as the user signs up for the first time, they get the personalise page where they're asked a few questions so that the product recommendations cater to the users needs at the time. However, it isn't mandatory for the user to answer and provide their details as they may have privacy concerns and hence they can skip this page.

Home



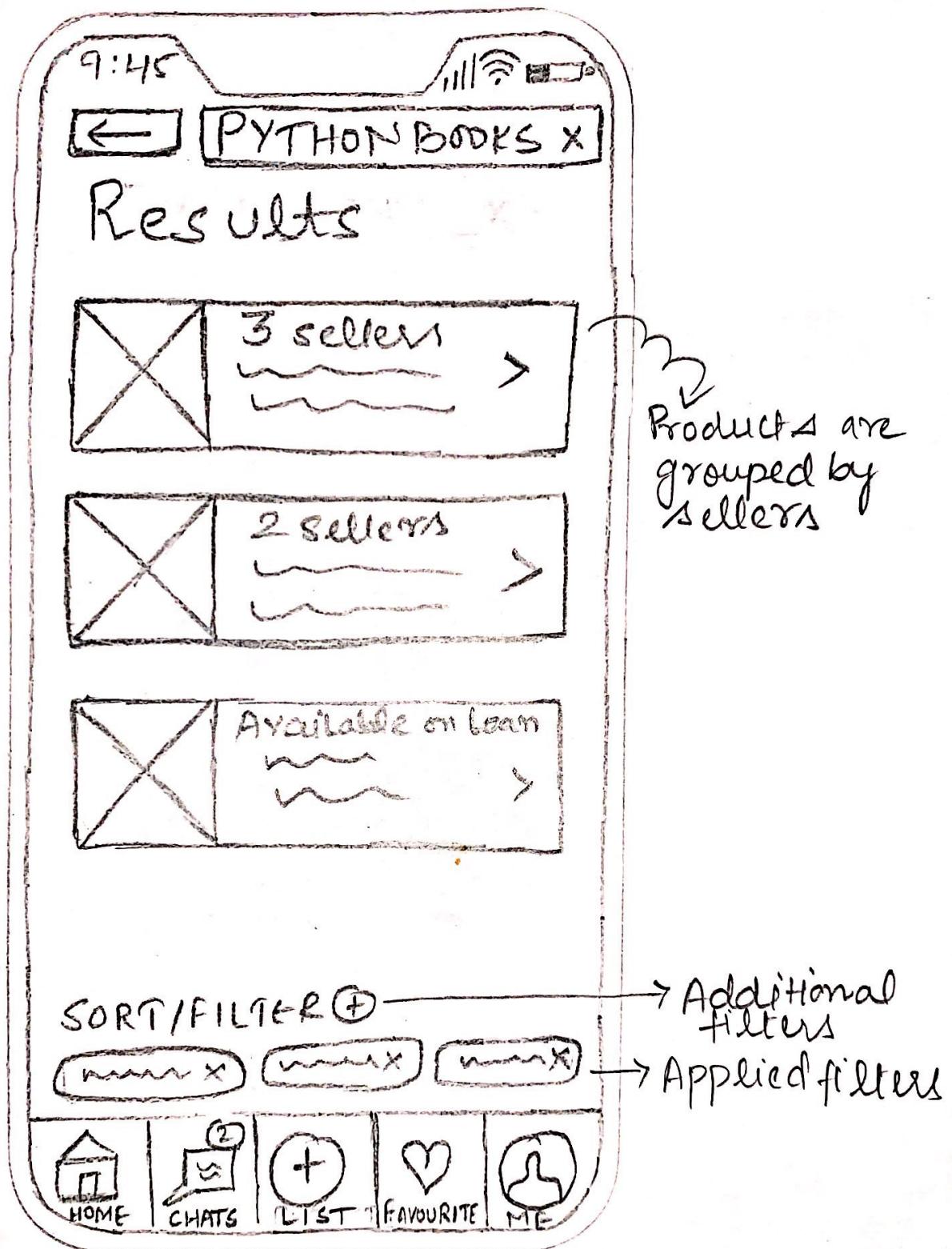
This is the home page which the user is greeted with every time they subsequently open the app. At the bottom is the menu/navigation bar using which the user can browse through the main screens of the app. The user can use the quick access menu to make use of the main features of the app and can also browse through the recent requests menu to see if they can fulfil any.

Expanded Recommended Page



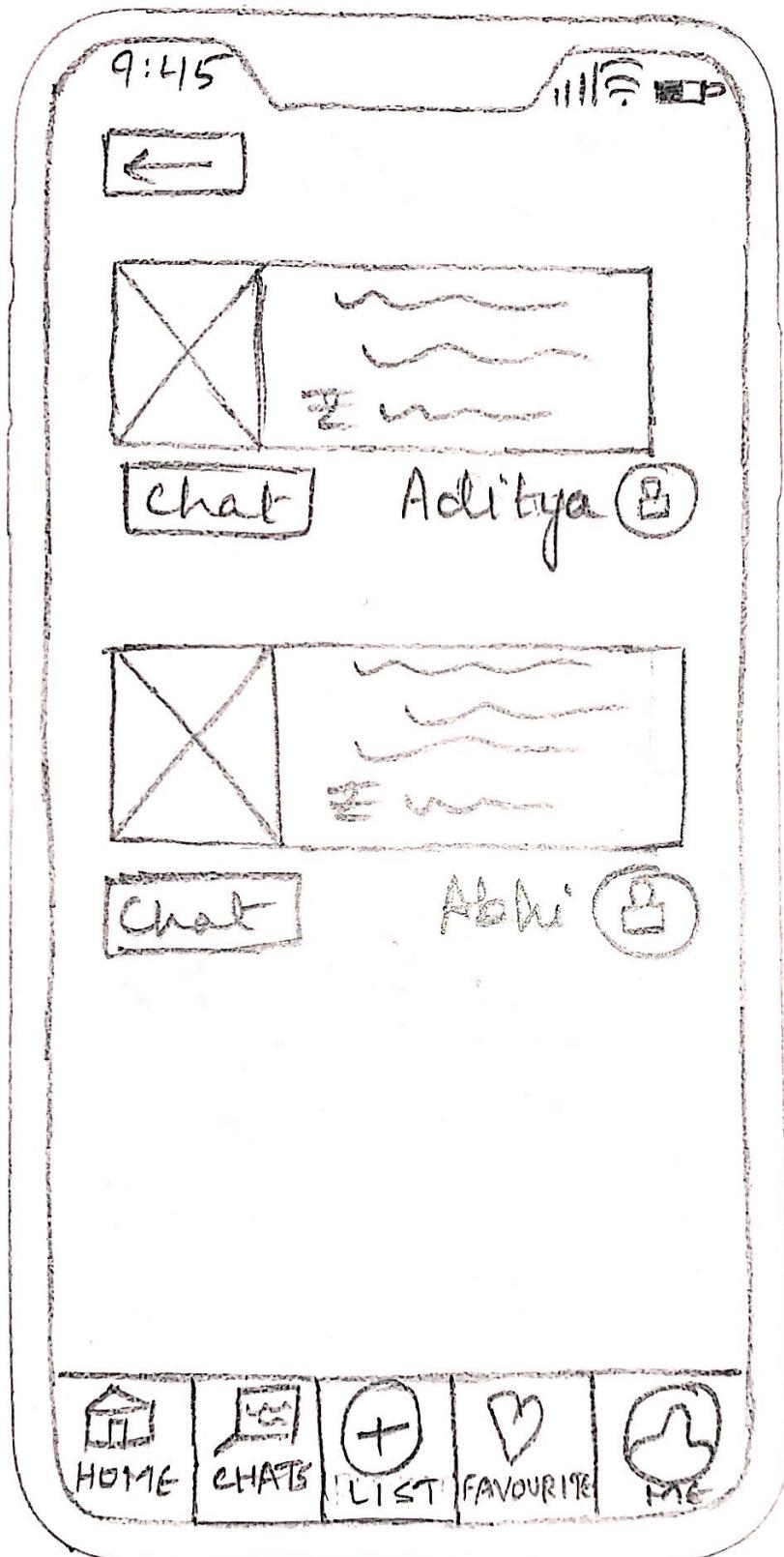
Page that lists all the recommended products. The user can have a look at the price, description and seller of the product and favourite it if they wish to do so. They can also apply filters according to their needs.

