SW Engineering CSC648-848-05 Fall2023

OrderOwl

Team 06

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Milestone 3

November 2, 2023

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M2V2	
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M2V2	11/02/23
M2V1	10/13/23

M1V2	10/12/23
M1V1	09/21/23

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I. Data Definitions:

a. **Registration (passwordID, UserID, emailID, firstNameId, lastNameId)**
User shall be able to register to our site and use our services with OrderOwl. We shall request the user a password, username, email, first name and last name. We need the username to be unique in order for no confusion to happen with other accounts that have been created. For the user's password the user shall create a password that must have at least one capital letter, special character, and a minimum of 10 characters. We shall also request an email as well in order send an email with a confirmation link to finalize the creation of their account. Finally, the user's email shall be used to receive updates about their packages.

b. **User login (password, username, email) (UserId, userpswd, userEmail)**
We shall store our users information in our database in order for their information to be saved within our application for future use. The user shall use their information to log back into OrderOwl and to view their tracked packages. All of the users information will be stored in our database encrypted for the safety of our users. Our team shall use “Let’s Encrypt” in order to encrypt the users information in case of any hacking attempts to our software.

c. **Tracking numbers and links (trackNum, trackLink)**
A lot of the websites we’re working with offer a tracking number or a link where the user can keep track of their orders. This will also help our team to make sure everything is being tracked and updated accordingly. We will store this information in the database so our users won’t lose their tracking information.

d. **Amount of orders/Order History**
Our users might make more than one order and would want to keep track of all of them. We will store the number of items they’ve ordered to keep count and to be able to show them more than one order. This also helps the user to have a list of all their orders all in one website without having to switch. The user will have no limit on the amount of orders on the list, we will store all of the orders in our database and as well as their history of completed tracked orders.

e. **Accounts from different websites**
To make it easier for users, we will be storing some of the user's accounts in our database so we can get the information for their orders on their account. This way we can access their tracking numbers or links to keep them updated on their orders. After we get access to this information, we will make sure to encrypt it so no one will be able to look at this information.

f. Order Category

The orders shall have a category depending on the item they ordered, such as clothing, electronics, food, or other categories. This will allow the user to have a better experience navigating through all their orders. There will be no need to scroll through so many orders in order to find a specific one. In case the user doesn't see a category that fits their order, they shall be able to create their own category. This shall work sort of like a music playlist, but this time we are putting in orders to be able to track.

g. Order Information

Users shall see the details about the item they've ordered from the website. This shall provide the user with a description of the item they ordered in case they forget what it was. In addition, the order information should contain the amount they paid for the order, when they bought it, and the quantity of items under an order if applicable.

h. Deleted Orders

All our user's orders will be stored in our database after they are uploaded. After the user decides to delete the order from their account, the tracking information for that order will be gone from our database and account.

i. Updates

Before we roll out updates we will store the information in our database in order to be ready to push it out for the public. We shall inform our users of our rolled out updates to keep them updated on what is new. Sometimes when a user uses an updated application, some stuff might be moved around or there might be new features.

j. Notifications

We will be sending out notification to users whenever they have an upcoming delivery. We will store the notifications in our database to get a basic template of what we are sending out to our users. This could potentially lead to less packages getting stolen and more people being ready to receive their package.

k. Data from our customers

We shall collect data from our customers in order to ensure the best experience for our Users. We will never give away or sell the information we receive from our users. We will only use it for the benefit of a better experience for users on OrderOwl.

l. Administration

Admin shall be able to login to their administrative accounts in order to do some testing with features that haven't come out yet. We will store login information for admin usage separate from regular users. This will help us to test out features that are not out yet before sending it out.

m. Return/Refund

We will be storing the refund and return information in our database for the user to see the tracking information as well. We shall also change the information on how much money they got back from their refund. This shall allow the user to keep track if they ever received the money back from the shipper.

n. FAQ (Frequently Asked Questions)

Some questions that our users will be asked frequently in messages. We will store these in a separate section of our OrderOwl website in case they have any doubts of how to use something. Users shall be able to find their answer quicker than having to wait for a message back from an admin. We shall update this list whenever we notice a pattern of the same question going on.

o. Sharing

Users will be able to share tracked packages amongst friends, family, or others to keep more than one person updated on the tracking of an order. Users will only be able to share the packages that are stored in your account because we will be able to share from our database where it is saved.

p. Hidden Packages

When our users use our software they will have the option of hiding their package. Even though it is hidden, it will still be in our database the entire time it is hidden, it will just look like it was deleted. There will be a tab of hidden orders in order to be able to check on them still.

q. Privacy

We will be taking care of privacy by encrypting in our database the users information and tracking information they've saved on our software.

II. Prioritized Functional Requirements:

a) Priority 1 (must have):

User:

1.1 User shall be able to track all their packages with tracking information.

1.2 User shall be able to add/delete tracking information.

1.3 User shall be able to login.

1.4 User shall be able to create/delete their account.

1.5 User shall be able to update their profile information.

1.6 User shall be able to recover password when needed.

1.7 User shall be able to see/hide their history of completed tracked orders.

1.9 User shall be able to sort their tracking information.

1.12 User shall be able to submit a ticket for help.

1.20 User shall be able to view the overview calendar.

1.21 User shall be able to view any month within a year in advance or within the past year.

Admin:

2.1 Admin shall be able to access all data.

2.2 Admin shall be able to modify any data.

2.4 Admin shall be able to create any type of account.

2.6 Admin shall be able to view another account.

2.10 Admin shall have the ability to conduct system maintenance and updates without disrupting user access.

2.11 Admin shall be able to receive and review user feedback and reports regarding system performance and functionality.

System:

3.1 System shall be able to collect traffic data.

3.2 System shall be able to store traffic data to improve user experience.

Notification:

4.1 Notification shall be able to be sent.

4.2 Notification shall be able to be received.

4.3 Notification shall be able to be stored.

4.4 Notification shall be able to be viewed.

4.6 Notification shall be able to be deleted.

4.8 Notification shall be time stamped to indicate the date and time of sending or receiving.

Tracking Information:

5.1 Tracking information shall be able to be stored.

5.3 Tracking information shall maintain an up to date dispatch alerts.

5.2 Tracking information shall be able retrieved in real time according to shipping carrier updates

5.4 Tracking information shall maintain an up to date database.

5.6 Tracking information shall update the overview calendar with ETA dates for tracked orders.

Overview Calendar:

6.1 Overview Calendar shall be able to mark the dates when orders are estimated to arrive.

6.2 Overview Calendar shall begin on the month a registered user signs up on.

6.3 Overview Calendar shall have a year in advance for a registered user to view.

6.4 Overview Calendar shall have the past year saved for a registered user to view.

b) Priority 2 (desired):

User:

1.8 User shall be able to save their tracking history into a file.

1.10 User shall be able to receive email notification of tracking updates.

1.19 User shall be able to post one or more questions.

1.24 User shall be able to edit the name of the label on a tracked order item.

1.22 User shall optionally be able to provide their feedback for the application.

1.23 User shall be able to choose whether they would like a personal or business account if they were to register.

Admin:

2.3 Admin shall be able to suspend any account if needed.

2.9 Admin shall be able to assign specific access levels and permissions to different user roles (e.g., standard user, moderator).

2.12 Admin shall have the authority to implement security protocols, including password policies and two-factor authentication, for user accounts.

2.13 Admin shall be able to post one or more answer replies to questions posted by users.

Overview Calendar:

6.5 Overview Calendar shall not include the ETA dates for hidden orders.

6.6 Overview Calendar shall contain embedded links on each ETA date and redirect a registered user to its page for more information.

III. Wireframes Based on your Mockups/Storyboards:

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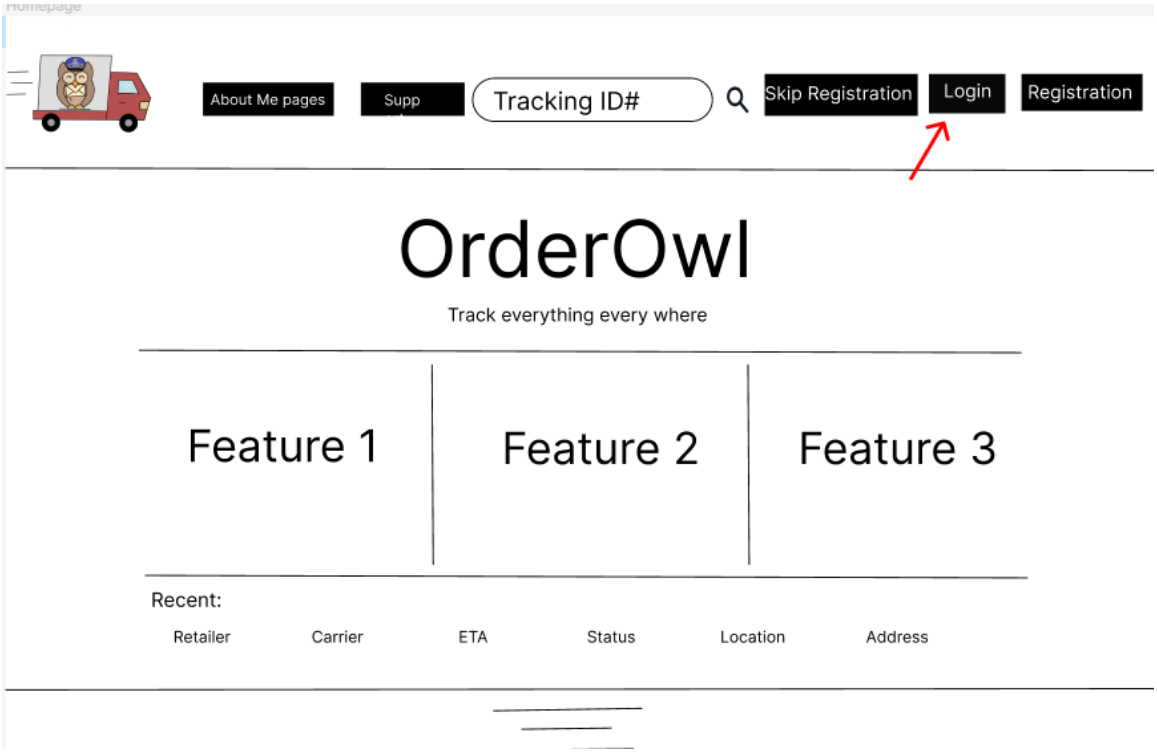

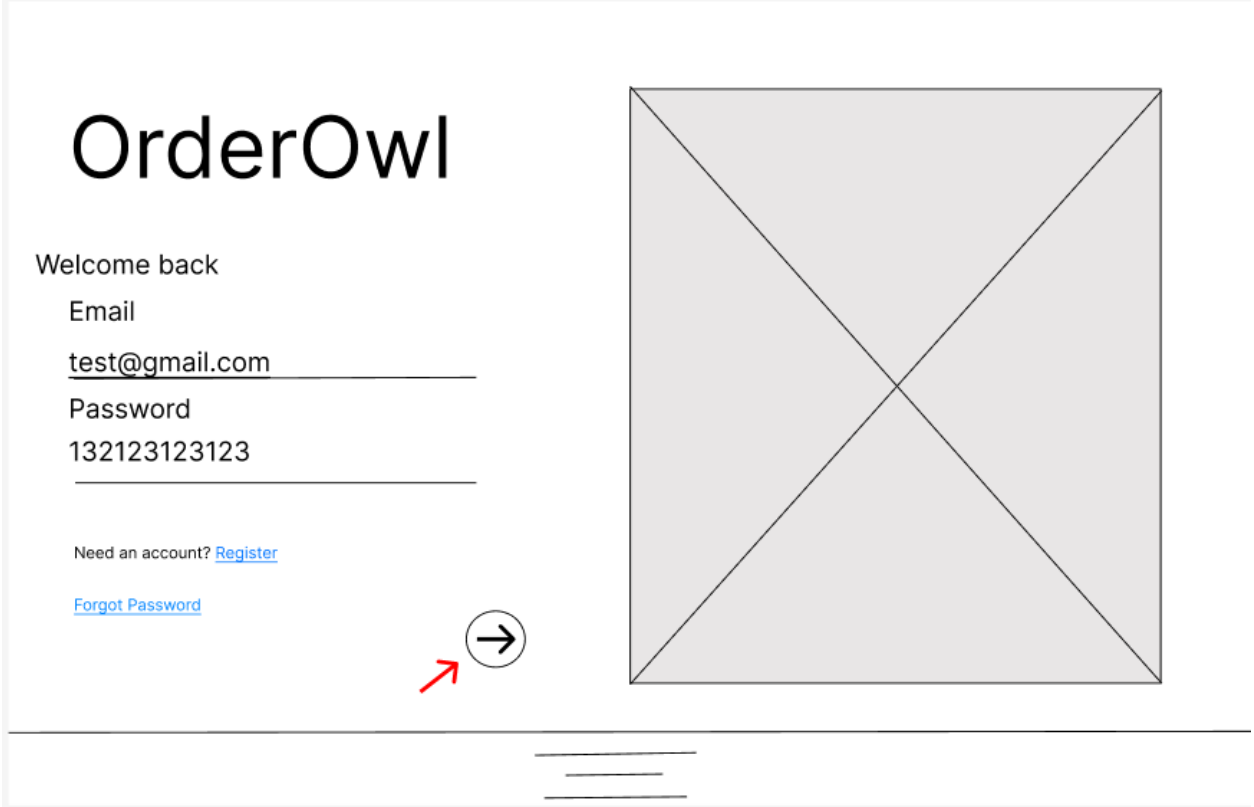

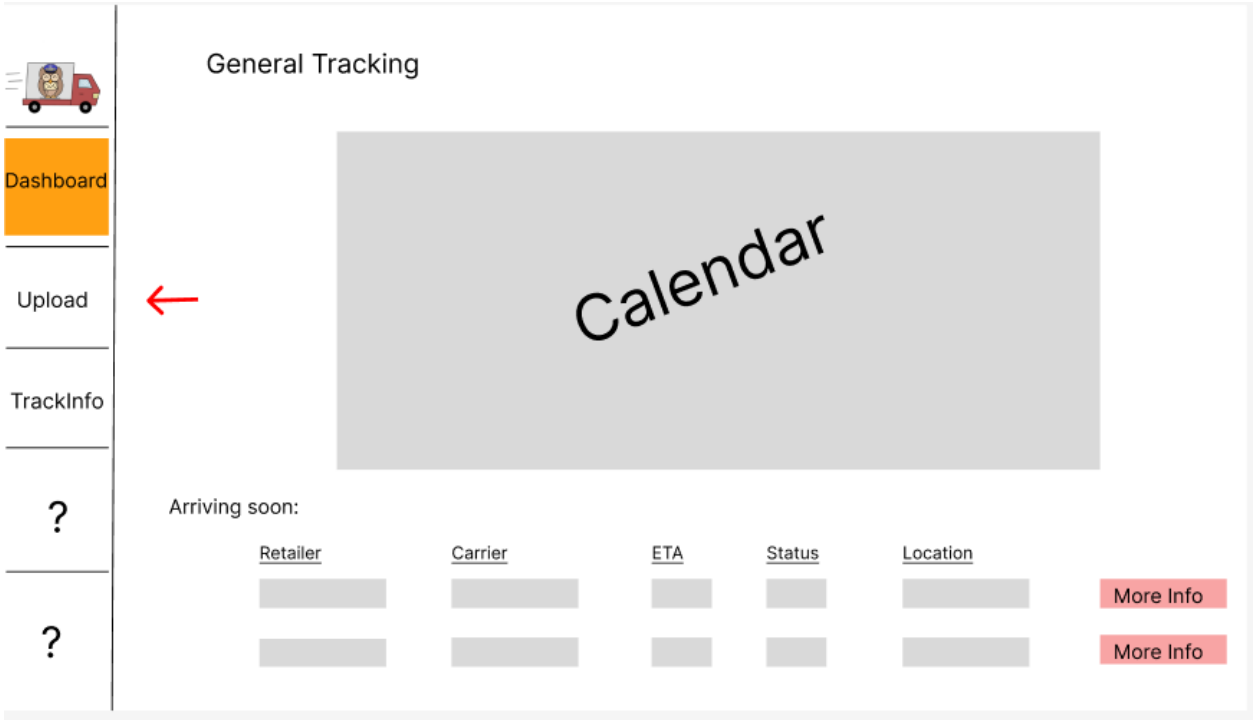
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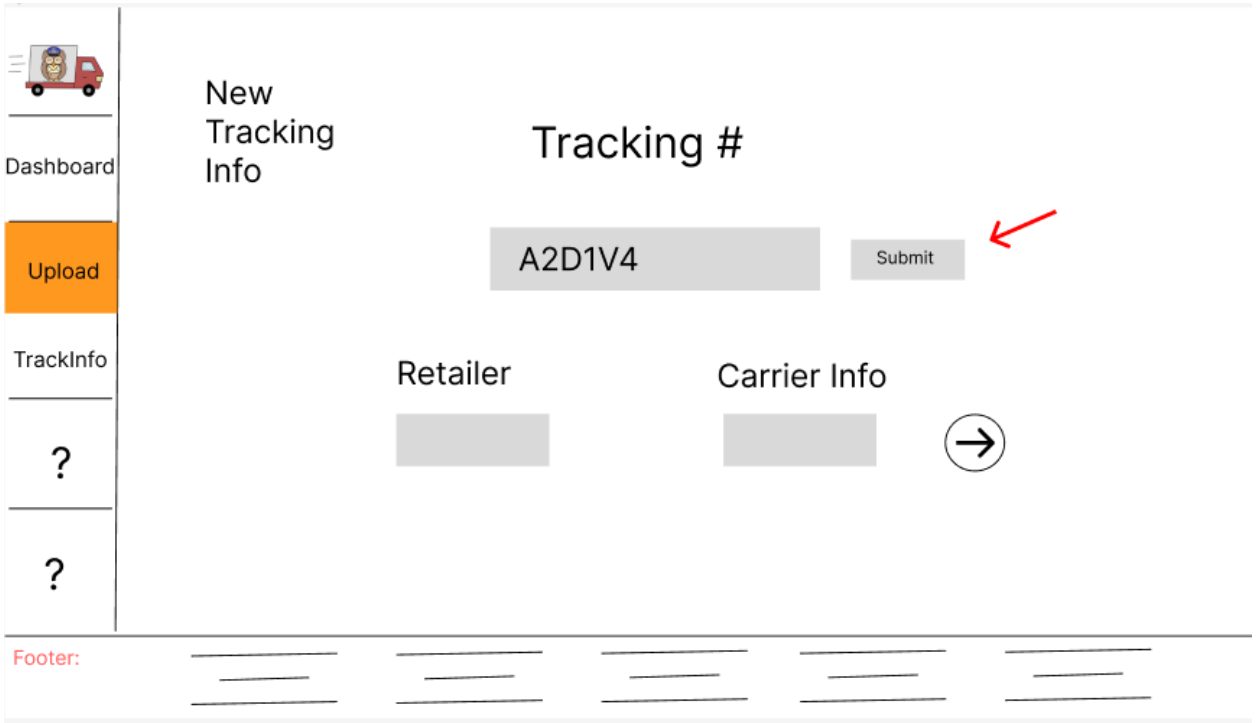
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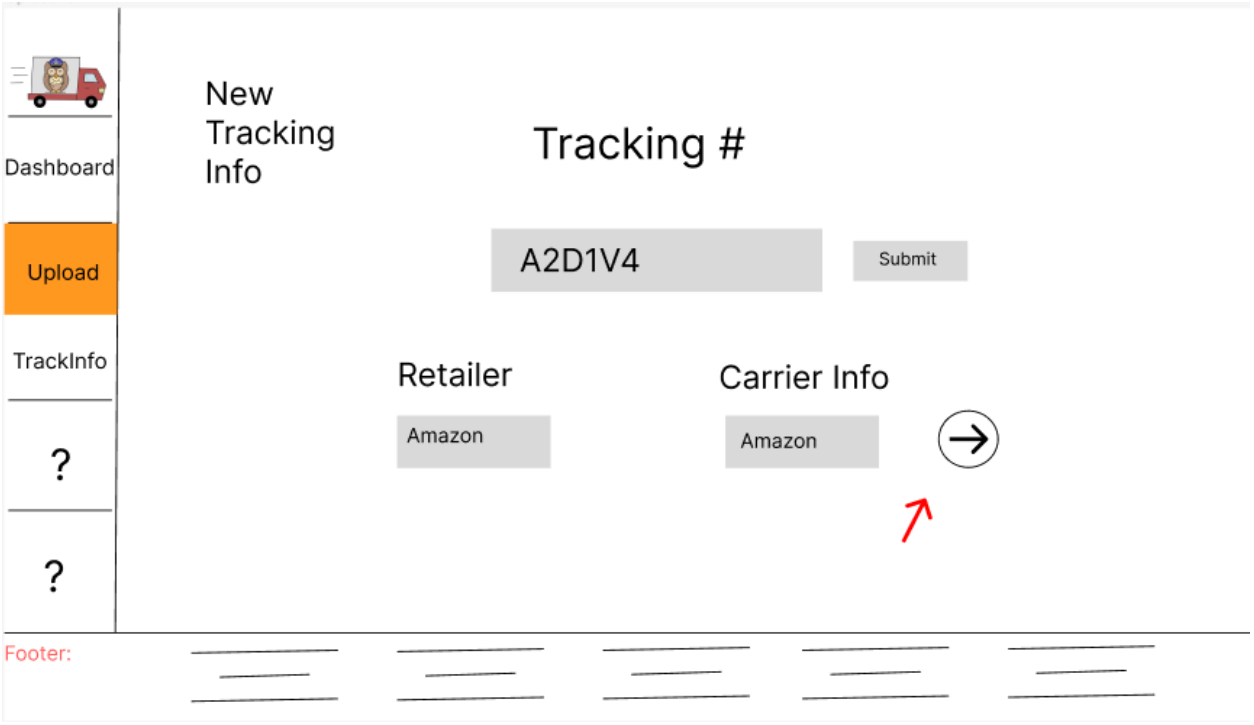
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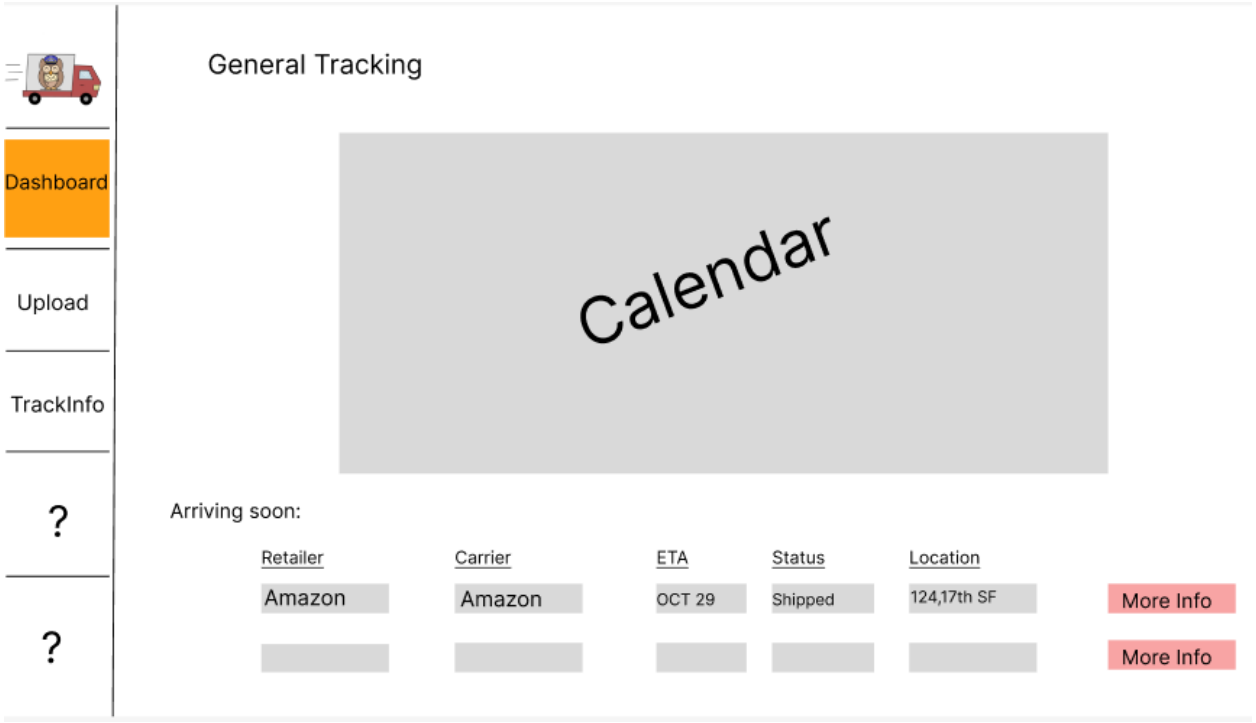
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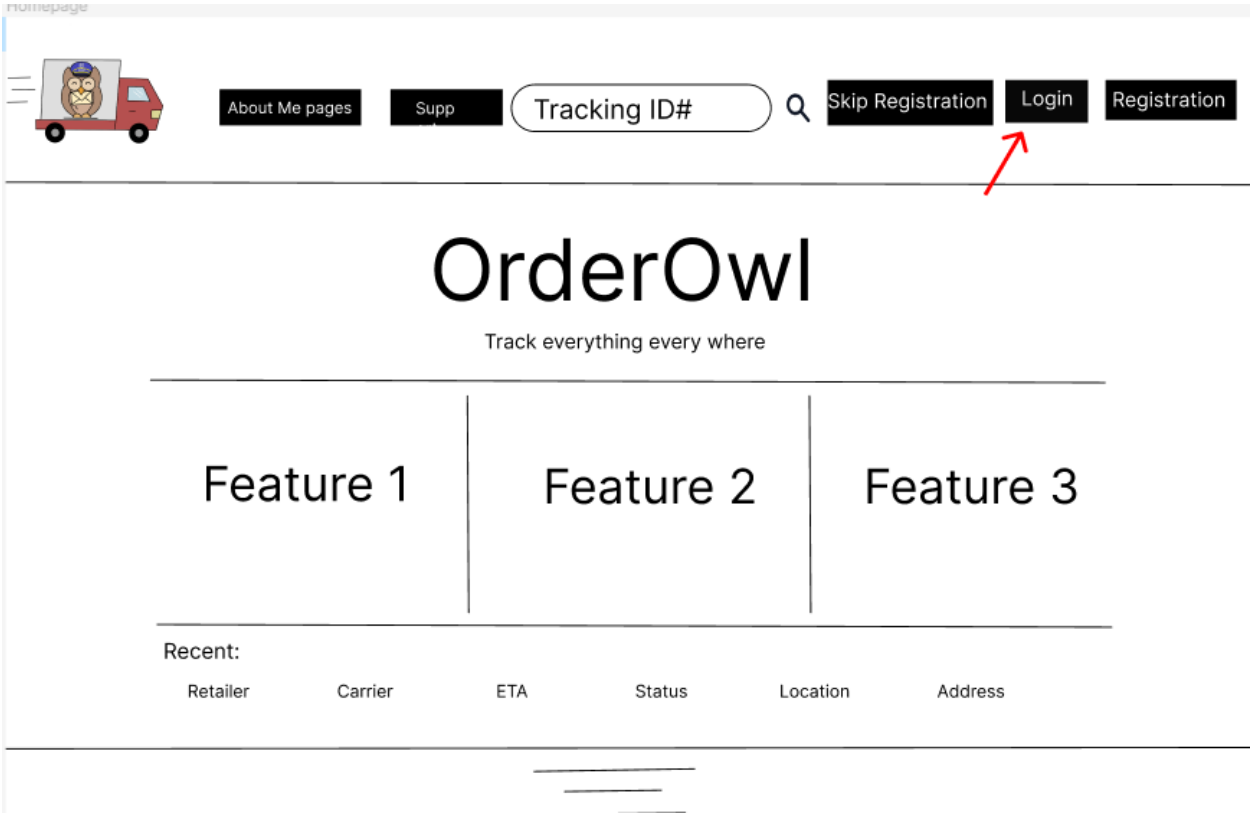
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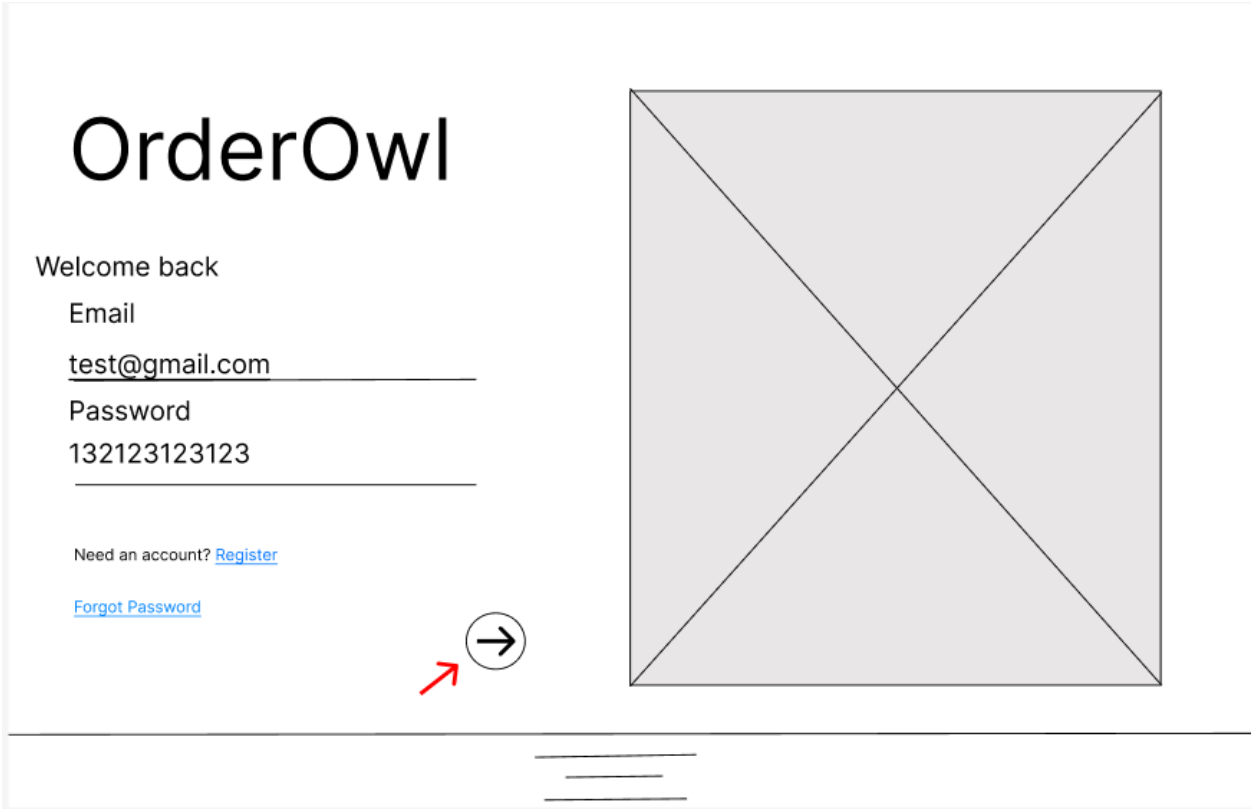
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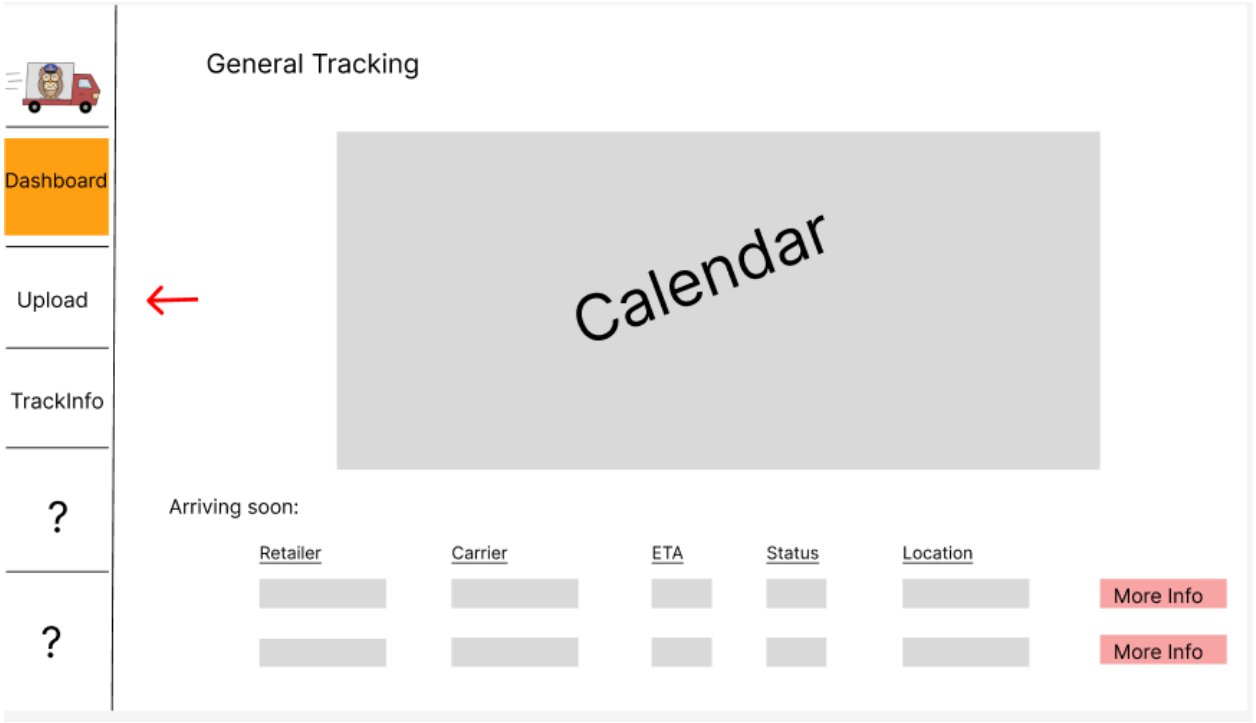
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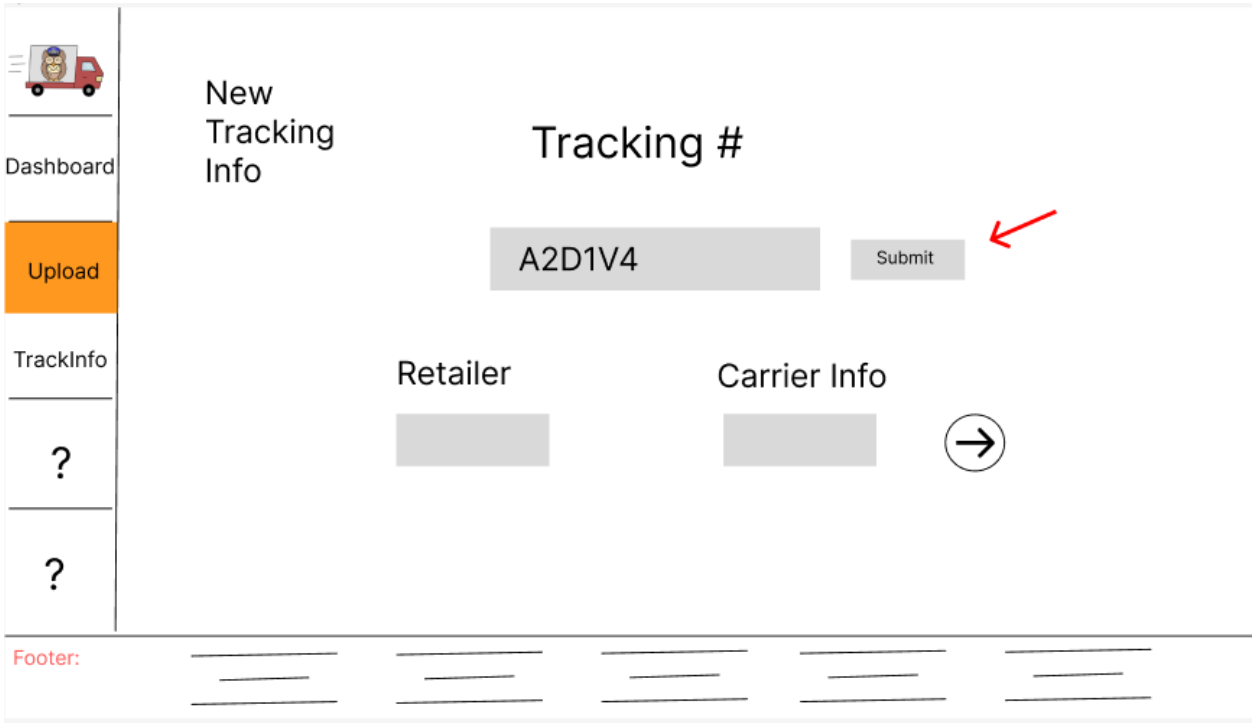
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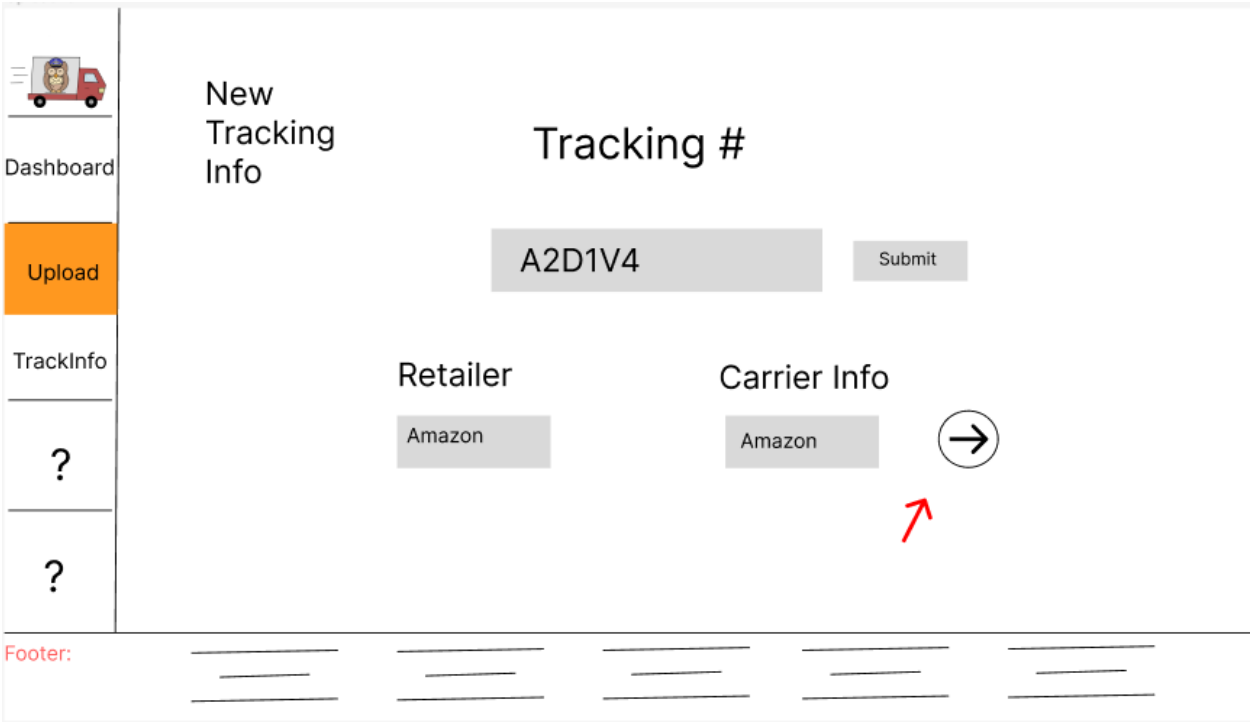