SEARCH RESULTS PAGE



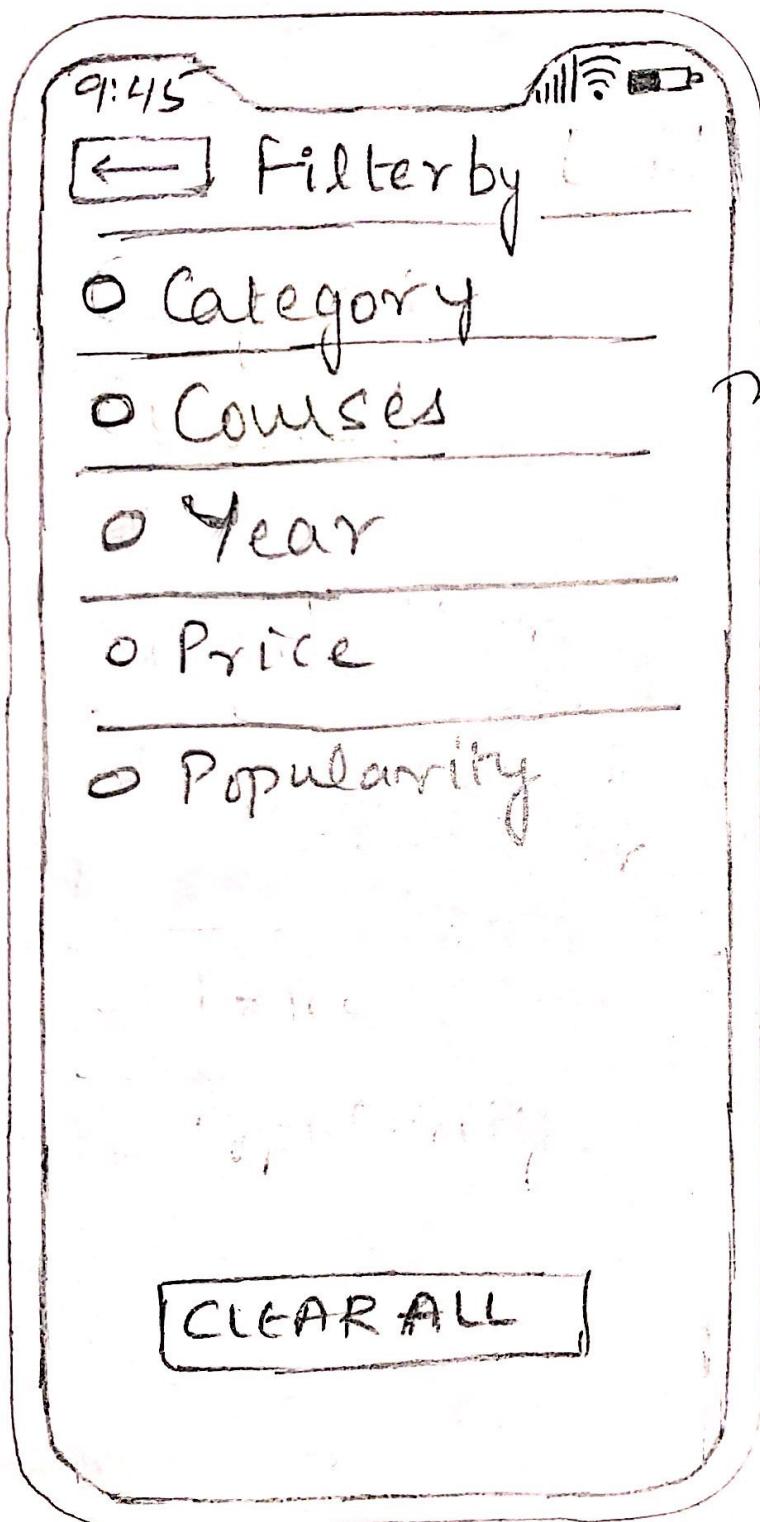
On searching the desired product, the user is provided with an optimised results page that groups the sellers for the same product together. It also displays the products that can be loaned and these results can be filtered according to the users preference.

PRODUCT SELLERS PAGE



On clicking a certain product, the group of sellers are enumerated and the user can select any one of those and decide to chat with them or they can click on the listing to know more about the product and its seller.

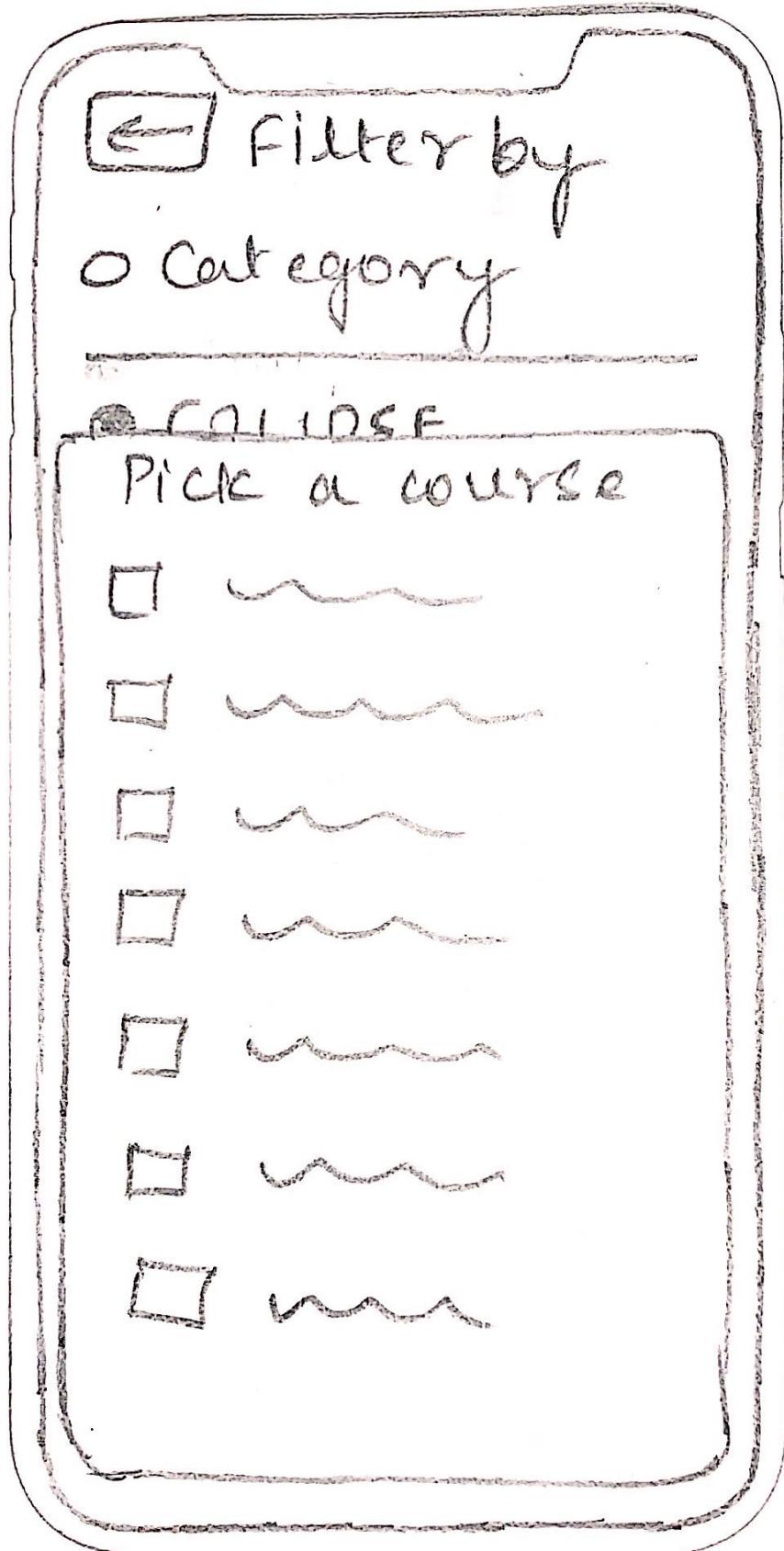
FILTER PAGE



On clicking a choice (a pop-up containing further filters appears)