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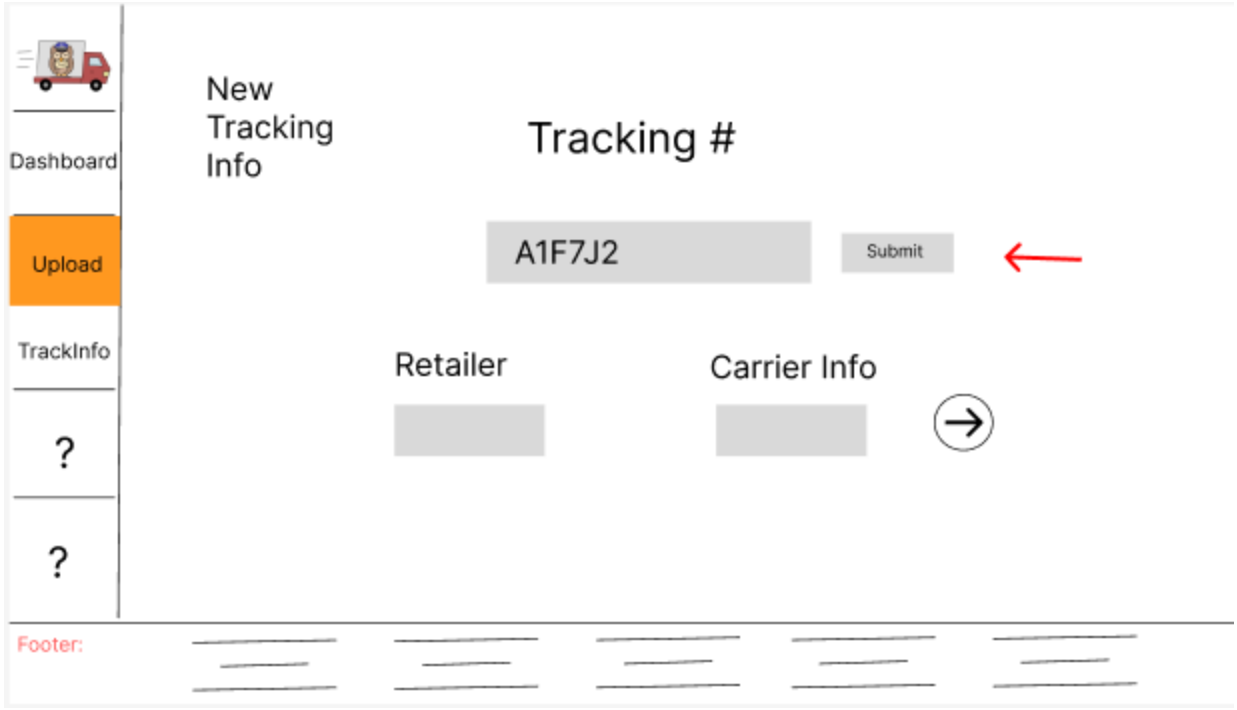
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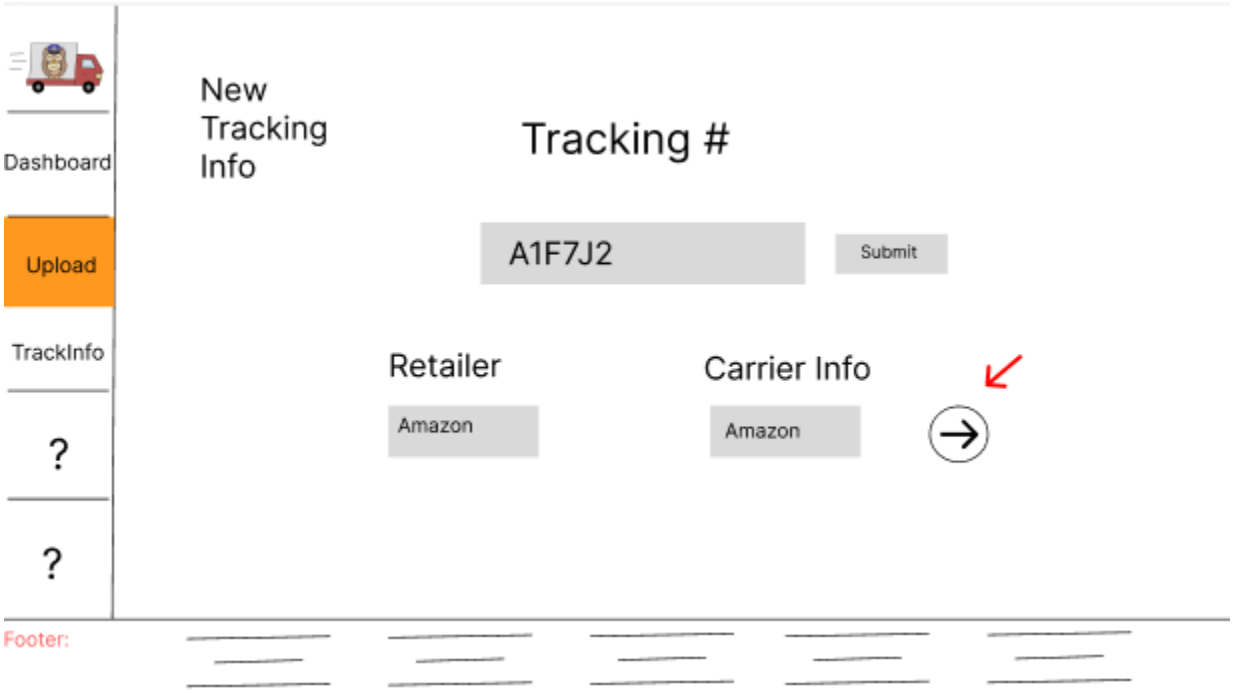
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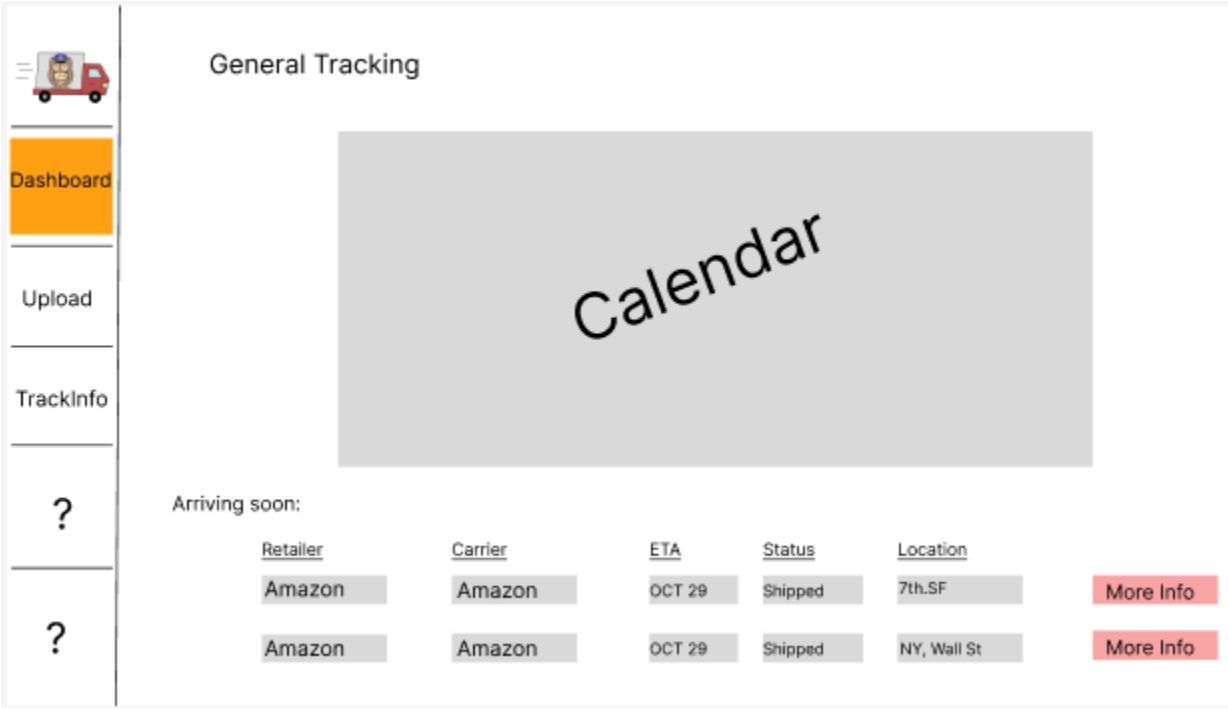
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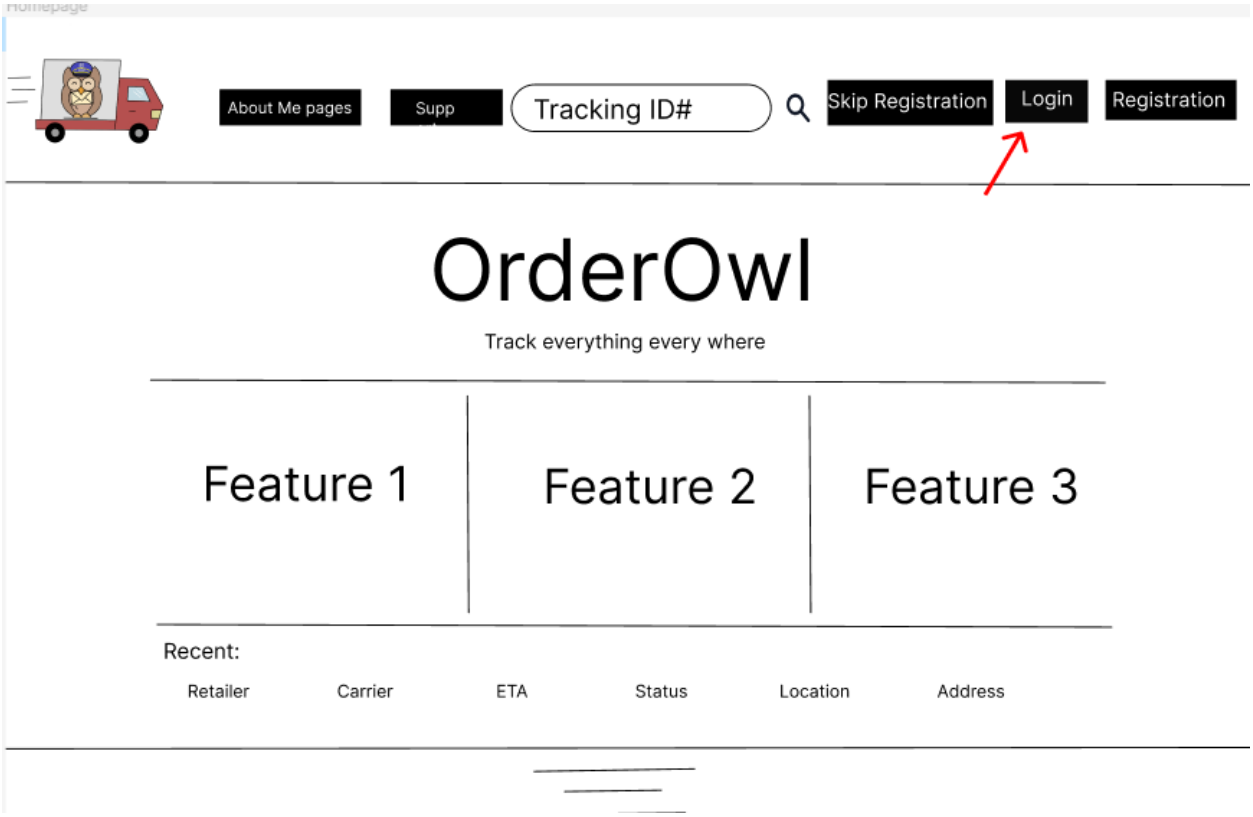
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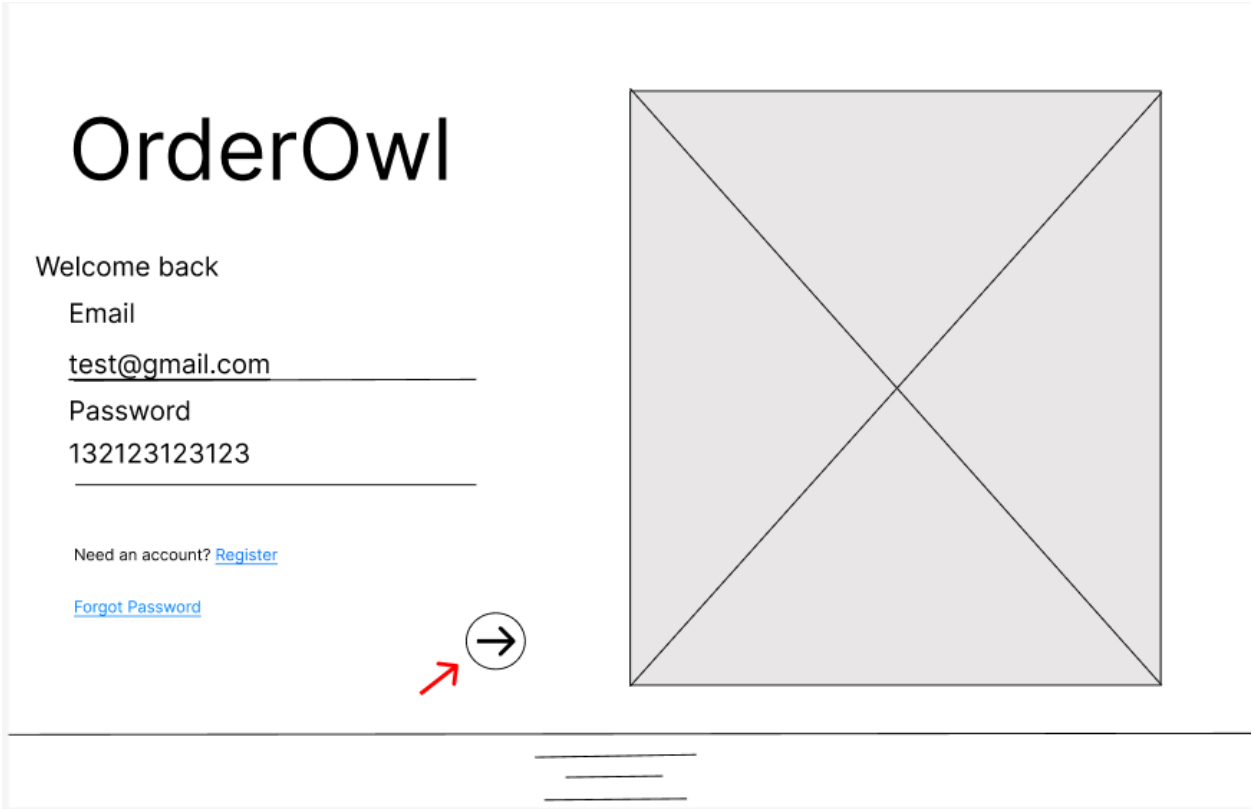
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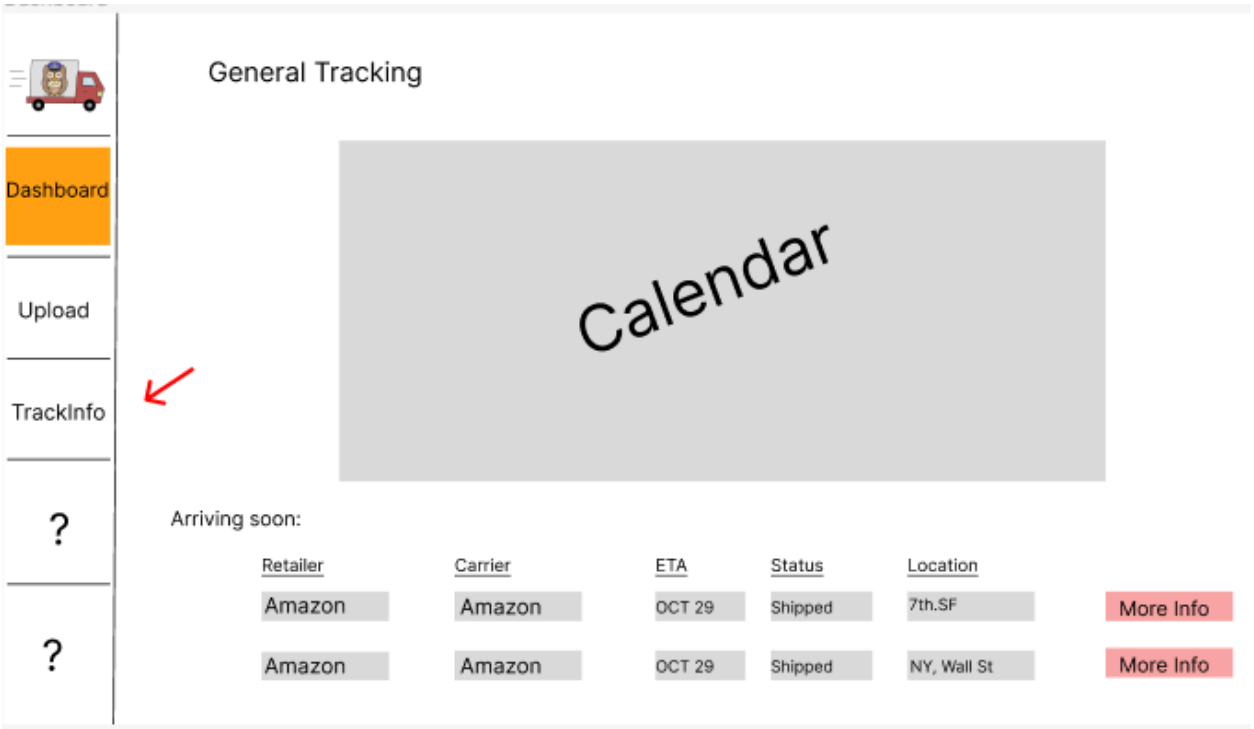
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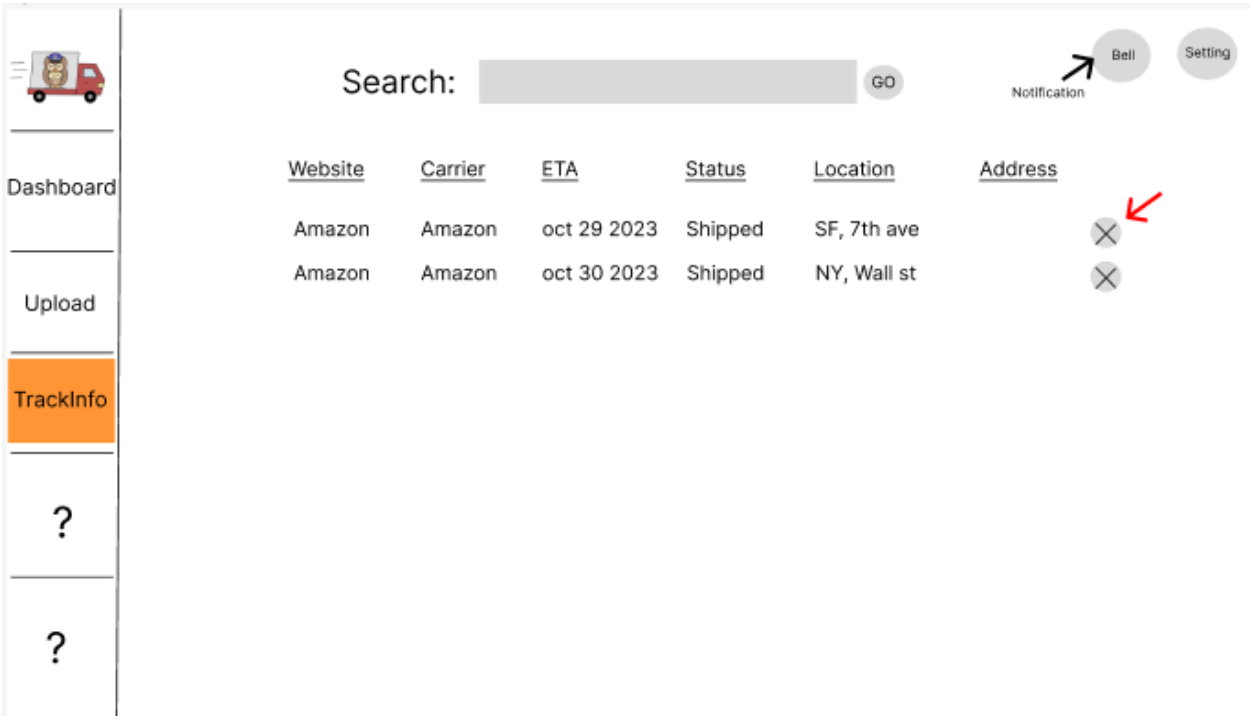
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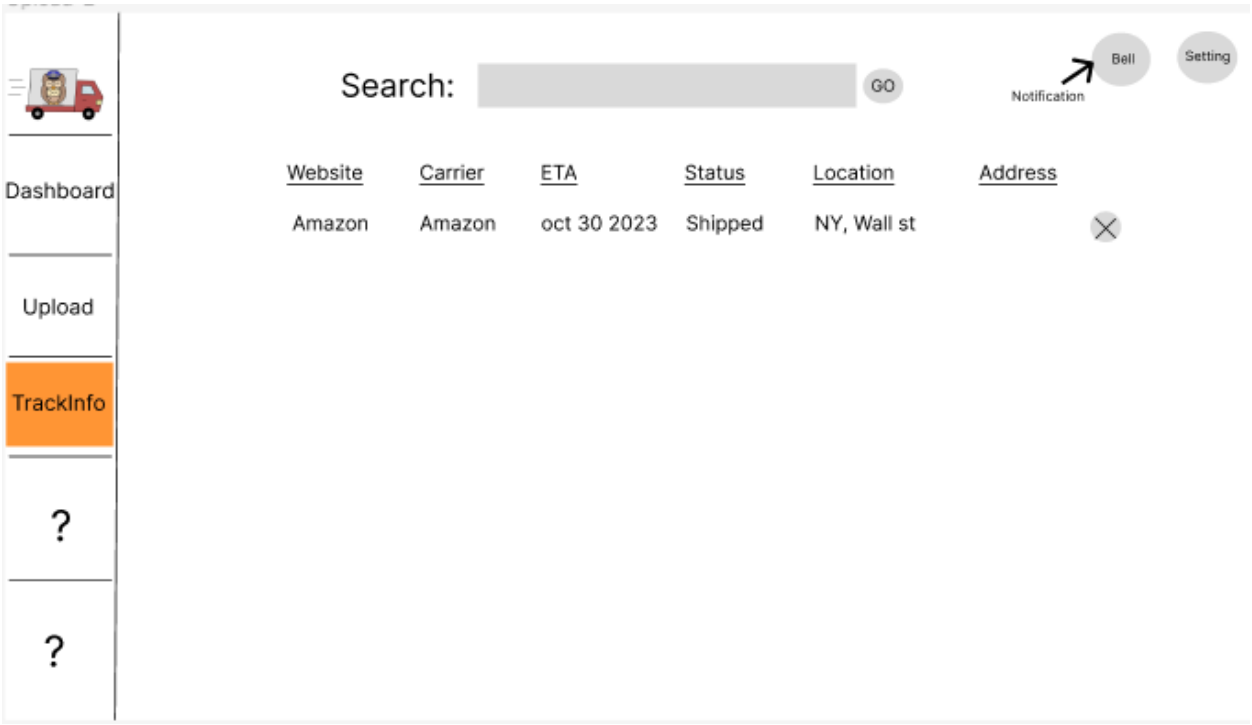