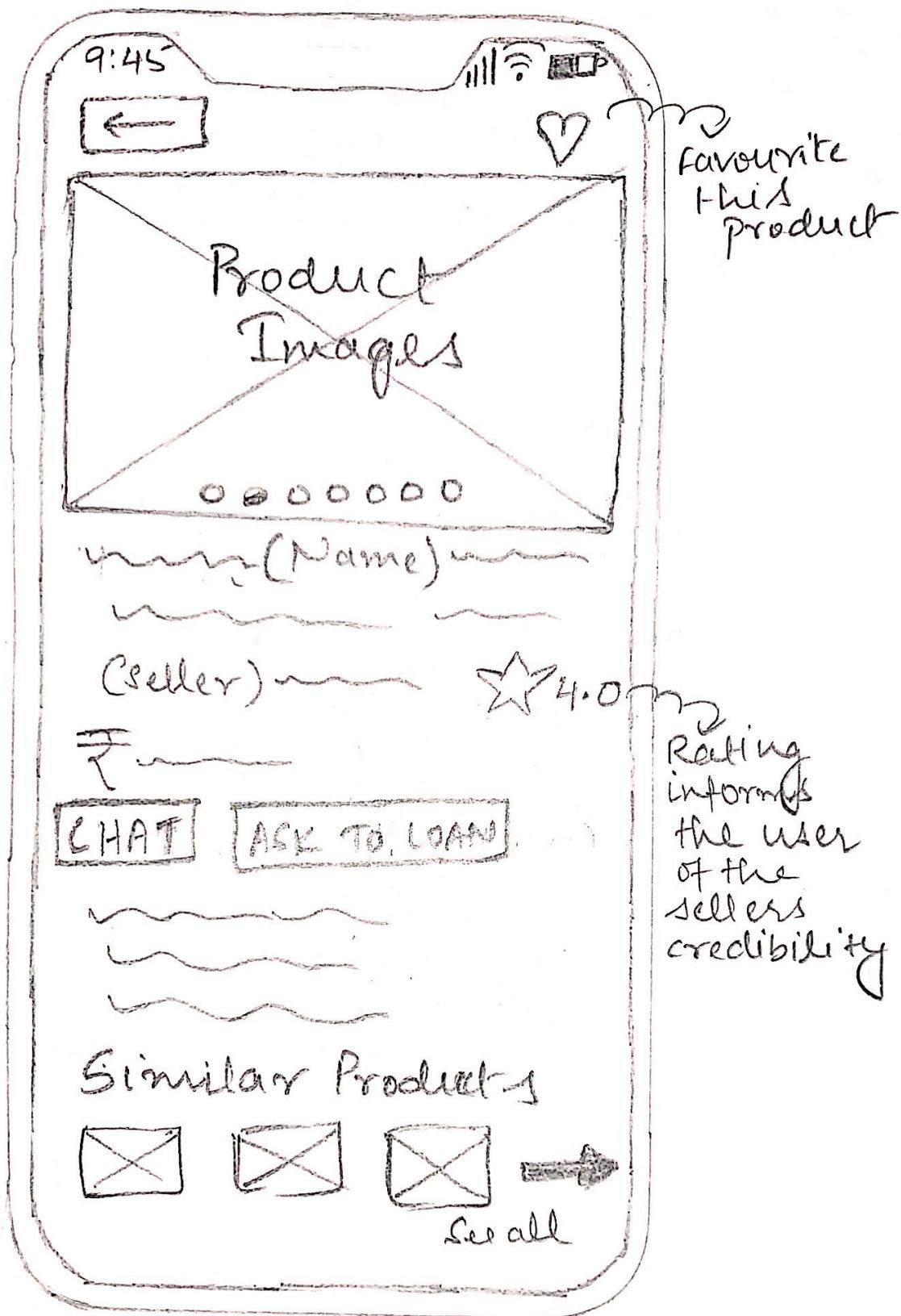
The user can filter the listings based on the above mentioned options on the filter page. On clicking a certain filter, a popup that allows the user to filter more specifically appears.

Sub-filters POP-UP



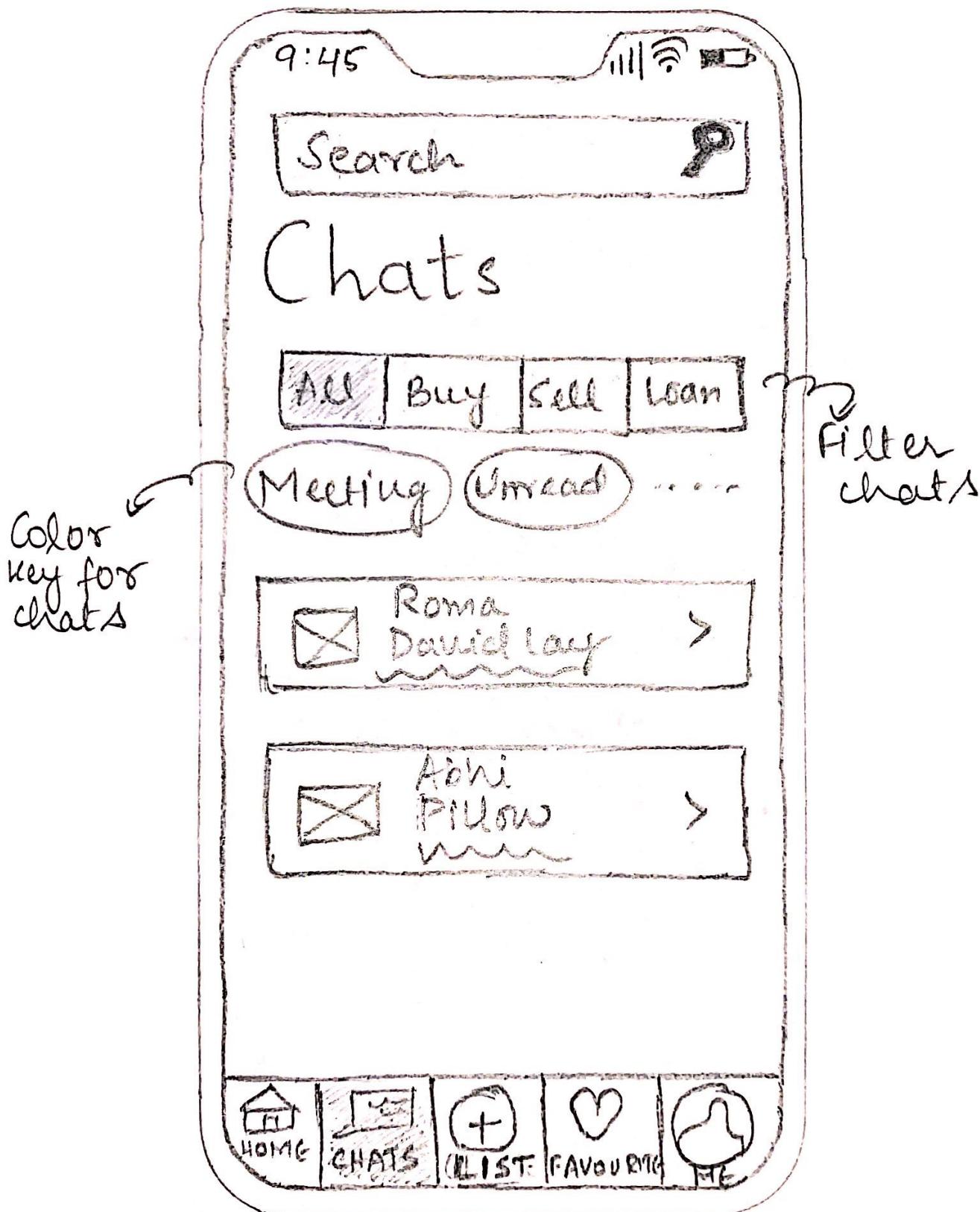
Popup where the user can further filter the listings more specifically.