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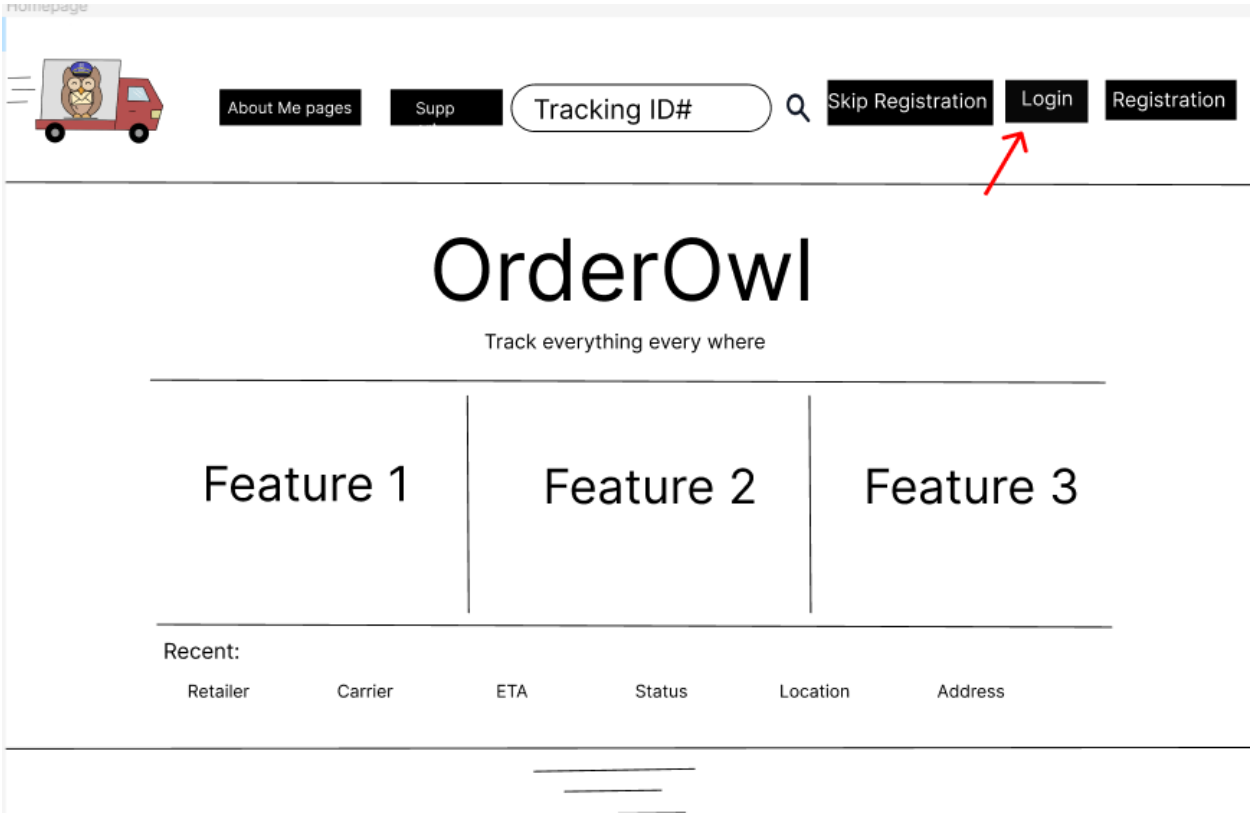
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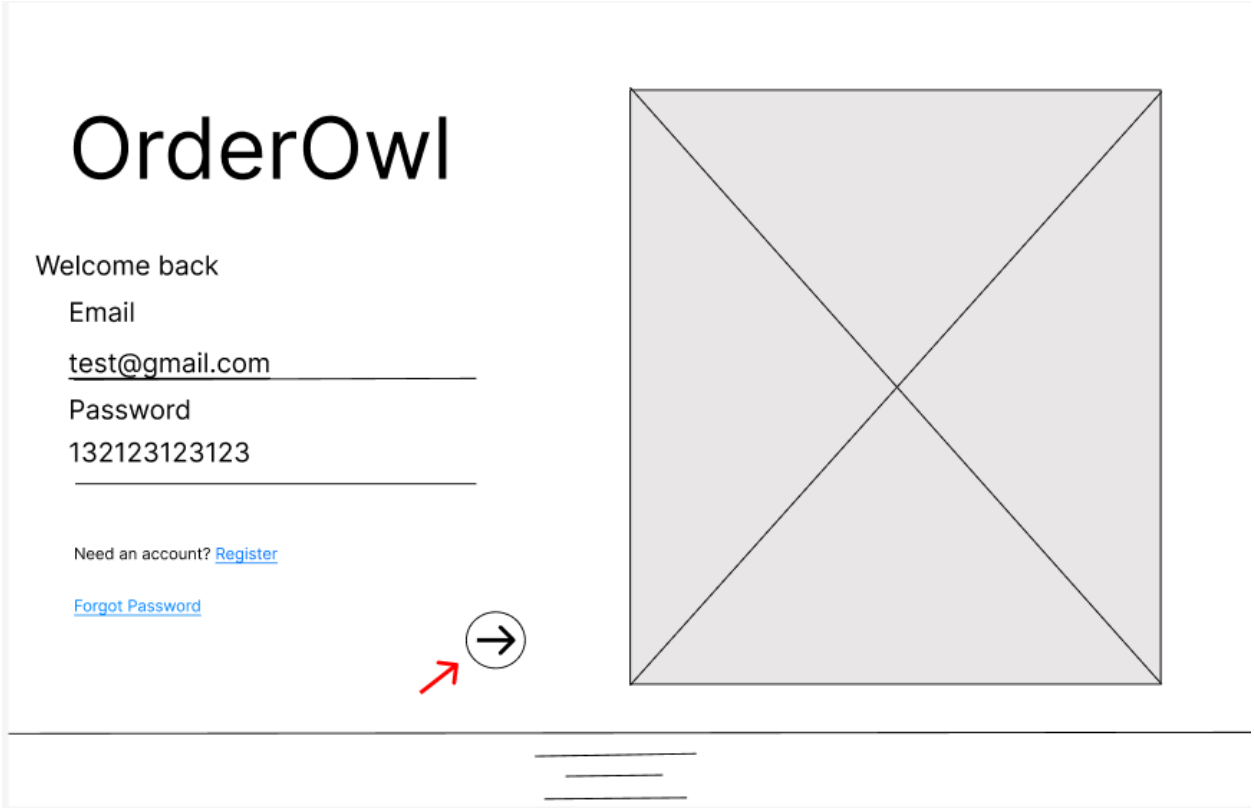
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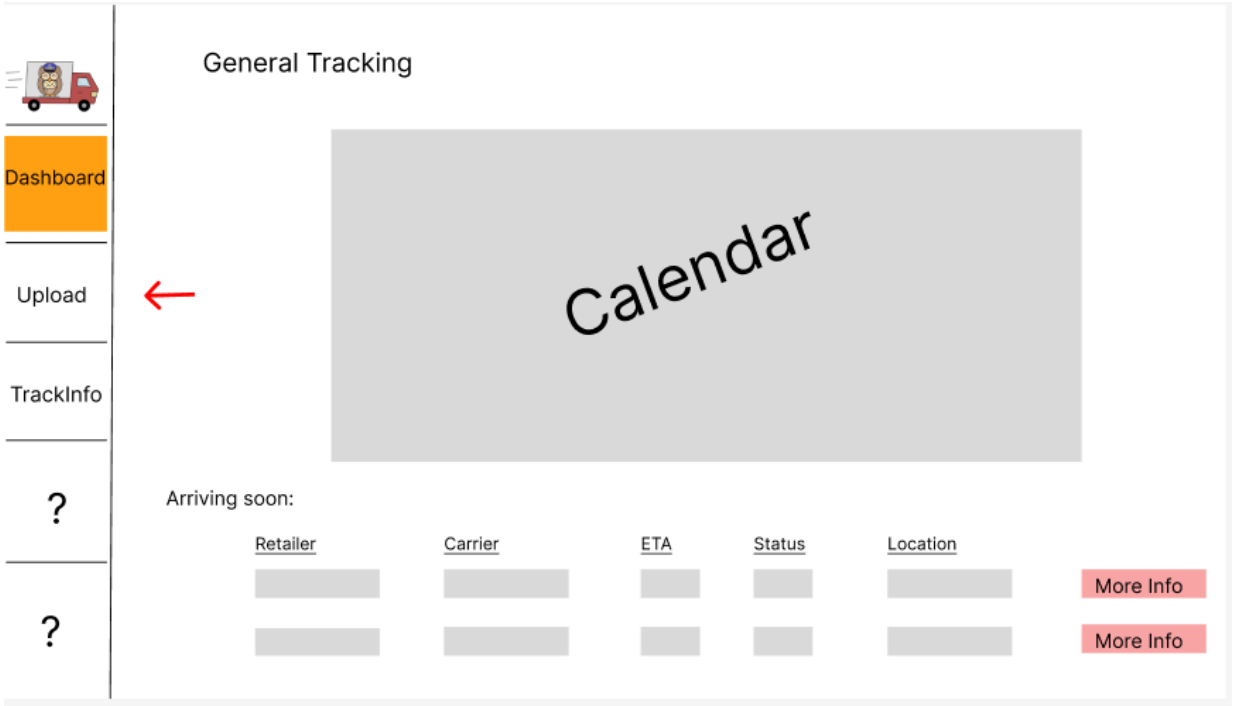
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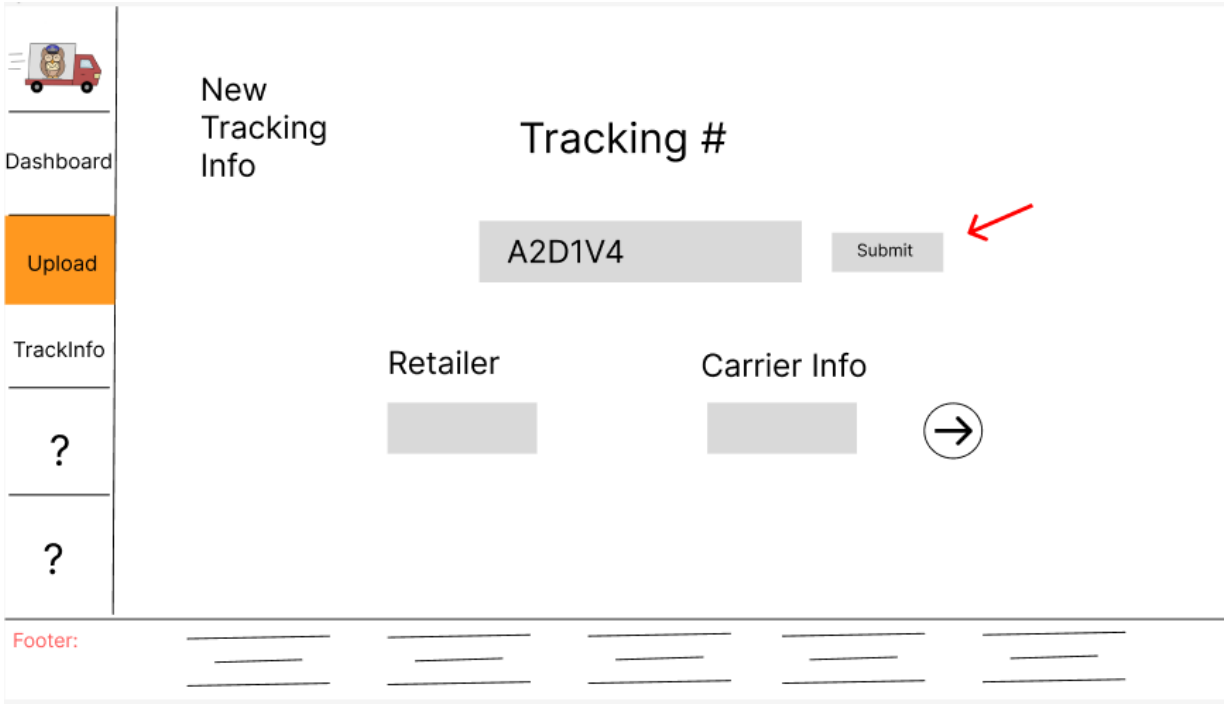
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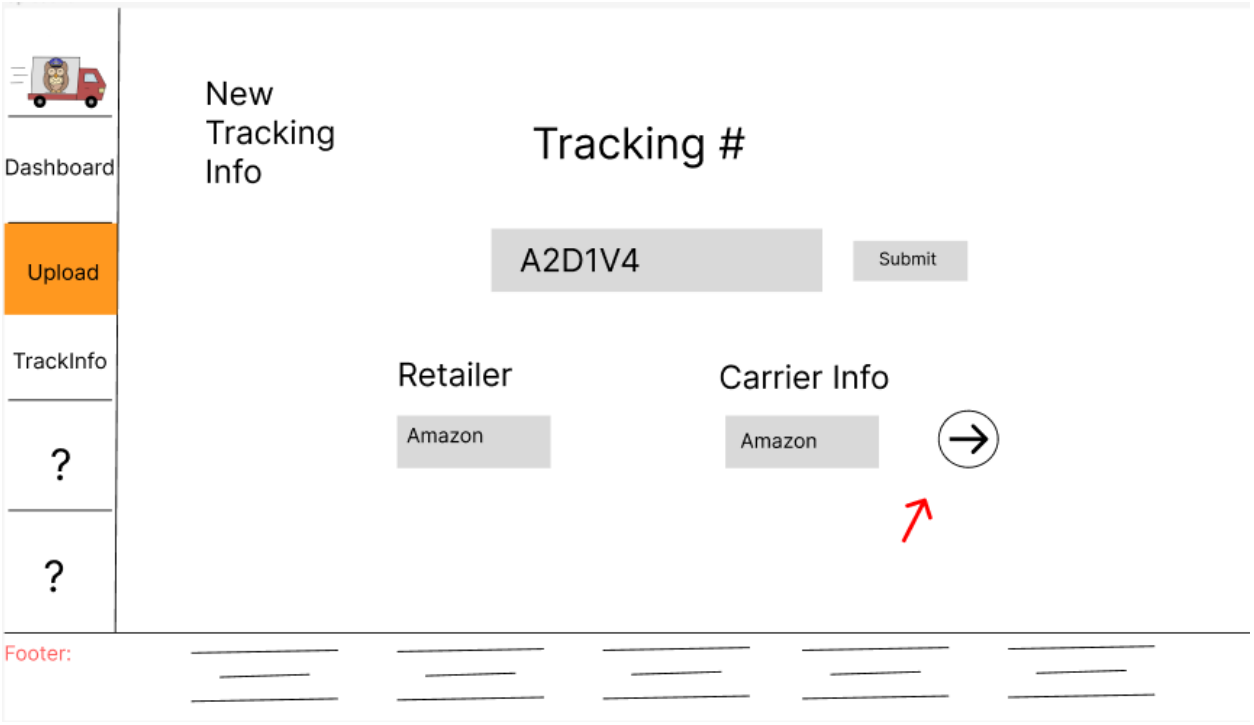
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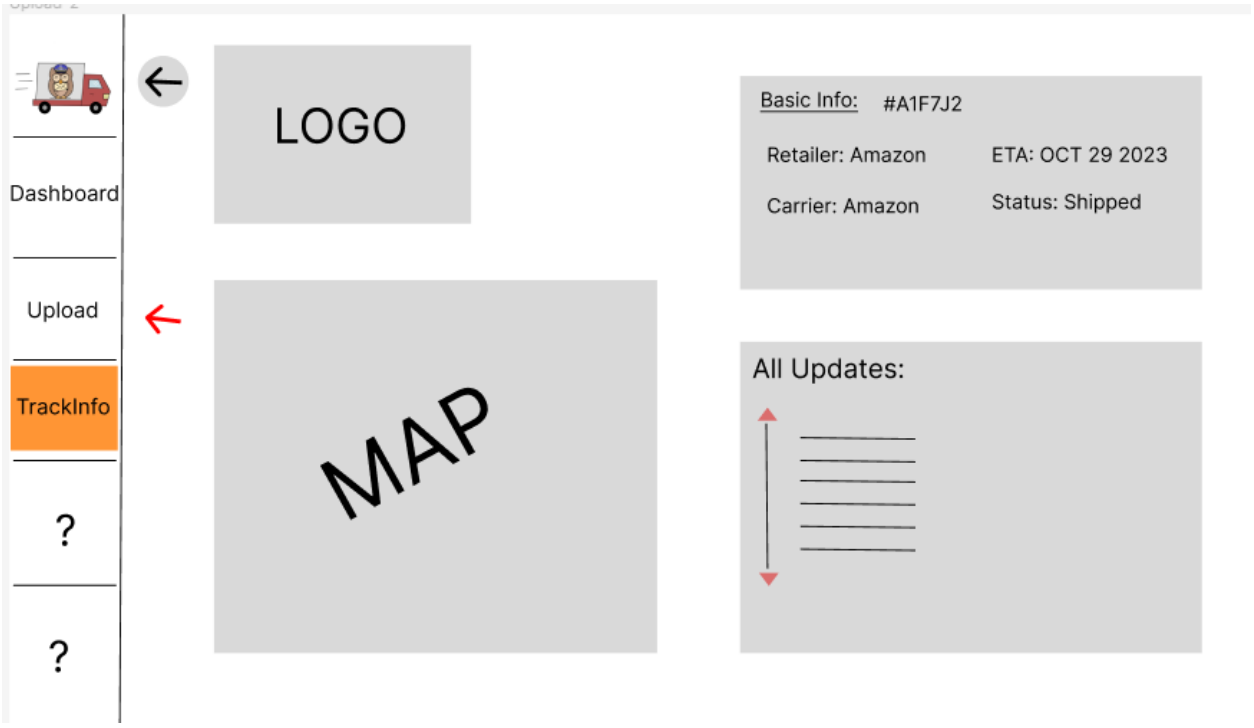
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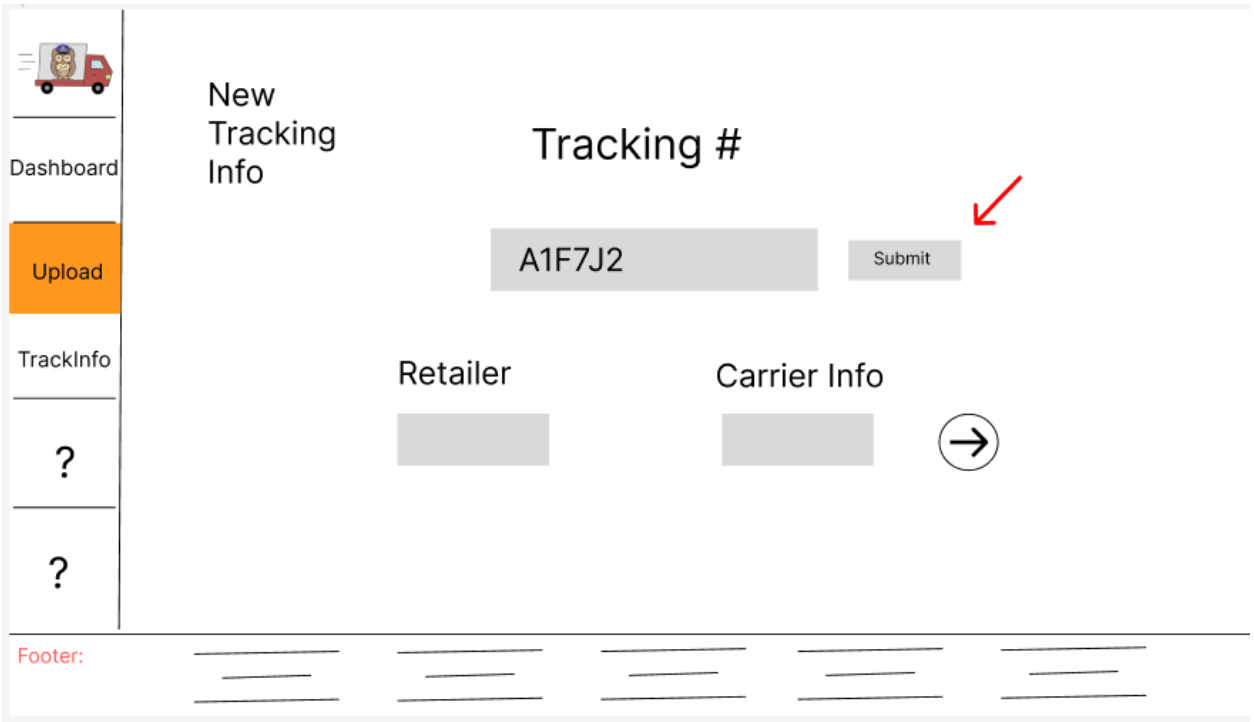
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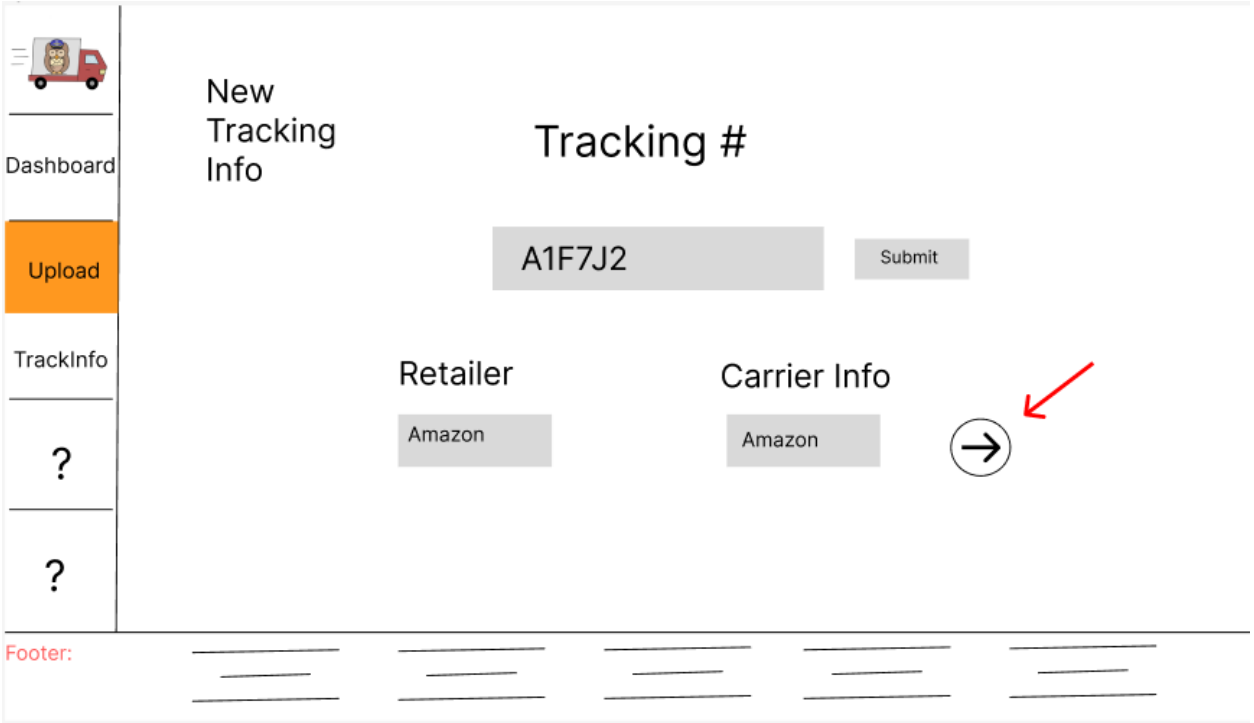
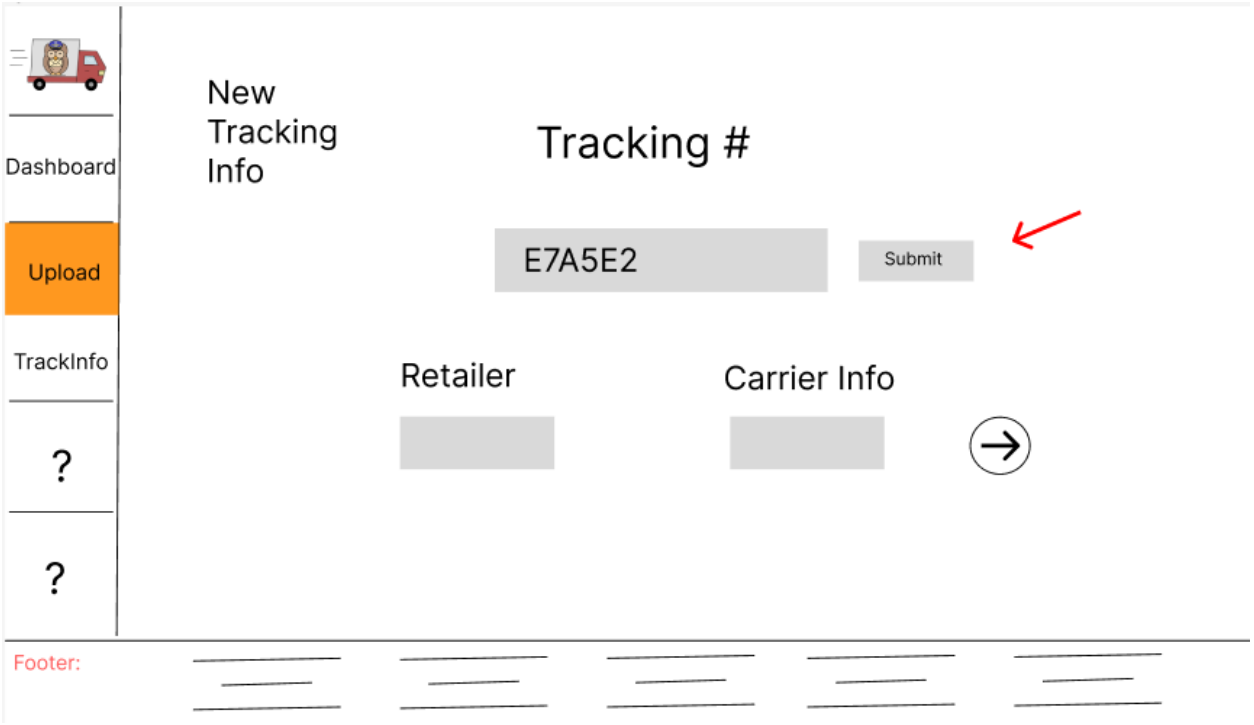