PRODUCT INFO PAGE

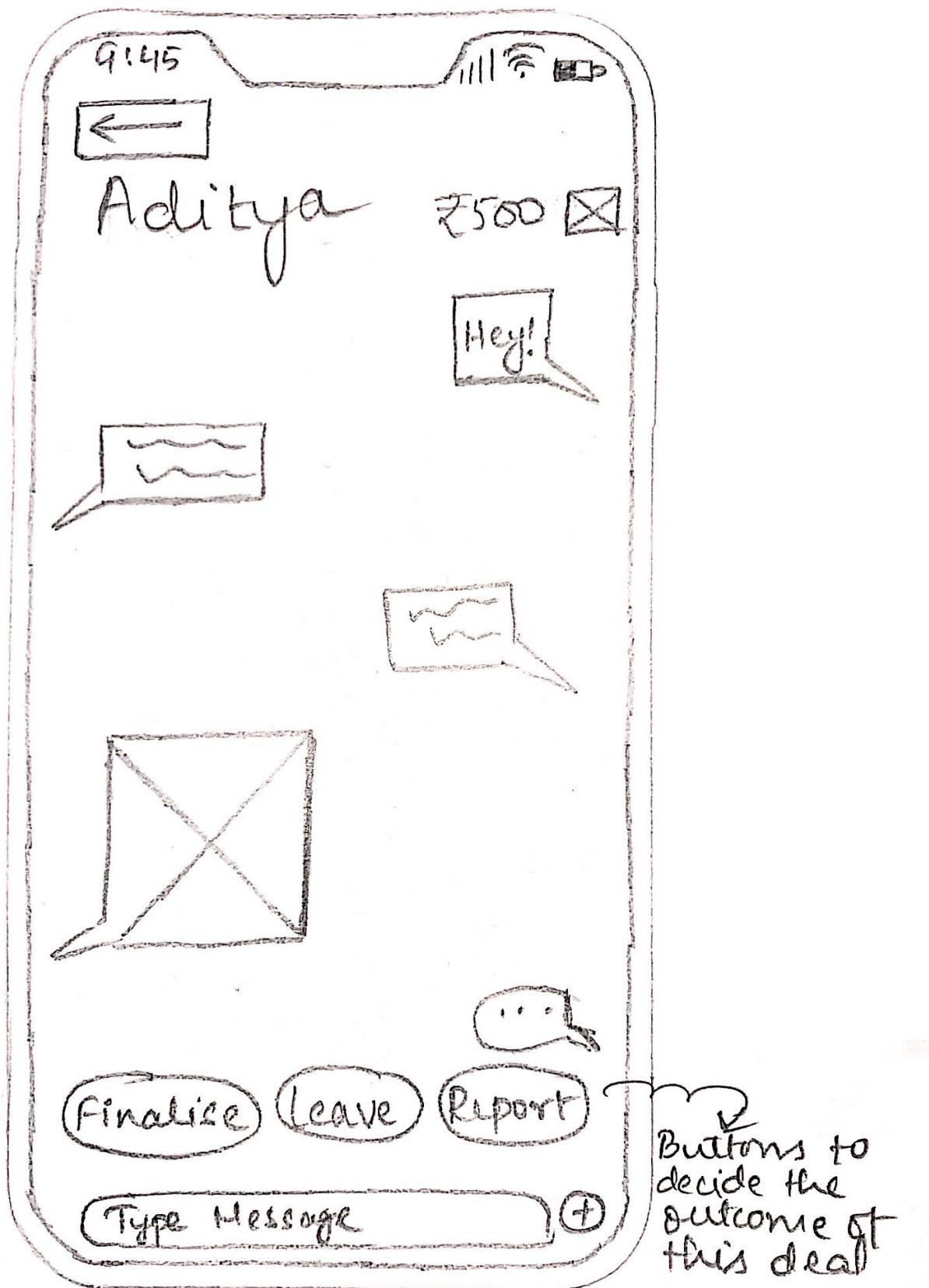


To enquire more about the product, the user can click on the product where they can decide based on the sellers ratings and they're also presented with the option to ask the user to loan the item to them.

CHAT MENU

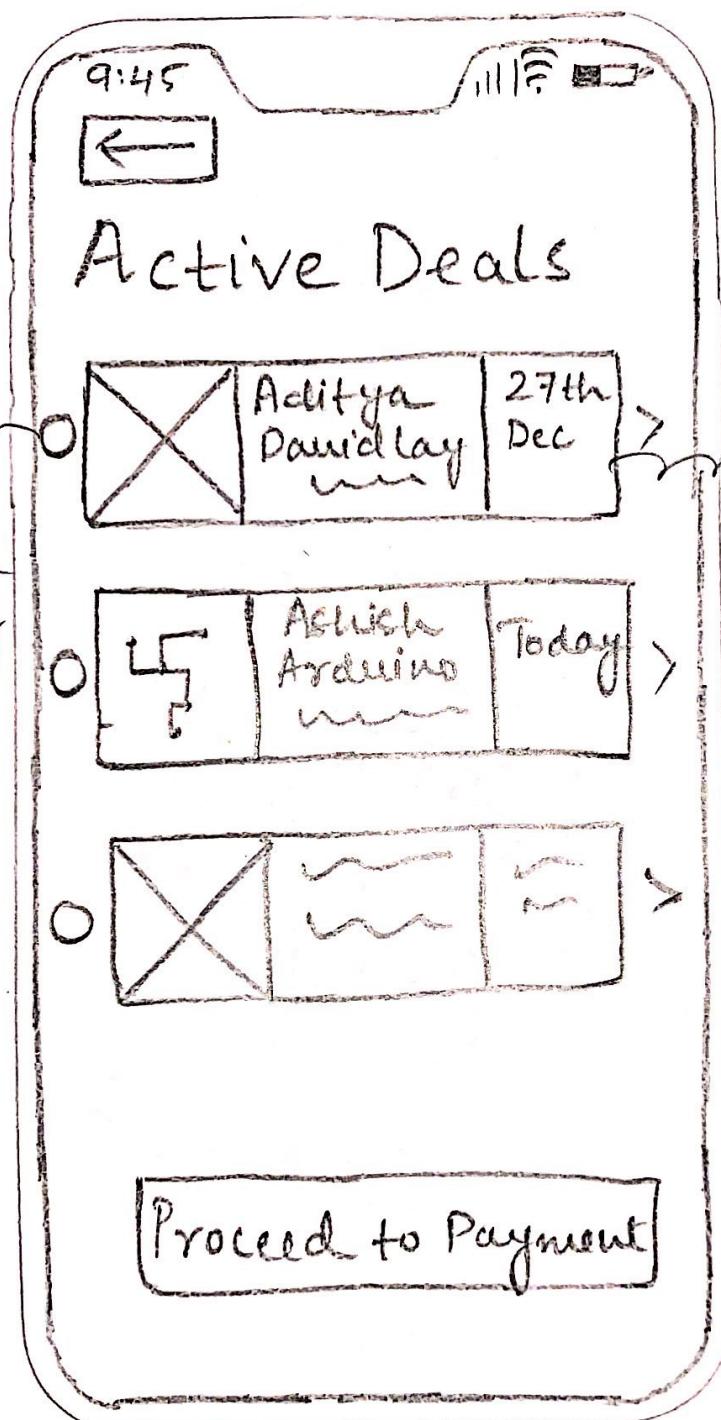


Once the user has decided on the product, they start chatting with the seller and they can access their current chats through the chat menu.



Chat screen with buttons to determine the outcome of the deal once the user has chatter with the seller and come to a common consensus.

DEALS PAGE

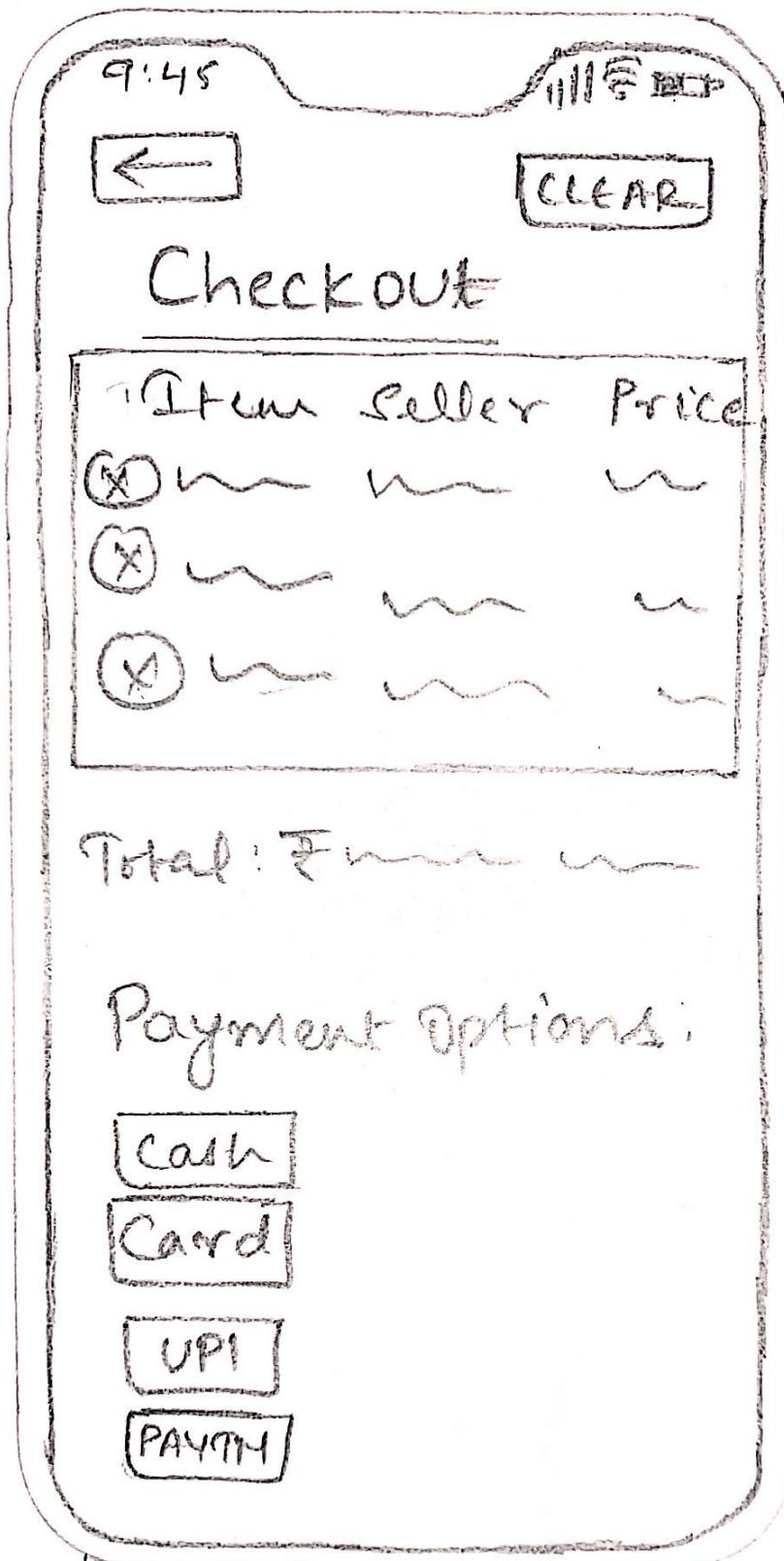


User can select the deals they want to pay for

Reminds the user of the finalised meet date.

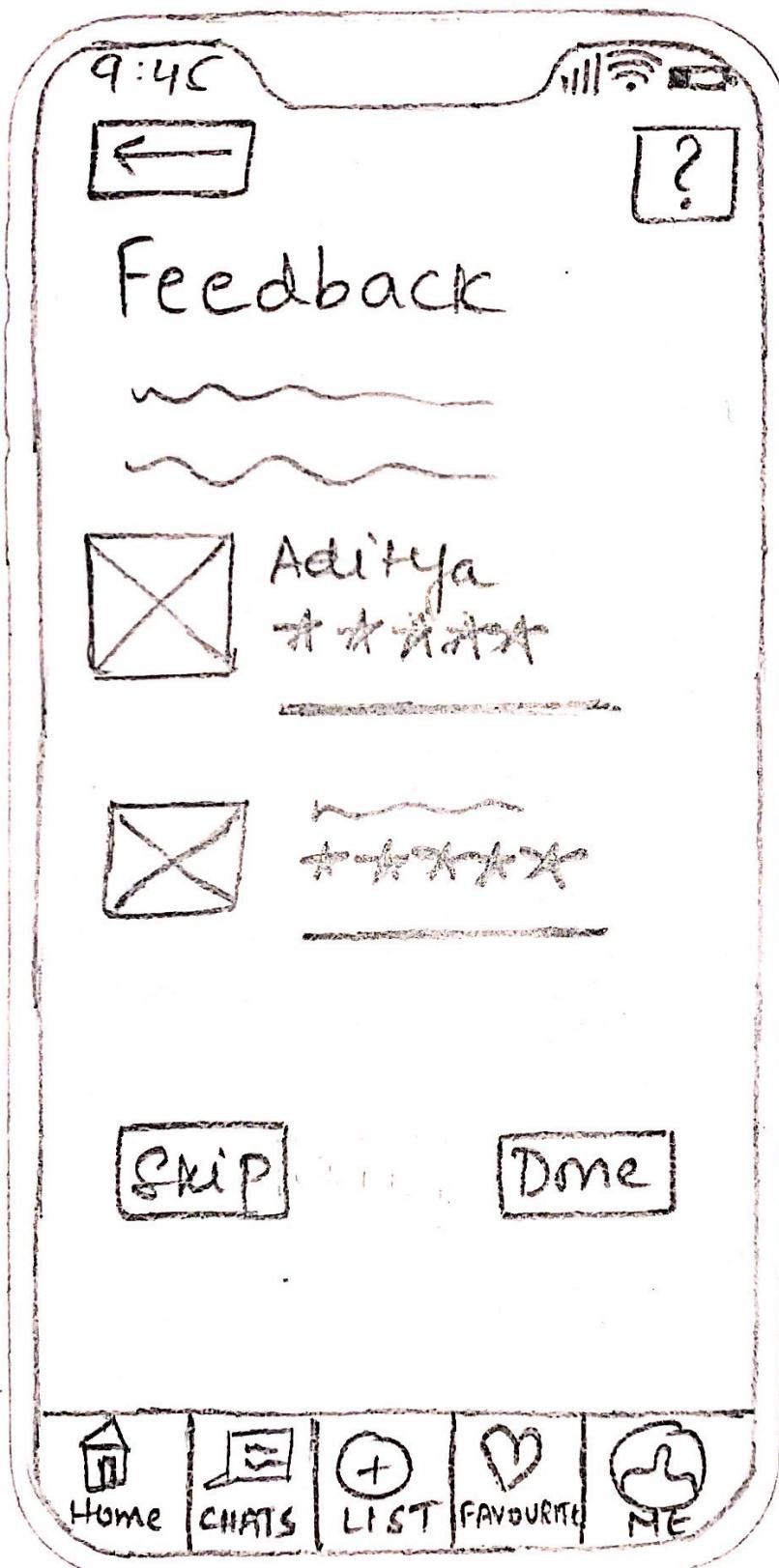
The active chats automatically appear in the active deals page where the user can select the items they want to pay for and checkout. It also serves as a reminder for the deals finalised already.

CHECKOUT PAGE



The classic checkout page provides a detailed description of the items the user wants to pay for and they can then choose their mode of payment and go ahead.

FEEDBACK PAGE



Once the user has paid and the deal is marked done by both the buyer and the seller, the user can provide feedback and rate the seller which helps other users of the app as well as the seller themselves.



**SHARE
BUDDY**

MidFi

Prototype

Steps taken by the persona in our scenario

Step 1 : Create an account and fill in essential information such as address within the hostel(if hosteller), contact number, IIITD roll number etc.

Step 2 : Answer a few questions that'll help the app personalise recommendations.

Step 3 : Proceed to check all the available resources in the recommended section.

Step 4 : If she can't find what she's looking for, she searches for the product using the search bar.

Step 5 : Search results are listed grouped by sellers who are selling the same product.

Step 6 : She filters the products to look for the specific book related to a course.

Step 7 : She clicks on the sellers and starts chatting with them to negotiate a price.

Step 8 : Once the deal is finalised, she clicks the set meeting button and sets a date for pick up.

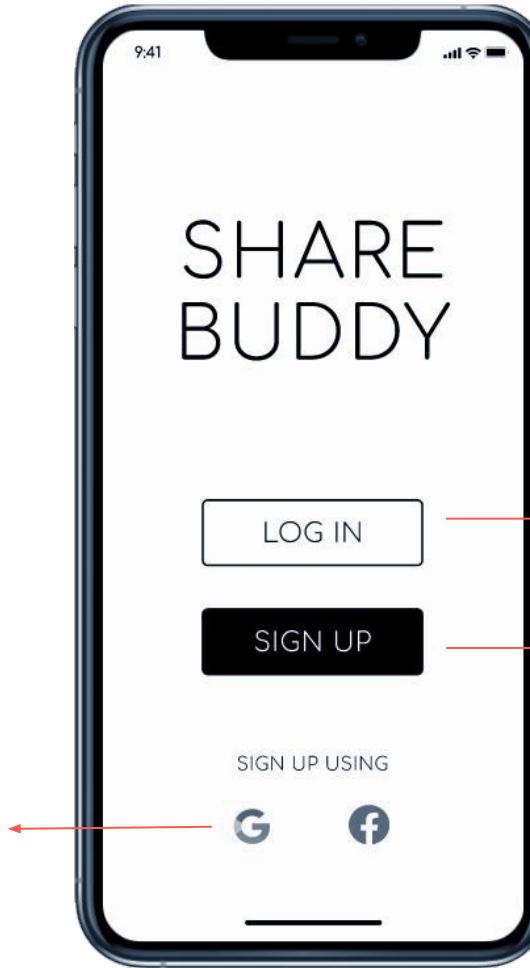
Step 9 : She selects the deals she wants to pay for, checks out and provides feedback.

Login Page

The user enters login details / uses social login to proceed to the personalise page.