Dashboard
Upload
TrackInfo
?
?
New Tracking Info
Tracking #
A1F7J2
Submit
Retailer
Amazon
Carrier Info
Amazon
Footer:

LOGO
Basic Info: #A1F7J2
Retailer: Amazon
ETA: OCT 30 2023
Carrier: Amazon
Status: Shipped
Dashboard
Upload
TrackInfo
?
?
MAP
All Updates: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Upload
TrackInfo
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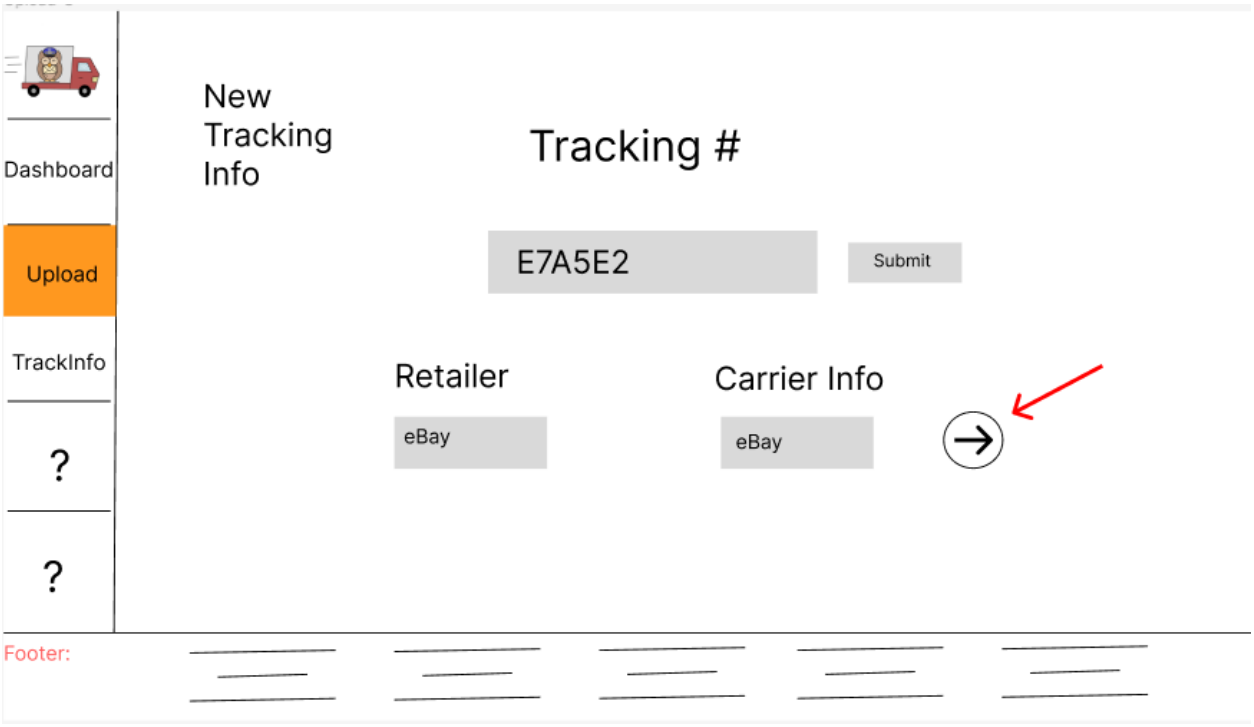
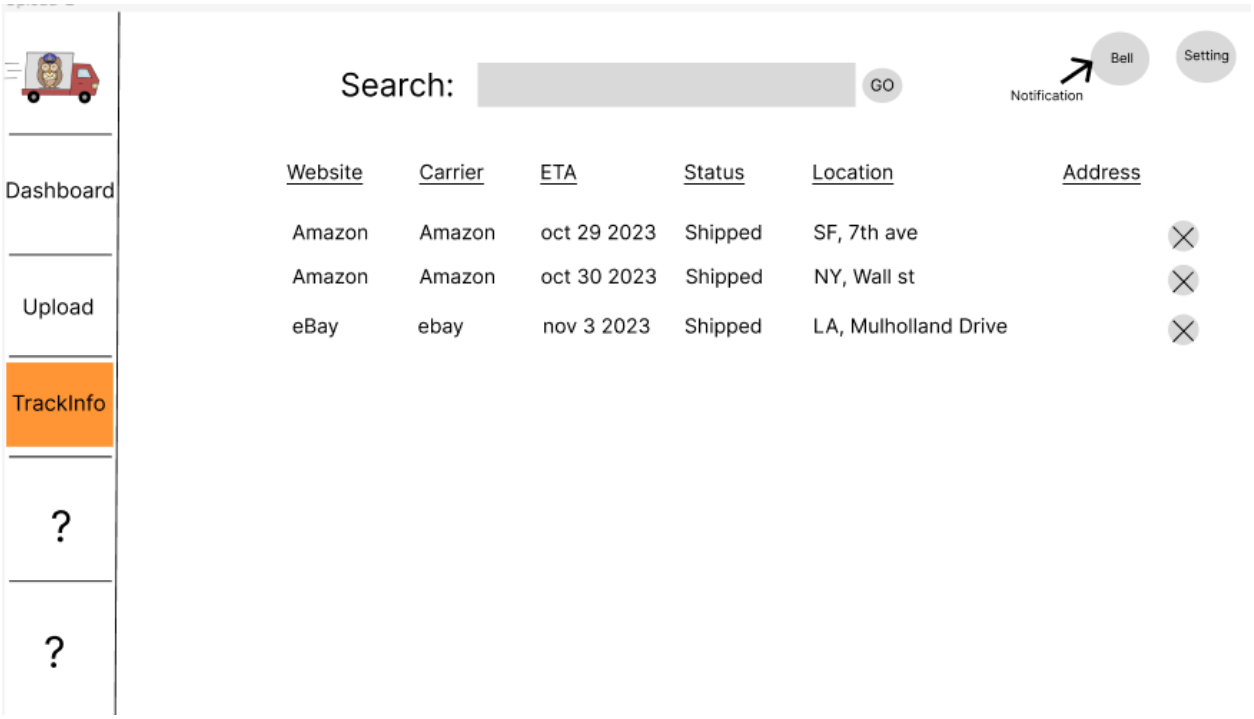
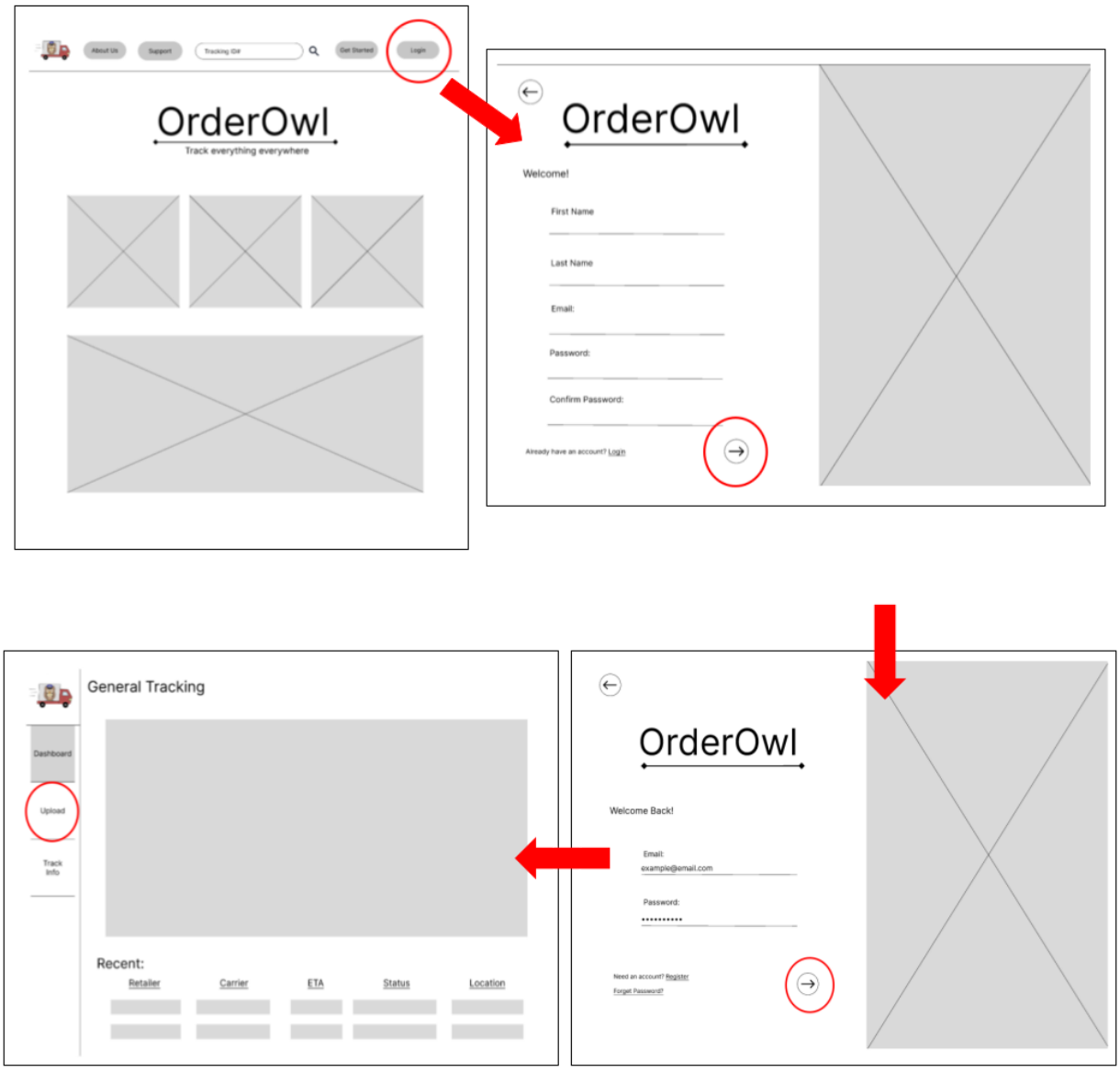
New Tracking Info
Tracking #
E7A5E2
Submit
Retailer
Carrier Info
Footer:

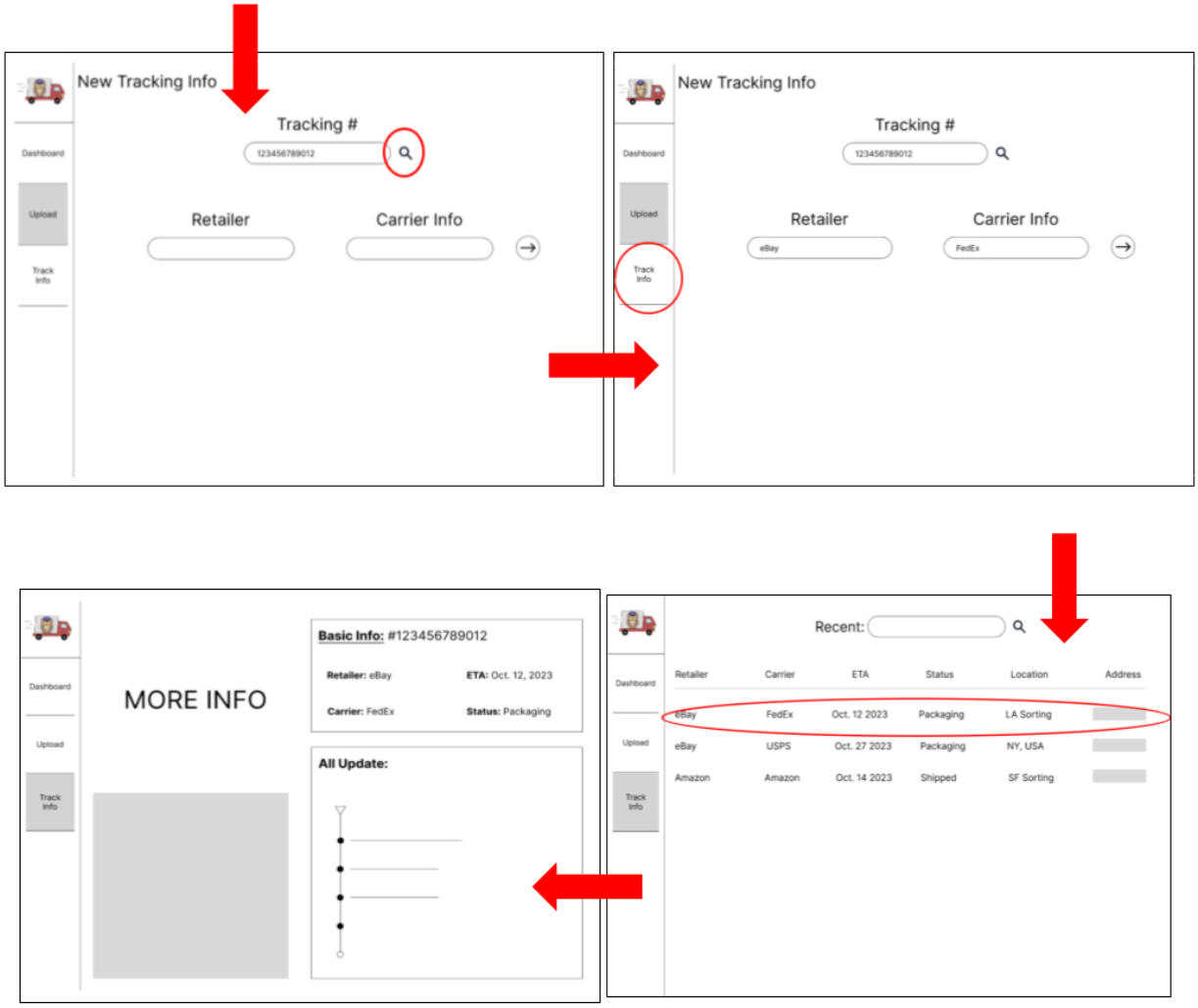

Dashboard
Upload
TrackInfo
?
?
New Tracking Info
Tracking #
E7A5E2
Submit
Retailer
eBay
Carrier Info
eBay
Footer:

Dashboard
Upload
TrackInfo
?
?
LOGO
MAP
Basic Info: #E7A5E2
Retailer: eBay
ETA: NOV 3 2023
Carrier: eBay
Status: Shipped
All Updates:

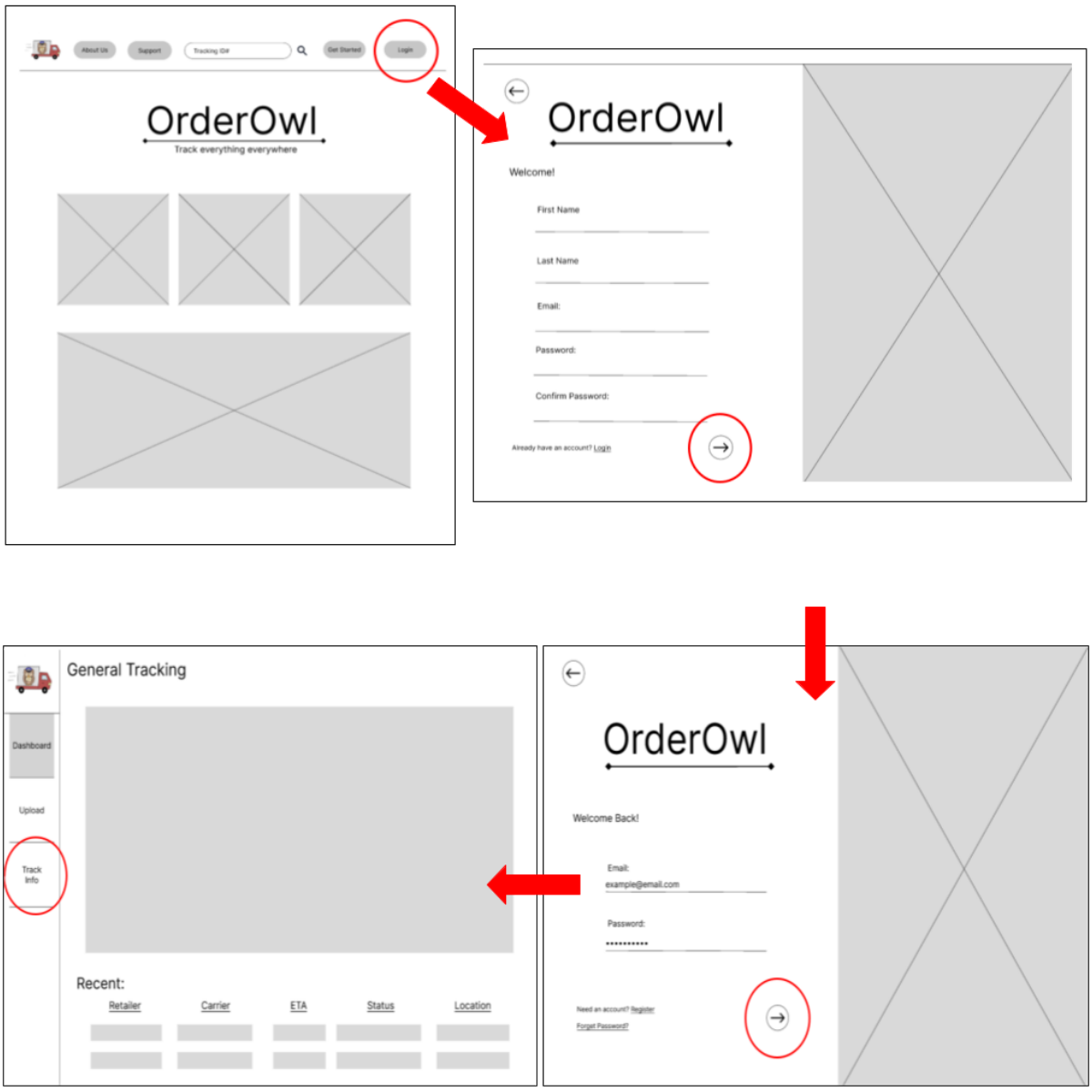

Search:
GO
Bell
Setting
Notification
Dashboard
Upload
TrackInfo
?
?
Website
Carrier
ETA
Status
Location
Address
Amazon
Amazon
oct 29 2023
Shipped
SF, 7th ave
Amazon
Amazon
oct 30 2023
Shipped
NY, Wall st
eBay
ebay
nov 3 2023
Shipped
LA, Mulholland Drive

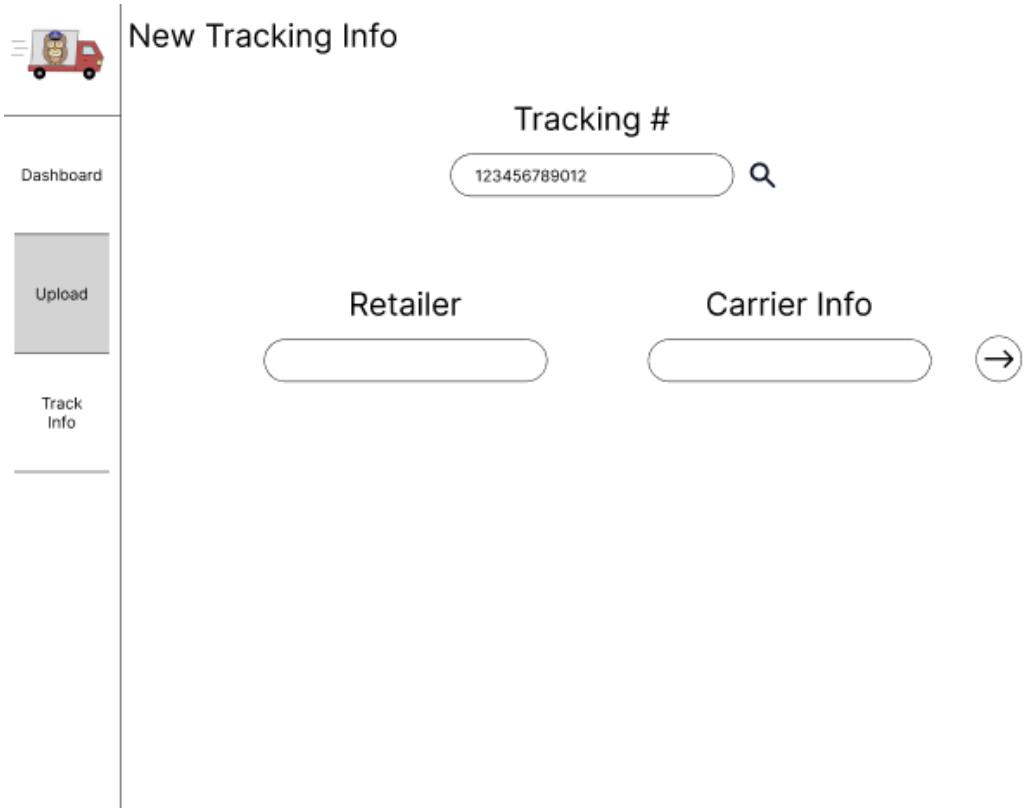
Use Case 5:


About Us
Support
Tracking ID#
Get Started
Login
OrderOwl
Track everything everywhere
OrderOwl
Welcome!
First Name
Last Name
Email:
Password:
Confirm Password:
Already have an account? Login
General Tracking
Dashboard
Upload
Track Info
Recent:
Retailer
Carrier
ETA
Status
Location
OrderOwl
Welcome Back!
Email:
example@email.com
Password:
Need an account? Register
Forget Password?


New Tracking Info
Tracking #
123456789012
Retailer
Carrier Info
Dashboard
Upload
Track Info
New Tracking Info
Tracking #
123456789012
Retailer
eBay
Carrier Info
FedEx
Dashboard
Upload
Track Info
Recent:
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting
Dashboard
Upload
Track Info
MORE INFO
Basic Info: #123456789012
Retailer: eBay
ETA: Oct. 12, 2023
Carrier: FedEx
Status: Packaging
All Update:
Dashboard
Upload
Track Info

Use Case 6:


About Us
Support
Tracking ID#
Get Started
Login
OrderOwl
Track everything everywhere
OrderOwl
Welcome!
First Name
Last Name
Email:
Password:
Confirm Password:
Already have an account? Login
General Tracking
Dashboard
Upload
Track Info
Recent:
Retailer
Carrier
ETA
Status
Location
OrderOwl
Welcome Back!
Email:
example@email.com
Password:
Need an account? Register
Forget Password?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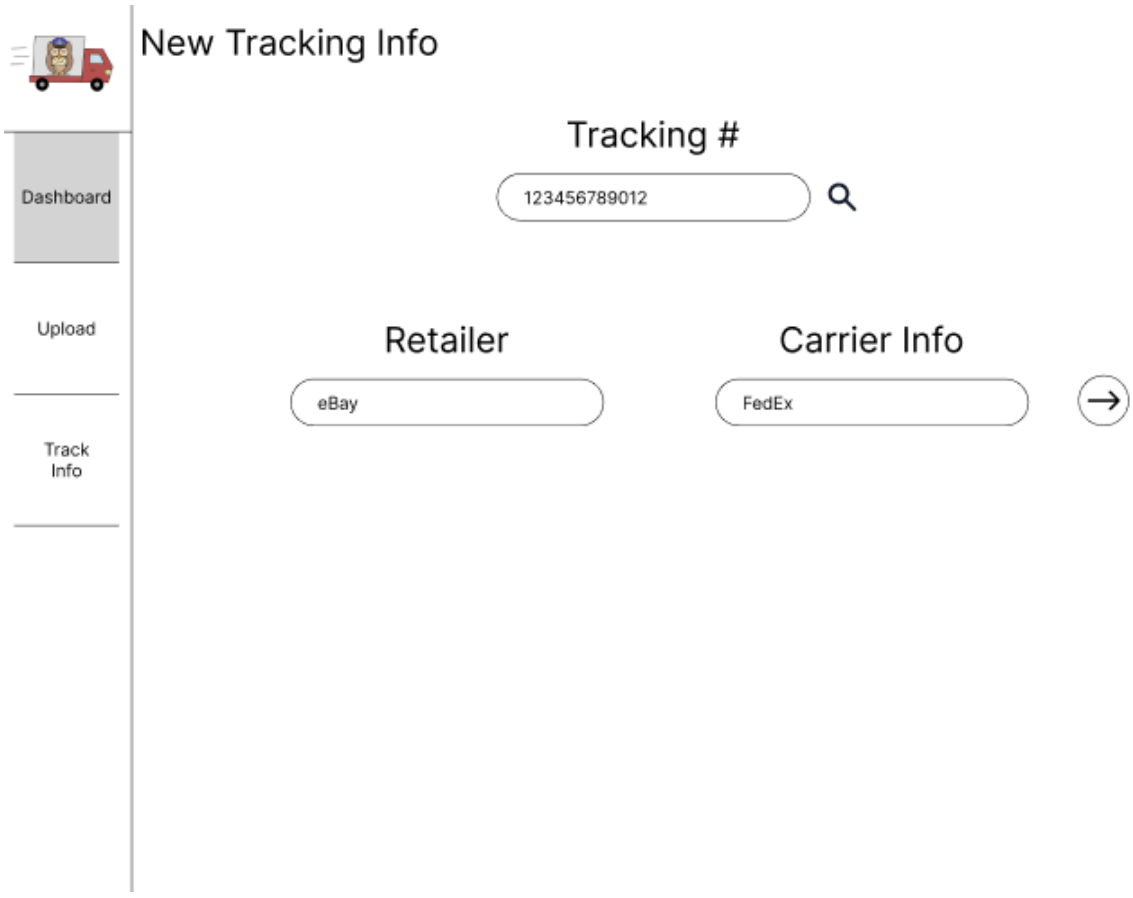
Track Info
Tracking #
123456789012
Retailer
Carrier Info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Tracking #
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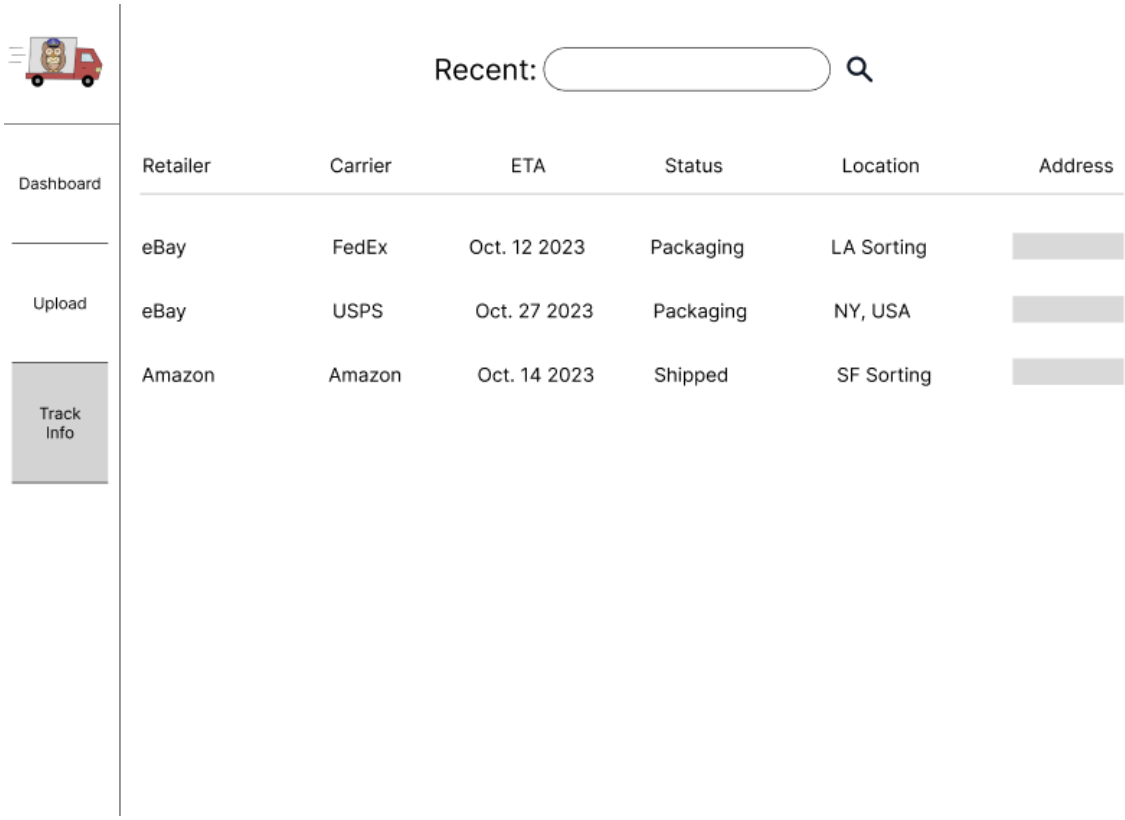
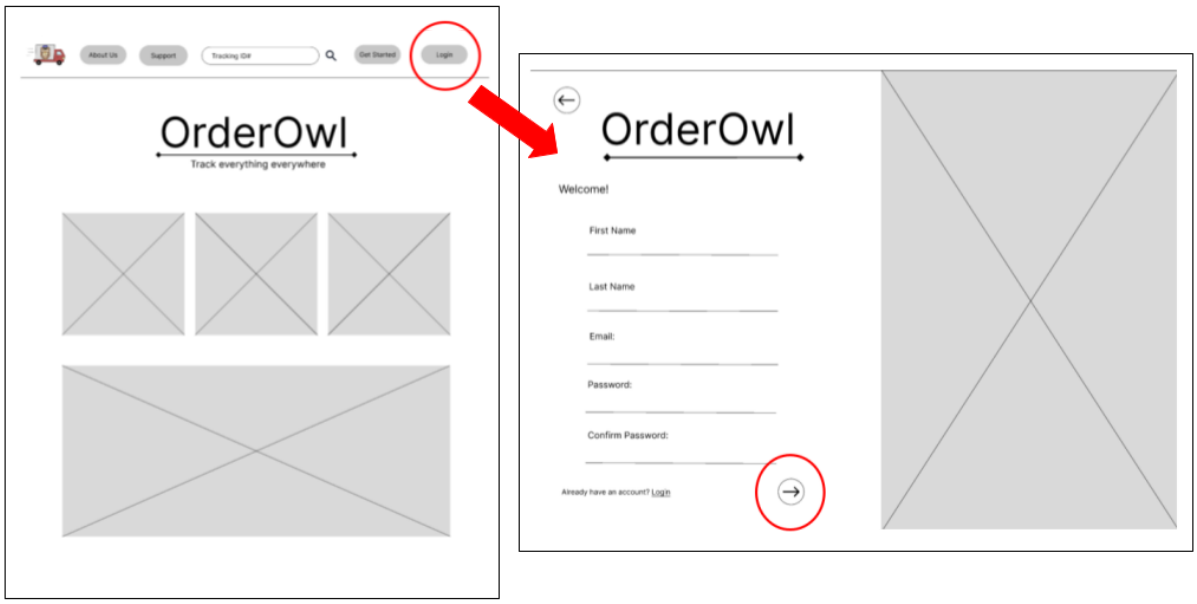
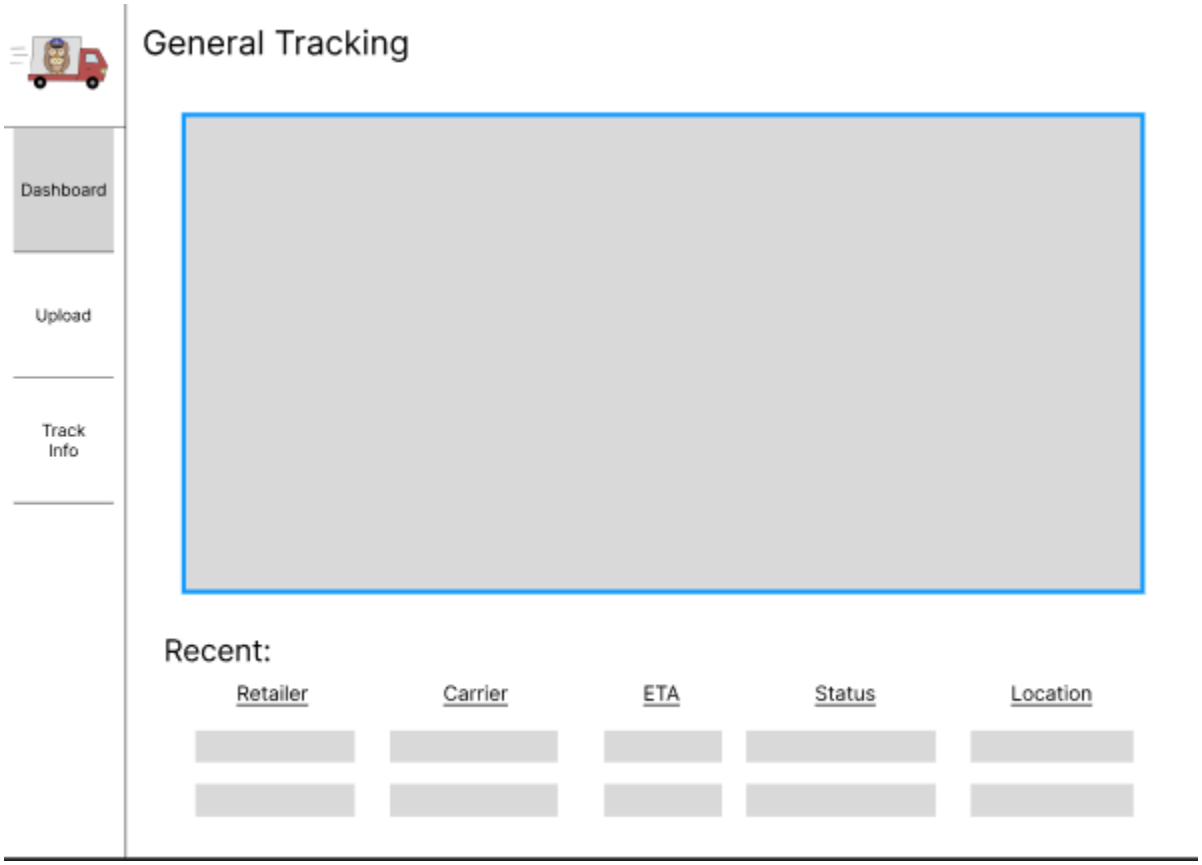
Retailer
eBay
Carrier Info
FedEx