Buttons for social login

Users can login via Facebook & Google Accounts



Login Button

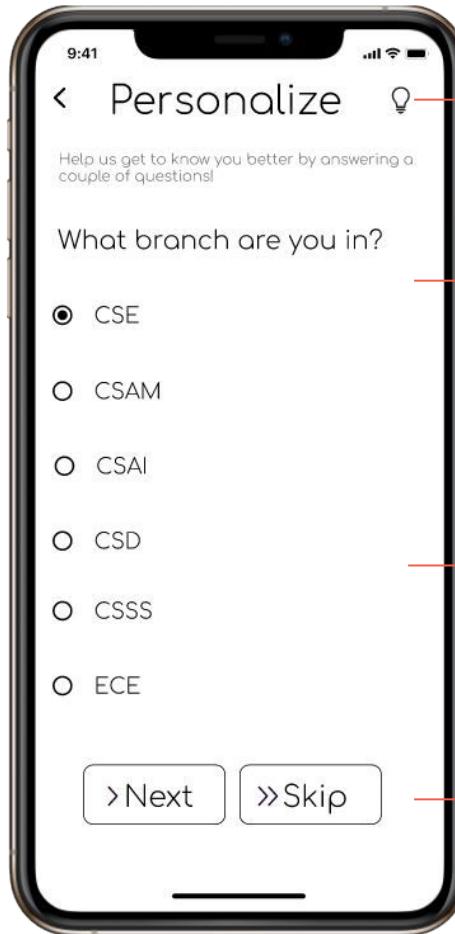
For users that already have an account.

Signup Button

For users that don't have an account.

Personalise Page

- The user encounters this page only the first time they log into the app.
- The recommended products are displayed based on their response to the questions.
- Skippi this phase which would result in a default display of most viewed and bought products.
- Next, Users proceed to the home page.



Help Button

For more details on usage

Personalised Questions

For recommendations based on user details

On Tap Interaction: To select relevant options

Next and Skip buttons

On Tap/ Swipe Interaction: To proceed to the home page

HOME PAGE

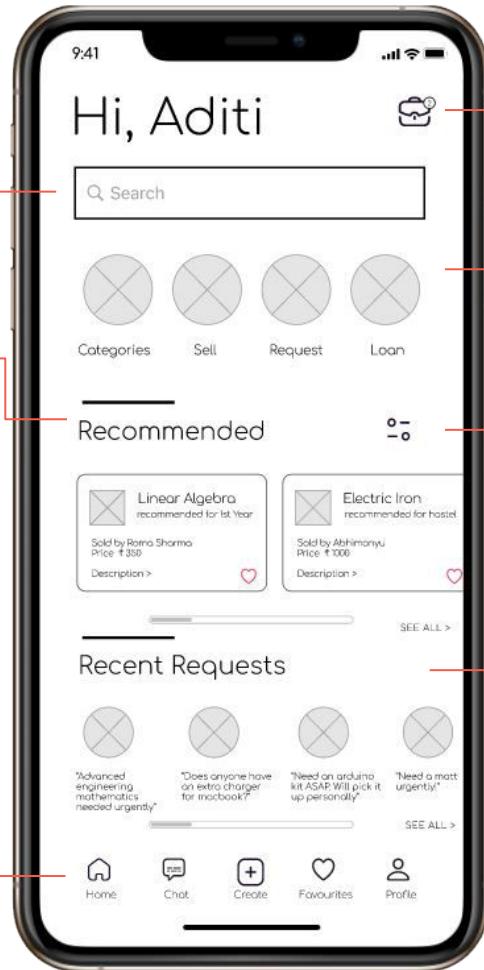
Search Box
To Search for products

Recommendations

Product recommendations based on the personalised questions.

Interaction: Swipe on the flashcards under Recommended section to scroll the list ahead.

The Navigation bar
To switch between Home, Chat, Create, Favourite and Profile pages



Deals Page
Shows the finalised deals and Meeting Points

Quick Access Bar
To quickly navigate to Sell or request pages

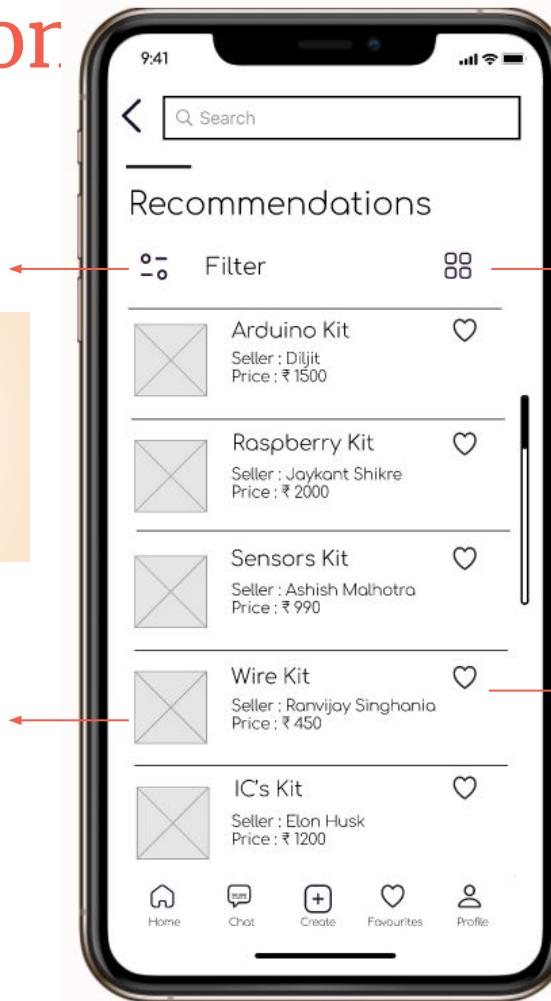
Filter Button

On Tap Interaction: to show the expanded recommendation page

Recent Product Requests

To show the recent product requests to the users.

Recommendation Page



Filter Icon

On Tap Interaction: to show the filter page, used to filter products by courses, year, price and popularity.

Product Tile/Card

Redirects the user to the product details page.

View Icon

Changes from list view to grid view

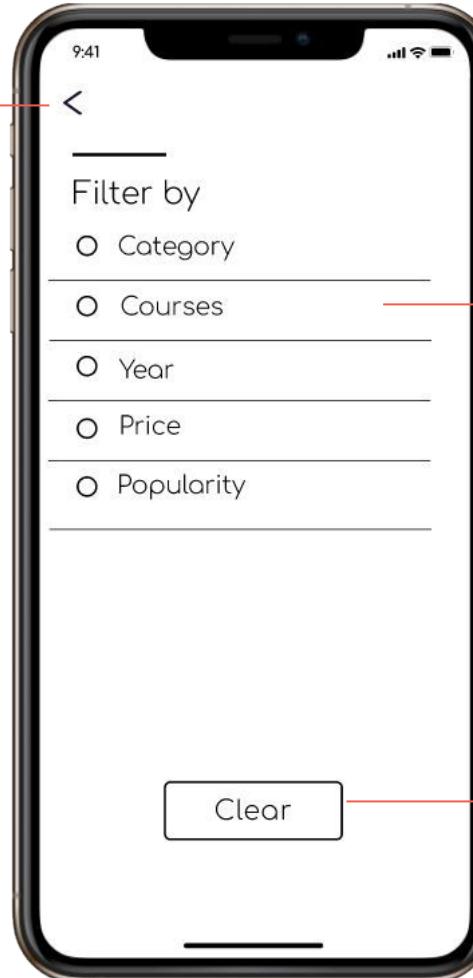
Favourite Icon

On Tap Interaction: User can add a product to favourites.

Filter Page

- This allows user to filter their search as per their requirement say course, year, price etc.
- Sub-filters are displayed as a popup on selecting a particular filter.