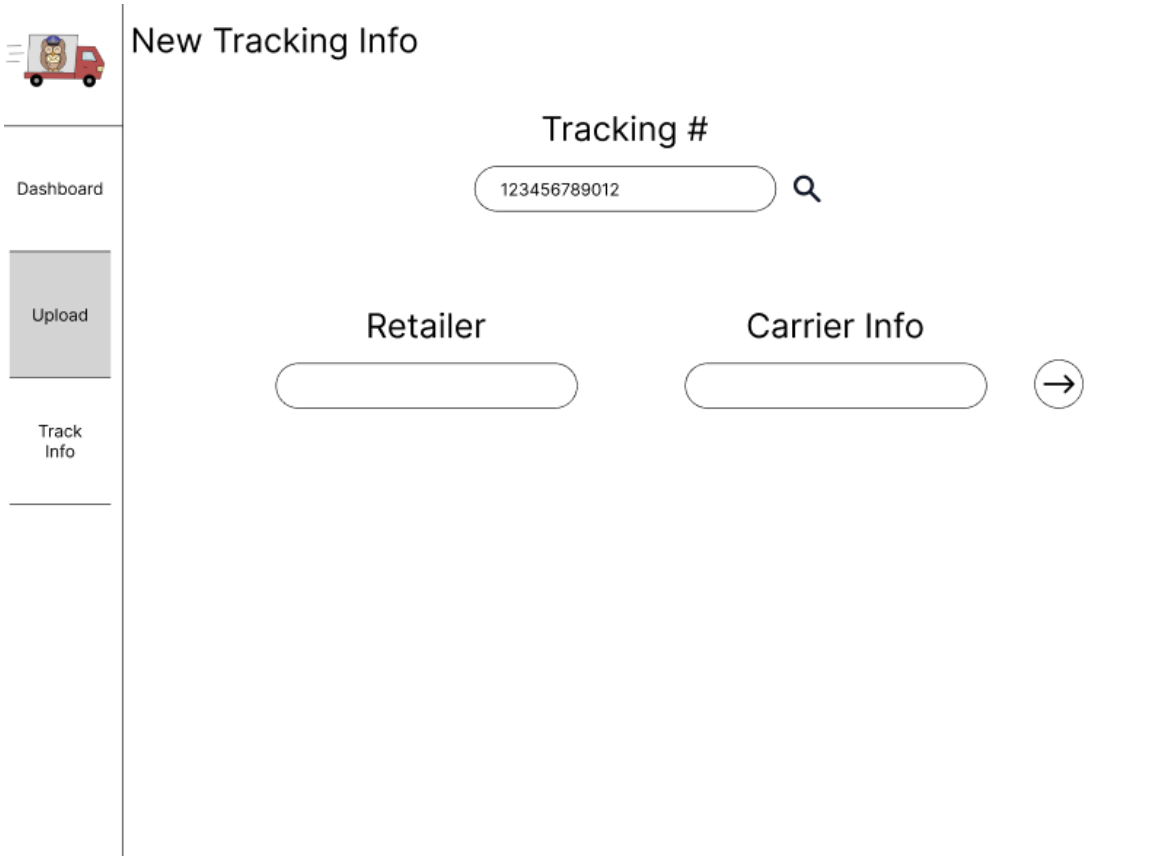

Recent:
Dashboard
Upload
Track Info
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting

Dashboard
Upload
Track Info
MORE INFO
Basic Info: #123456789012
Retailer: eBay
ETA: Oct. 12, 2023
Carrier: FedEx
Status: Packaging
All Update:

Use Case 7:


OrderOwl
Track everything everywhere
OrderOwl
Welcome!
First Name
Last Name
Email:
Password:
Confirm Password:
Already have an account? Login


General Tracking
Dashboard
Upload
Track Info
Recent:
Retailer
Carrier
ETA
Status
Location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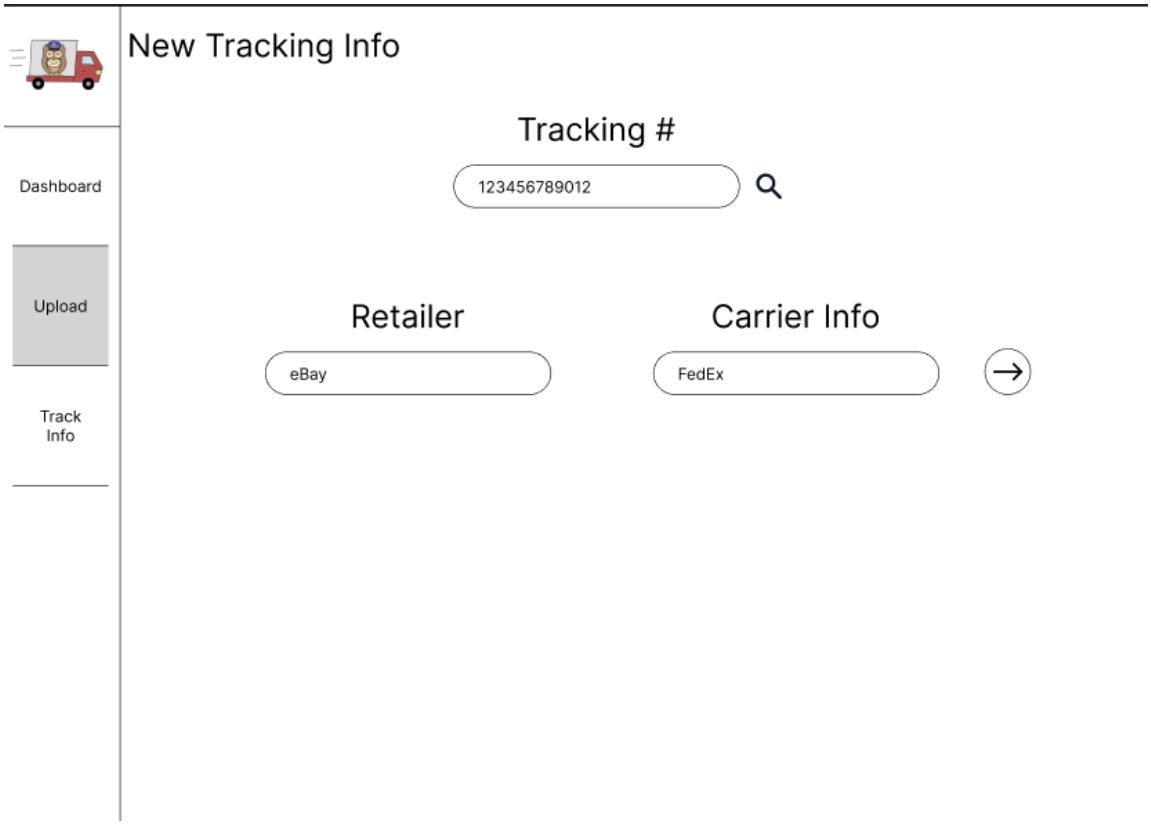
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Retailer
eBay
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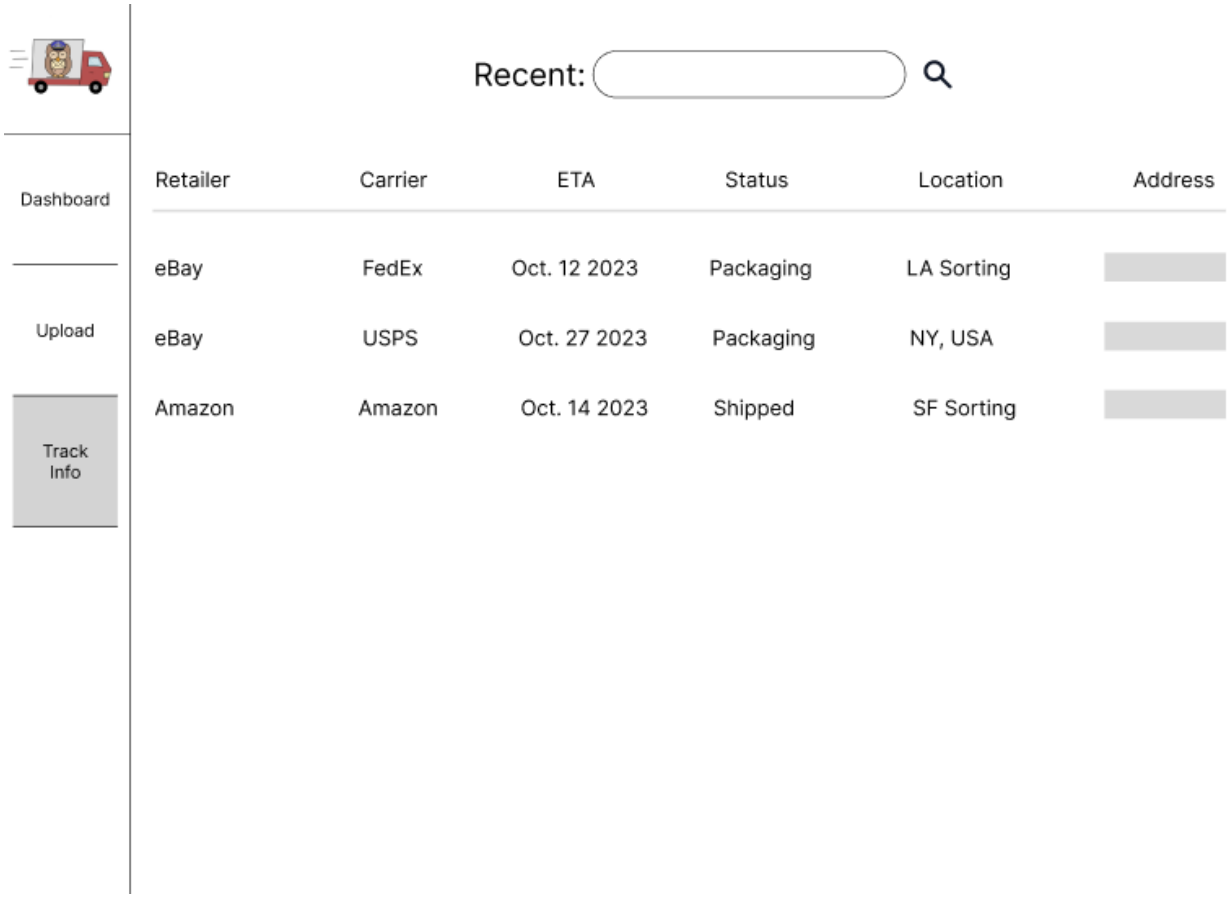
FedEx


Recent:
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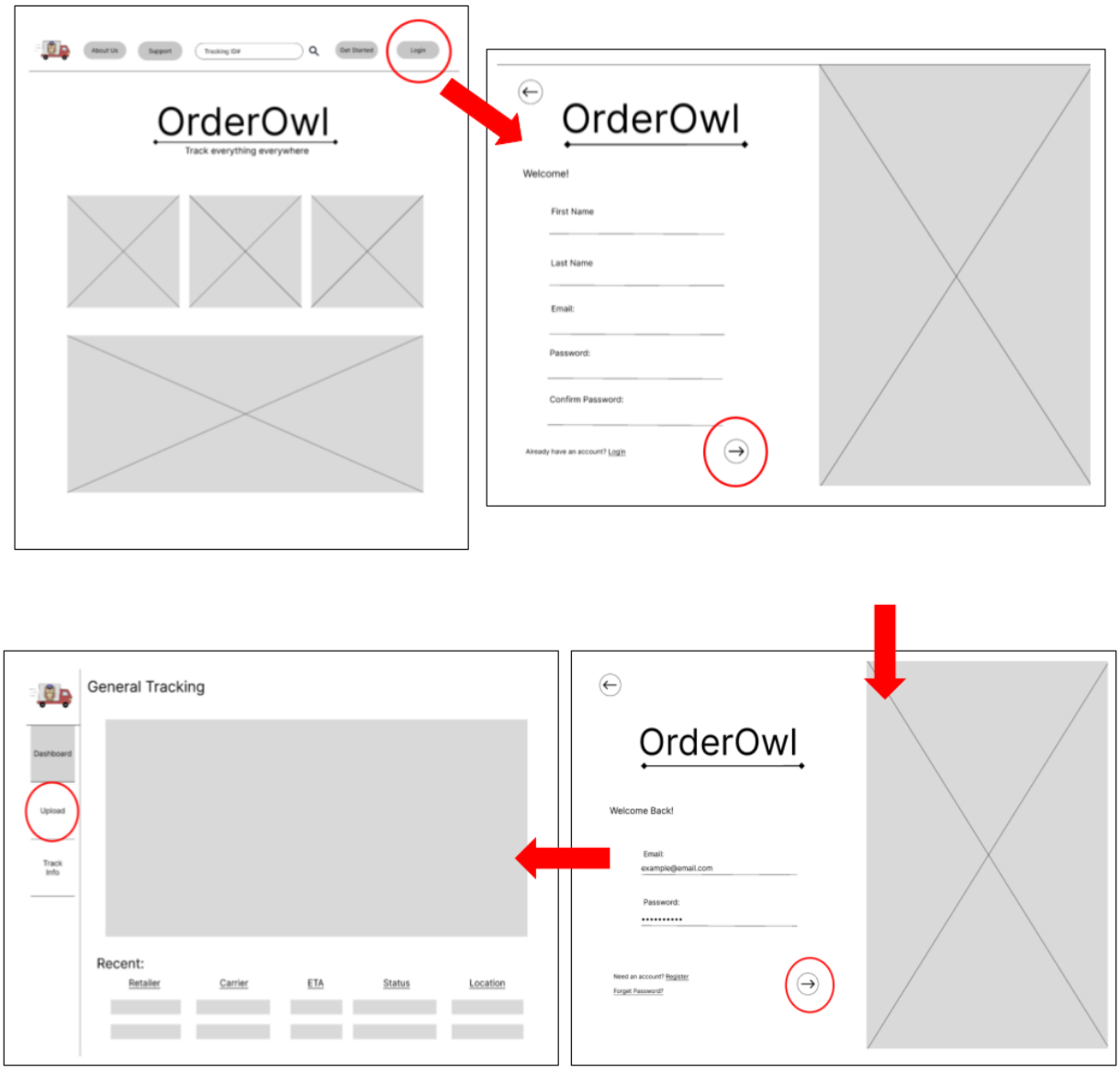
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting

Dashboard
Upload
Track Info
MORE INFO
Basic Info: #123456789012
Retailer: eBay
ETA: Oct. 12, 2023
Carrier: FedEx
Status: Packaging
All Update:

Use Case 8:


About Us
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Last Name
Email:
Password:
Confirm Password:
Already have an account? Login
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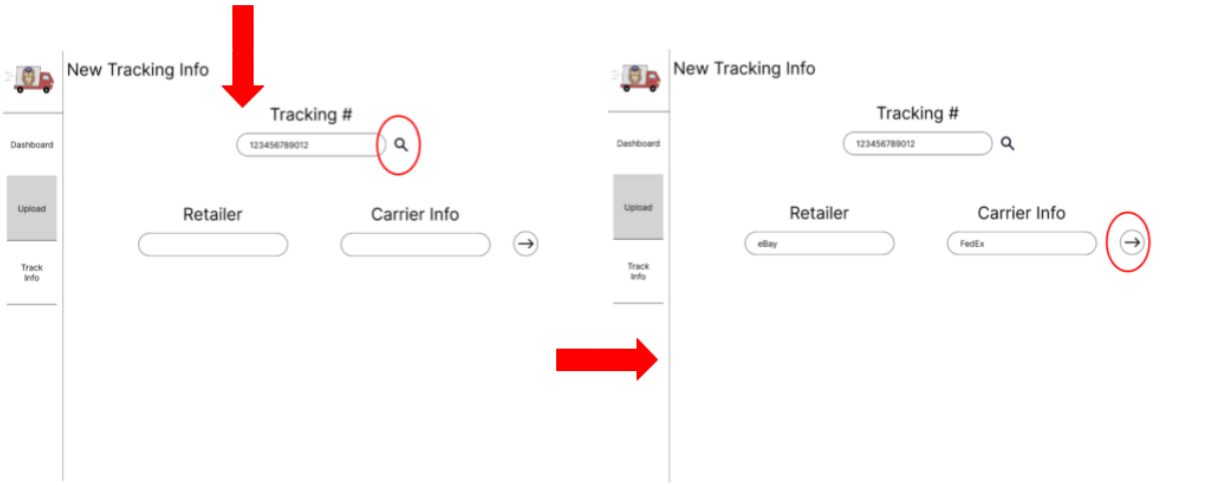
Recent:
Retailer
Carrier
ETA
Status
Location
OrderOwl
Welcome Back!
Email:
example@email.com
Password:
Need an account? Register
Forget Password?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Tracking #
123456789012
Retailer
Carrier Info
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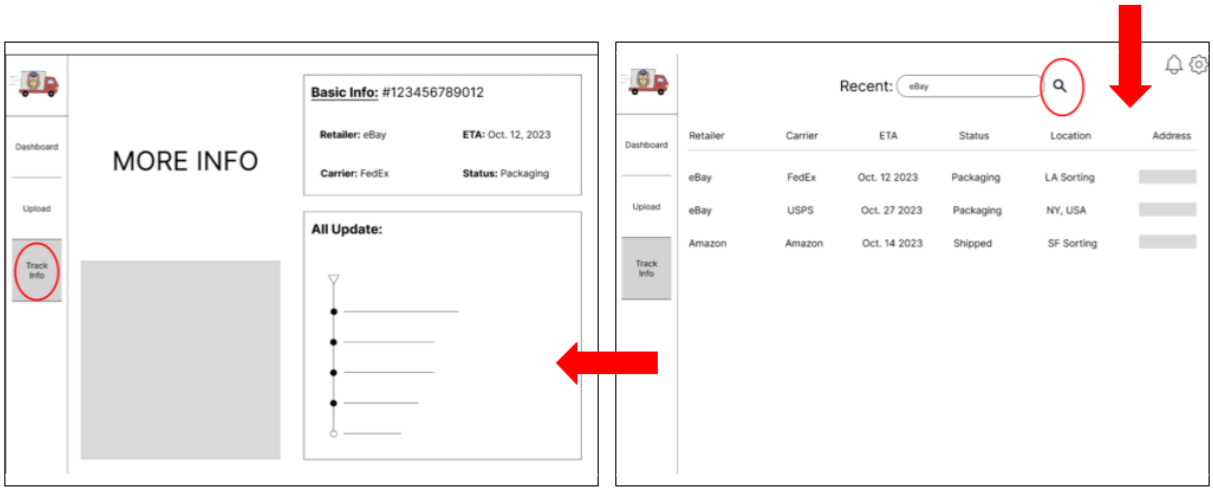
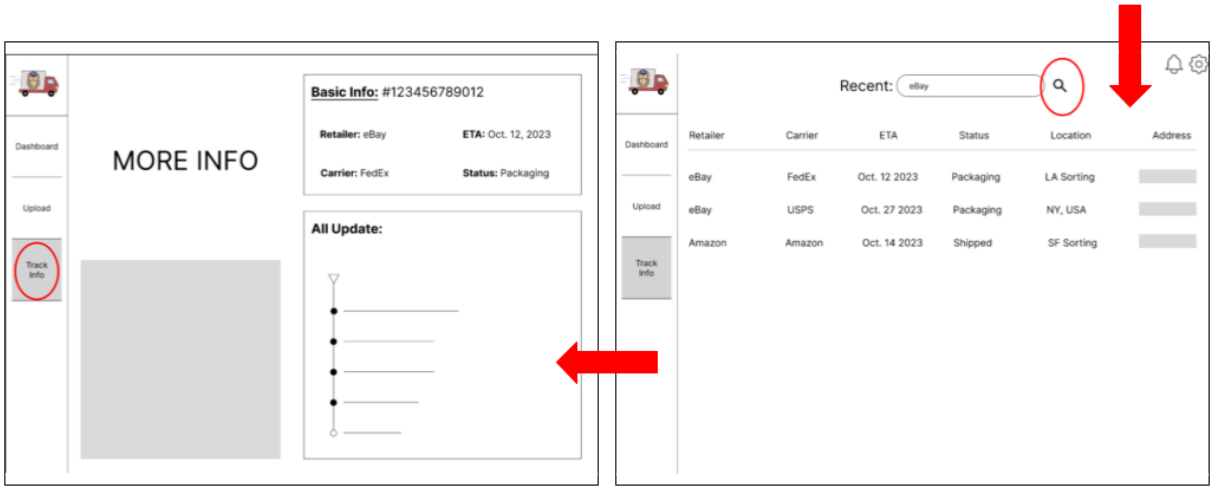
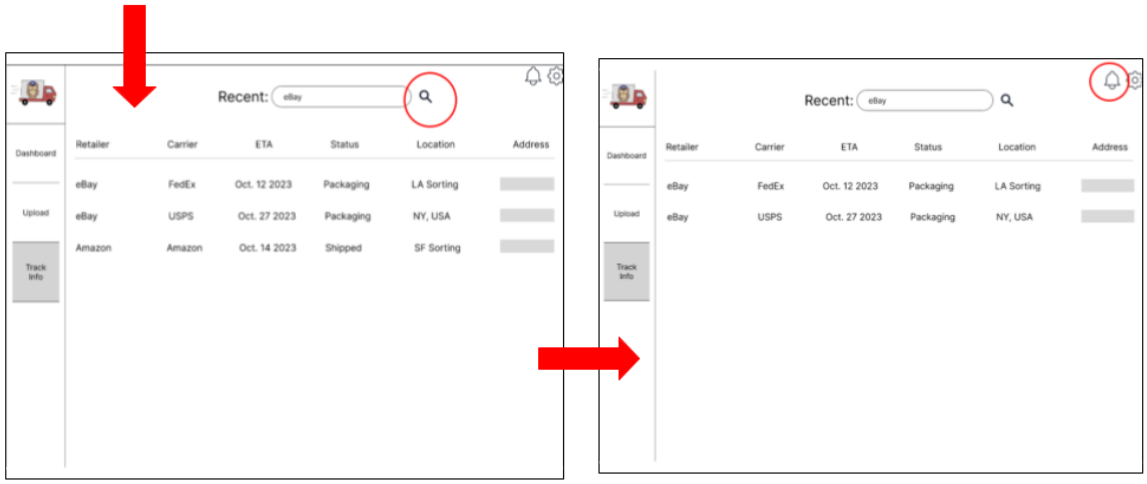
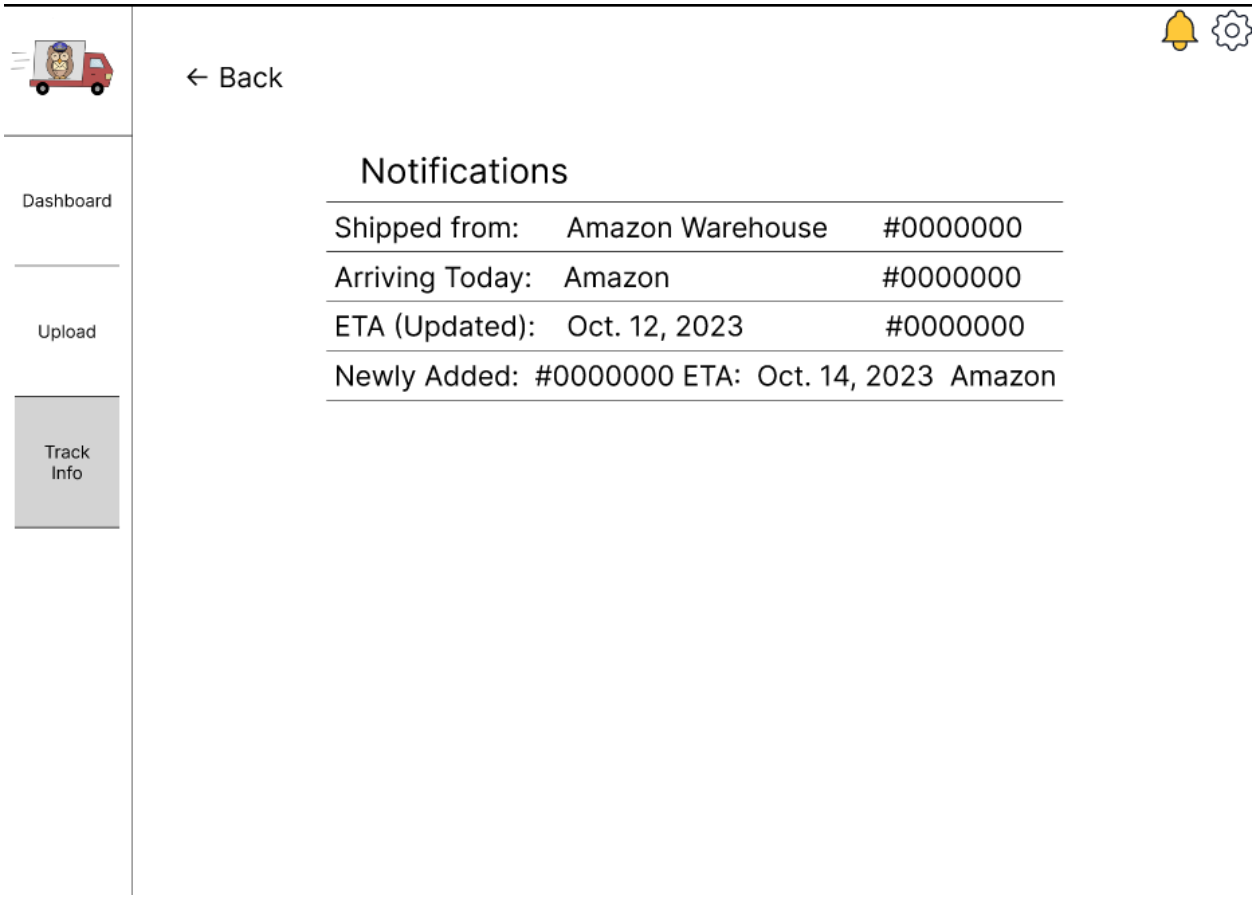
eBay
Carrier Info
FedEx
Dashboard
Upload
Track Info

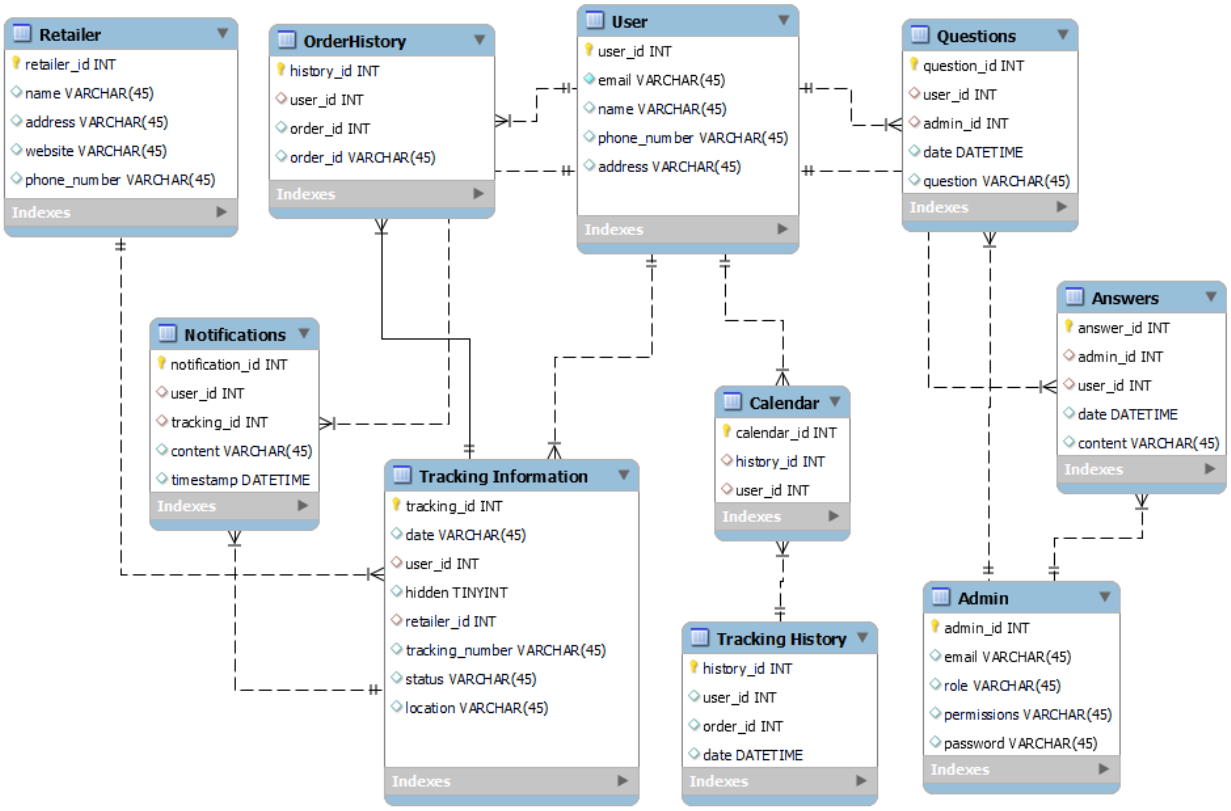

MORE INFO
Basic Info: #123456789012
Retailer: eBay
ETA: Oct. 12, 2023
Carrier: FedEx
Status: Packaging
All Update:
Dashboard
Upload
Track Info
Recent:
eBay
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting


MORE INFO
Basic Info: #123456789012
Retailer: eBay
ETA: Oct. 12, 2023
Carrier: FedEx
Status: Packaging
All Update:
Dashboard
Upload
Track Info
Recent:
eBay
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting

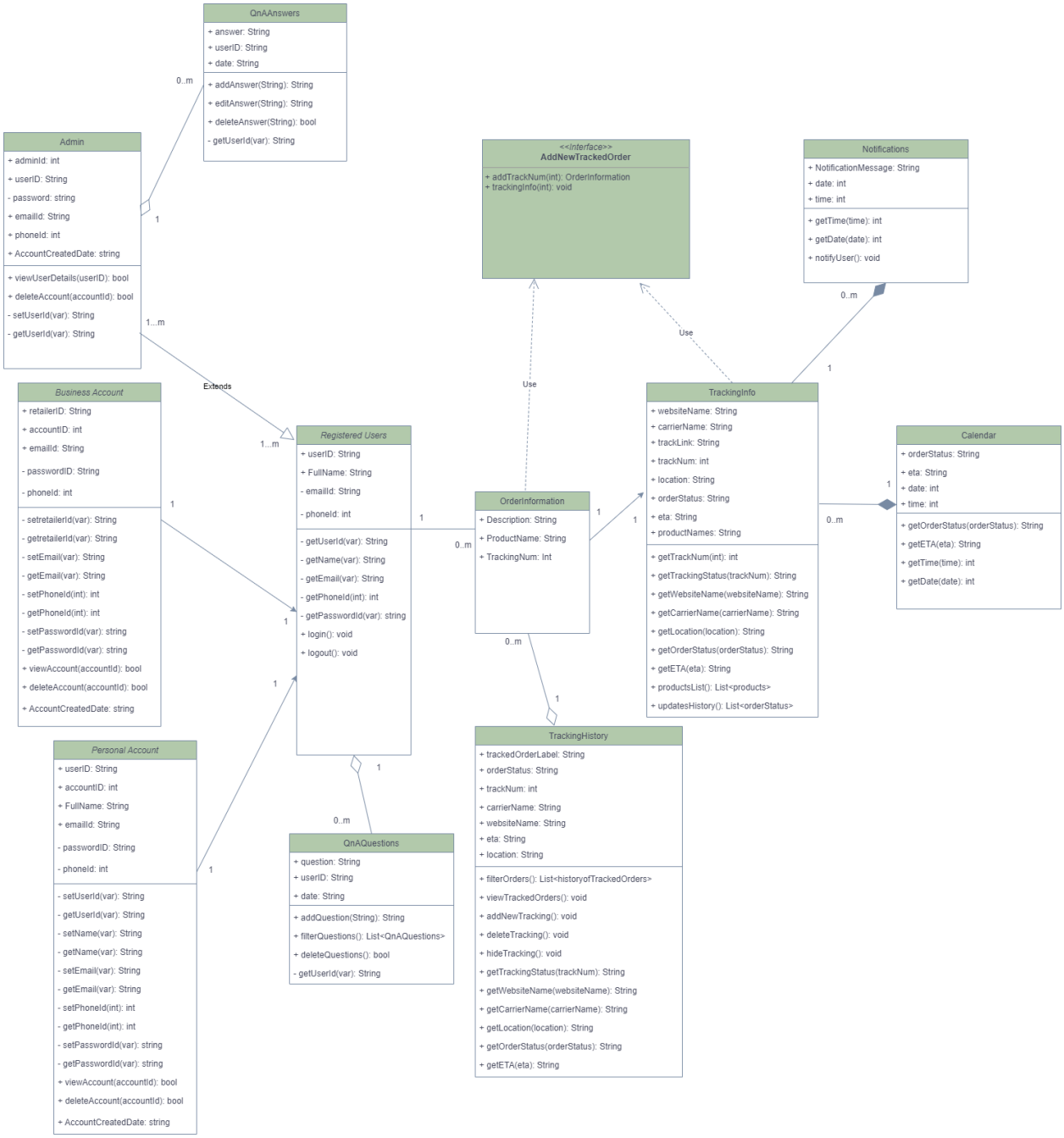

Recent:
Dashboard
Upload
Track Info
Retailer
Carrier
ETA
Status
Location
Address
eBay
FedEx
Oct. 12 2023
Packaging
LA Sorting
eBay
USPS
Oct. 27 2023
Packaging
NY, USA
Amazon
Amazon
Oct. 14 2023
Shipped
SF Sorting

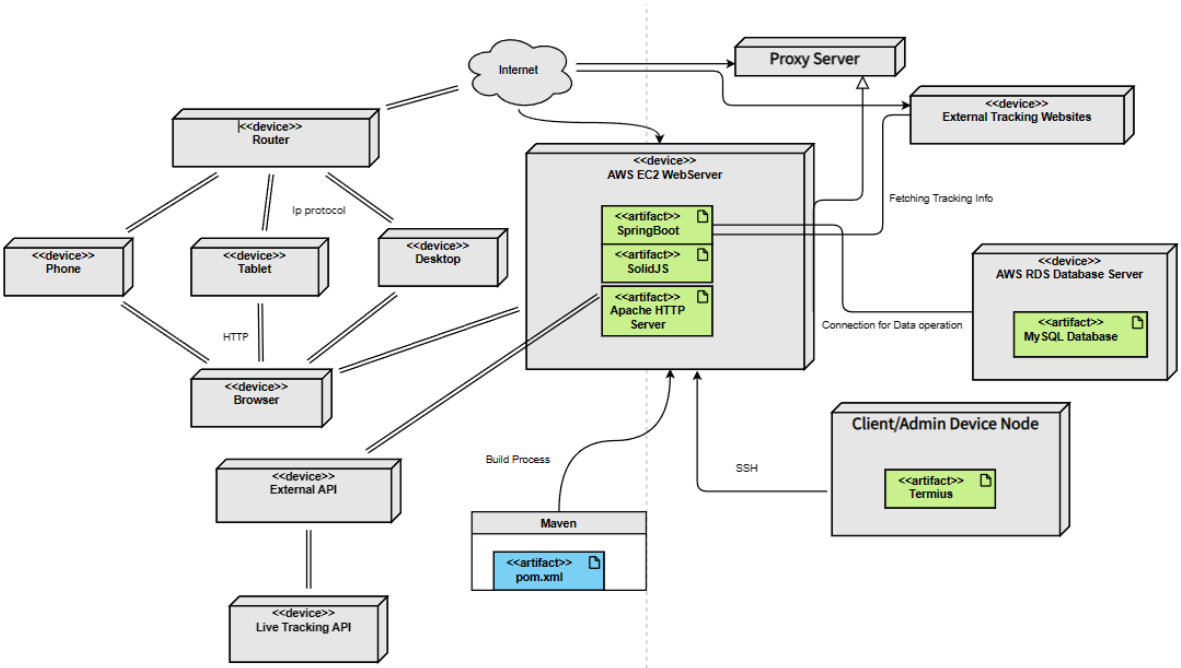

← Back
Dashboard
Upload
Track Info
Notifications
Shipped from: Amazon Warehouse #0000000
Arriving Today: Amazon #0000000
ETA (Updated): Oct. 12, 2023 #0000000
Newly Added: #0000000 ETA: Oct. 14, 2023 Amazon

IV. High Level Database Architecture and Organization:



V. High Level Diagrams:

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Router
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External Tracking Websites
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AWS EC2 WebServer
<<artifact>>
SpringBoot
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SolidJS
<<artifact>>
Apache HTTP
Server
Fetching Tracking Info
Ip protocol
<<device>>
Phone
<<device>>
Tablet
<<device>>
Desktop
<<device>>
AWS RDS Database Server
<<artifact>>
MySQL Database
Connection for Data operation
HTTP
<<device>>
Browser
Client/Admin Device Node
<<artifact>>
Termius
SSH
Build Process
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External API
Maven
<<artifact>>
pom.xml
<<device>>
Live Tracking API

VI. Detailed List of Contributions:

Team Lead:

Team Members	Contribution	Score
Belu Velazco	● Revised section 6 from M2V1 to M2V2 ● In charge of section 5 on M3 ● Took notes from use case 8 to report back to team and notify what our application needs ● Actively participated and communicated ● Hosted and led all team meetings ● Created report summaries for all weekly meetings ● Set internal deadlines ● Checked in with the team and reminded about deadlines ● Revised and completed section 2 for M2V2 and completed M3 ● Held and called for emergency meeting when needed ● Attended and signed up for office hours for the team ● Assigned tasks to team members ● Gave feedback for the entire M2V2 documentation and checked with each section requirements. ● Edited and updated cover page and table of contents page for M3 documentation. ● Worked on the	8

	notification center for the front-end. ● Edited and formatted section 3 wireframes ● Set up a submission email.	
David Lien	● Revised part of section 4 from M2V1 to M2V2 ● In-charge of section 4 on M3 ● Took notes from use case 7 to report back to team and notify what our application needs ● Actively participated and communicated ● Joined and participated in all weekly meetings except for 1, but communicated that they couldn't come ahead of time ● Joined and participated in all class meetings ● Actively participated and communicated during an emergency meeting. ● Worked on the back-end of the prototype.	9
Komaldeep Kaur	● Worked on the revisions for section 2 for M2V2 ● Worked on section 2 for M3 ● Worked on mockups/storyboards for use cases 1-4 for section 3 from M2V1 to M2V2 ● Took notes from use case 3 and 4 to report back to team and notify what our application needs ● Actively participated and communicated	7

	• Joined and participated in all weekly meetings • Joined and participated in all class meetings except for 1, but communicated that they couldn't come ahead of time • Actively participated and communicated during an emergency meeting. • Edited MS and M2V2 • Worked on the front-end of the prototype. • Formatted documents.	
Jimmy Pan	• Worked on mockups/storyboards for use cases 5-8 for section 3 from M2V1 to M2V2 • Took notes from use case 5 to report back to team and notify what our application needs • In charge of section 3 use cases 5-8 on M3 • Participated • Joined and participated in all in-class and weekly team meetings • Actively participated and communicated during an emergency meeting. • Worked on the front-end of the prototype regarding formatting, the settings page, guest popup, registration validation, linked tracing with backend, and other components.	7
Mankit Yeung	• Revised section 7 from M2V1 to M2V2 • In charge of section 3 use cases 1-4 on M3	9

	• Took notes from use case 1 to report back to team and notify what our application needs • Actively participated and communicated • Joined and participated in all weekly team and in-class meetings • Actively participated and communicated during an emergency meeting. • Met all internal deadlines • Worked on the front-end of the prototype. • Worked on section 5 on M3 • Formatted MS and M2V2 • Helped set up wireframes for section 3.	
Luis Ramirez	• Revised section 1 from M2V1 to M2V2 • In charge of section 1 on M3 • Took notes from use case 6 to report back to team and notify what our application needs • Actively participated and communicated • Joined and participated in all weekly team and in-class meetings • Actively participated and communicated during an emergency meeting. • Met all internal deadlines. • Worked on the back-end of the prototype. • Tested all use cases.	9

Tin Nguyen	• Revised parts of section 4 and 7 from M2V1 to M2V2 • Took notes from use case 2 to report back to team and notify what our application needs • Actively participated and communicated • Joined and participated in all class meetings • Actively participated and communicated during an emergency meeting. • Worked on the back-end of the prototype. • Worked on section 5 on M3 • In charge of section 4 on M3	9