Back Button



Filter by Options

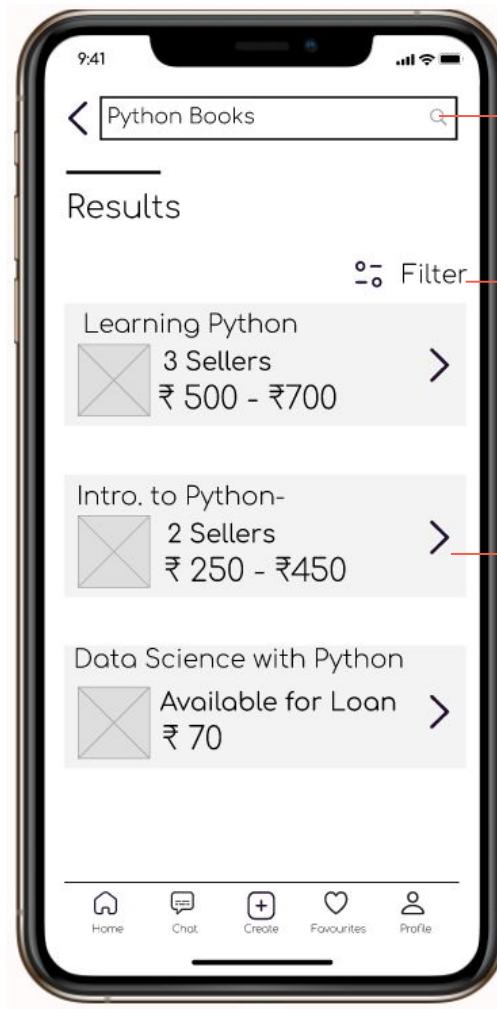
On Tap Interaction: User can select the category apply filter according to the same.

Clear Button

To clear all applied filters

Search Results Page

- Once the user searches for a product, the application groups all the sellers selling the same product.
- For Example, On searching for python books, All the different books are listed



Search box
To modify the search

Filter Button

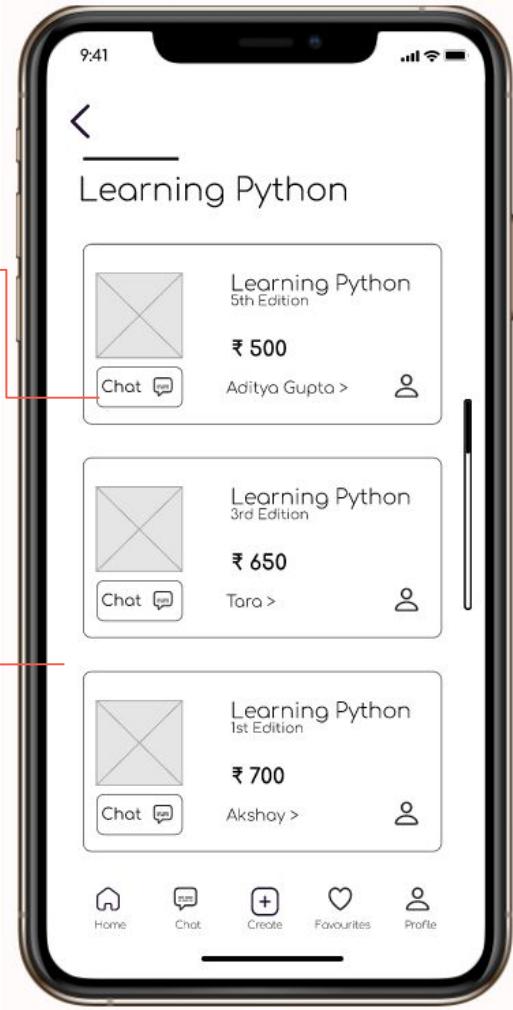
On Tap Interaction: to show the various filters available.

Products are grouped by sellers

Enables users to compare the various sellers available for the same product.

Sellers Page

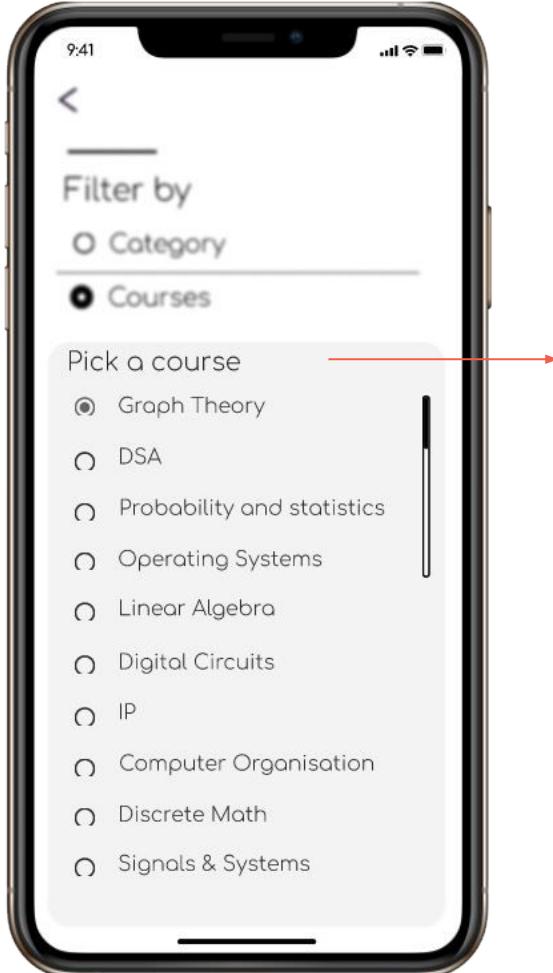
- Chat button**
lets you chat with the seller directly
- Sellers Tile/Card**
Redirects the user to the product details page for that seller.



- On clicking a particular product, the sellers page opens which enumerates the listings posted by different sellers and their prices.
- The user can select the most attractive listing to display further information related to the product or he can directly chat with the seller to know more.

Sub filters pop-up

- User gets to see sub filter options.
- For example, if the user wants to filter on the basis of courses, he can do it by selecting a particular course.
- Products will be filtered on the basis of that particular course.

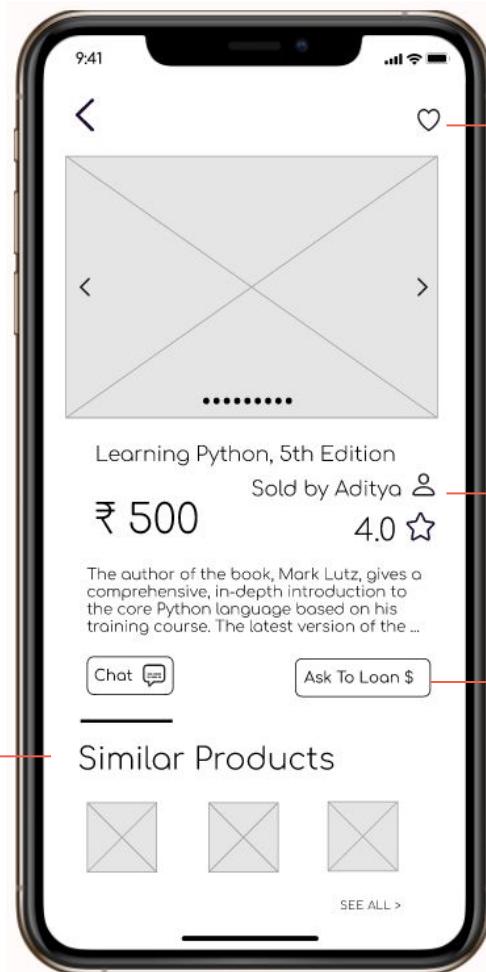


Pop up menu for applying Courses filter

Product info Page

- Product description of the listed product by a particular seller along with the ratings of the seller and buttons to enquire about the product from the seller are provided in this page.

Similar Products
Based on user history / interest.



Favourite Icon

On Tap Interaction: To add this product in wishlist.

Seller Details

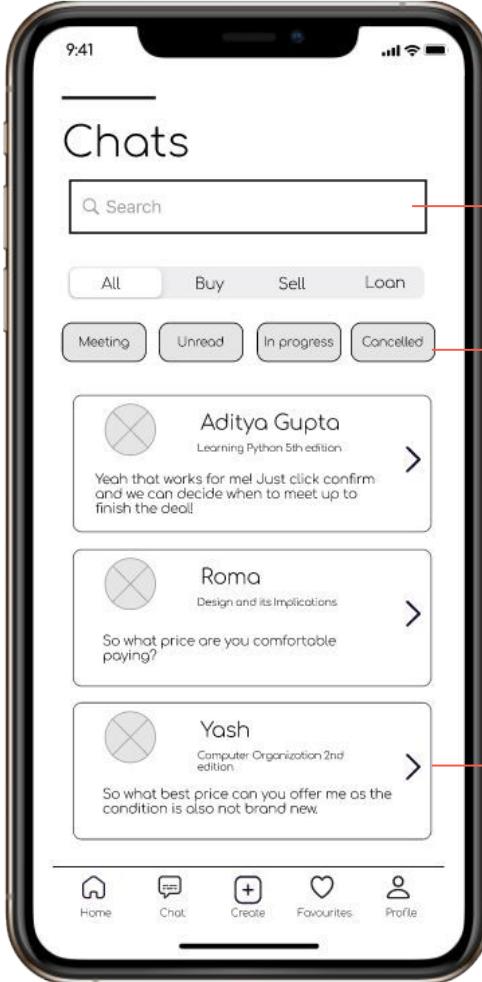
Name, Rating for the users information.

Ask to loan button

To request the seller for the option to loan the item.

Chat Menu

- This is our Chat Menu page where you can see all the active chats with the real sellers associated with particular products. The chats follow a color key provided at the top for easy navigation.



Search Box

Color keys to differentiate chats.

On Tap Interaction: to show the chats with the current status same as that selected

User Tile
Redirects to the chat page

Chat Page

This is our Chat Page where the user is involved in conversation with the real seller (one to one) basis and can negotiate and close the deal.



Report the seller

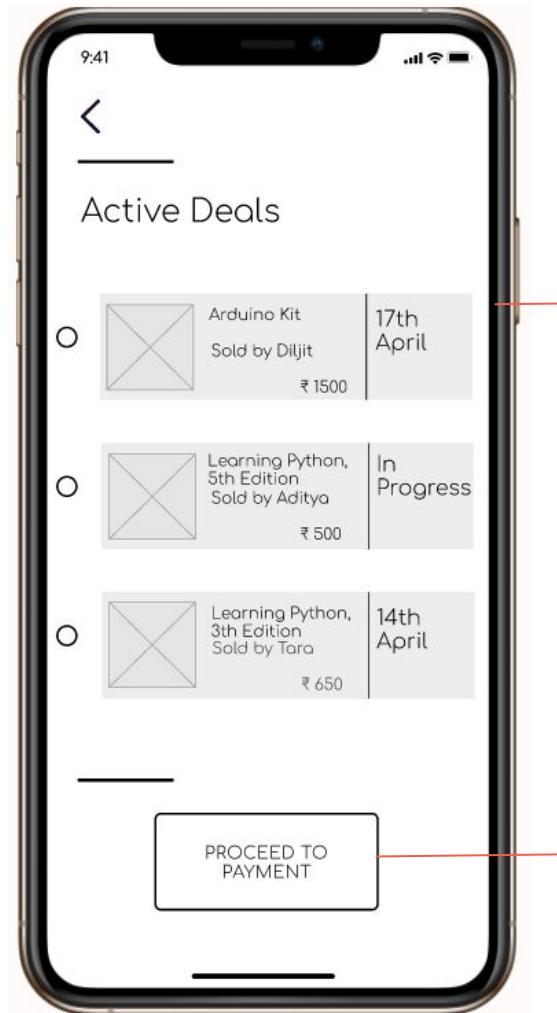
On Tap Interaction: to report the seller to App authority

Quick reply buttons
To recommend users with common phrases

Media button
For users to attach product images & videos

Deals Page

- This page displays all the active deals of the user and their respective status.
- The users can choose the deals they wants to pay for and can proceed to payment.



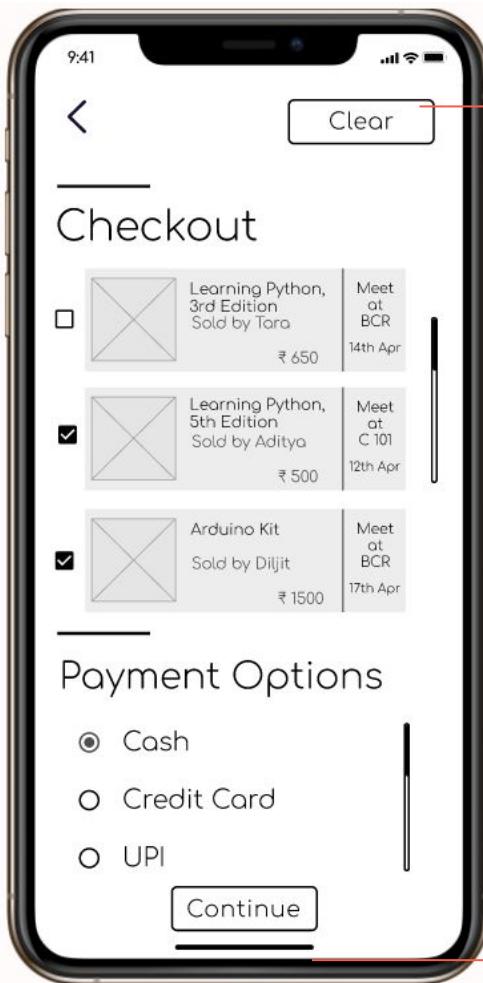
Active Deals

Show the finalised deals in progress along with product, seller and meeting date details.

Button to make the payment and confirm the deal.

Checkout Page

This is our final Checkout Page where we have the choice of choosing our payment method and also review what all we are going to pay for.



Clear Cart

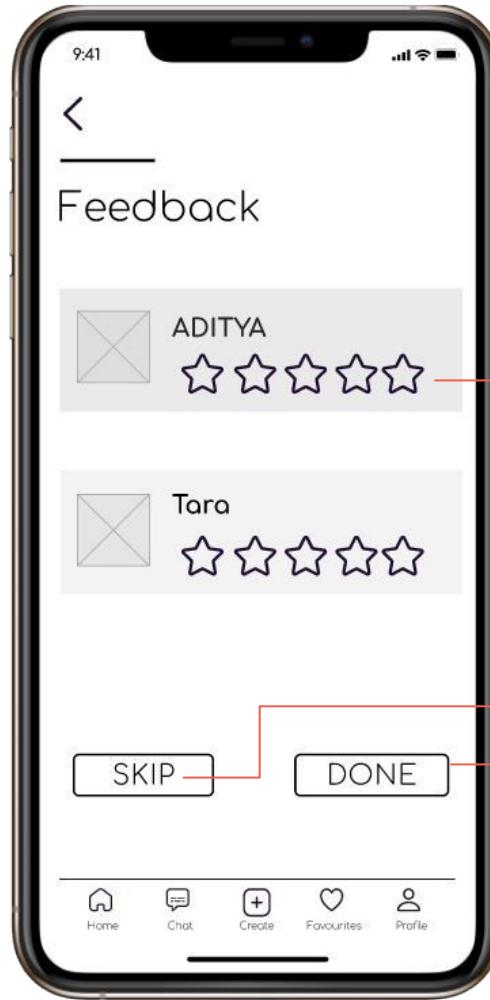
Interaction: Swipe on the flashcards under Checkout section to scroll the list of products in cart.

Interaction: Swipe on the options under the Payment Option section to explore more payment methods.

Continue Button
to proceed

FeedBack Page

This is our Feedback Page, where the user after successfully purchasing/lending an item can rate their experience with the seller. This is optional to the user they have the option to skip.



You can tap on any star to rate the user that many stars out of 5

Skip rating

Done with rating

On Tap Interaction: to proceed to next step either by skipping or filling the feedback



**SHARE
BUDDY**

HiFi

Prototype

High Fidelity Prototype

Link to Figma Prototype: [Link](#)

PRIMARY TASK SEQUENCE:

1. Click anywhere on the logo on the splash screen to proceed to the app.
2. Personalise the app as per your preference. This is optional to the user. Click on the “Skip” button to skip the personalization process.
3. This is the homescreen of the app. The recommended and recent requests section on this page are horizontally scrollable. Click on “see all” under the recommended section to look at your recommended products.
4. This is the recommended products page. This page is vertically scrollable. Click on search to search for the product you want.
5. This takes you to the search results page where products with the same sellers are grouped together. The user clicks on the first group of sellers.
6. The user can filter the books as per their need. Click on the filter button to do so.
7. Click on courses followed by the close button on the popup.
8. Click back to see the filtered results.
9. The user then clicks on the first book to view more details.
10. This is the product info page. The user clicks on the “Chat” button to chat with the seller.
11. Once the user is done chatting with the seller. He clicks on the back button in the top left corner.
12. From the products info page, the user clicks on the home button in the navigation bar.
13. The user then clicks on the “Active Deals” button in the top right corner of the home screen.
14. The user selects all three deals and clicks on “Proceed to Payment”.
15. The user clicks on Continue after finishing the payment and provides feedback.
16. Click skip to go back to the home screen.

ADDITIONAL SCREENS AND FEATURES DESIGNED:

1. Users can feel free to click on any of the buttons in the navigation bar at the bottom of any page that it is on and visit the menus. Click on the back button to exit respective menus.
2. Clicks on the search bar on the homescreen to bring up the keyboard. Click anywhere on the screen to remove the keyboard. You can do the same with the search bar in the chat menu.
3. The recommended and recent requests section on the home screen are horizontally scrollable. The recommended products page is vertically scrollable.