

## Overview:

The client used to breed live animals for recreation. It had led to his launching a company that specialized in shipping live animals securely, and on time. It had meant a world of convenience for animal breeders, large and small, across the USA who could ship live animals at affordable costs. The client sensed this as an opportunity. Stepping aside from animal breeding, he set his focus on improving the quality of the service and becoming a credible and established source of information related to the live-animal shipping. The need of the hour was to get an online solution built in order to bring about more finesse in the shipping process, making it more secure and timely. After analyzing the need, the team@Mindfire offered to develop a dynamic solution using Ruby on Rails.

## Client details:

**Name:** Confidential | **Type:** Transportation & Logistics | **Location:** USA

## Technologies:

Ruby on Rails, PostgreSQL, Apache, Redis, Bootstrap

## Project Description:

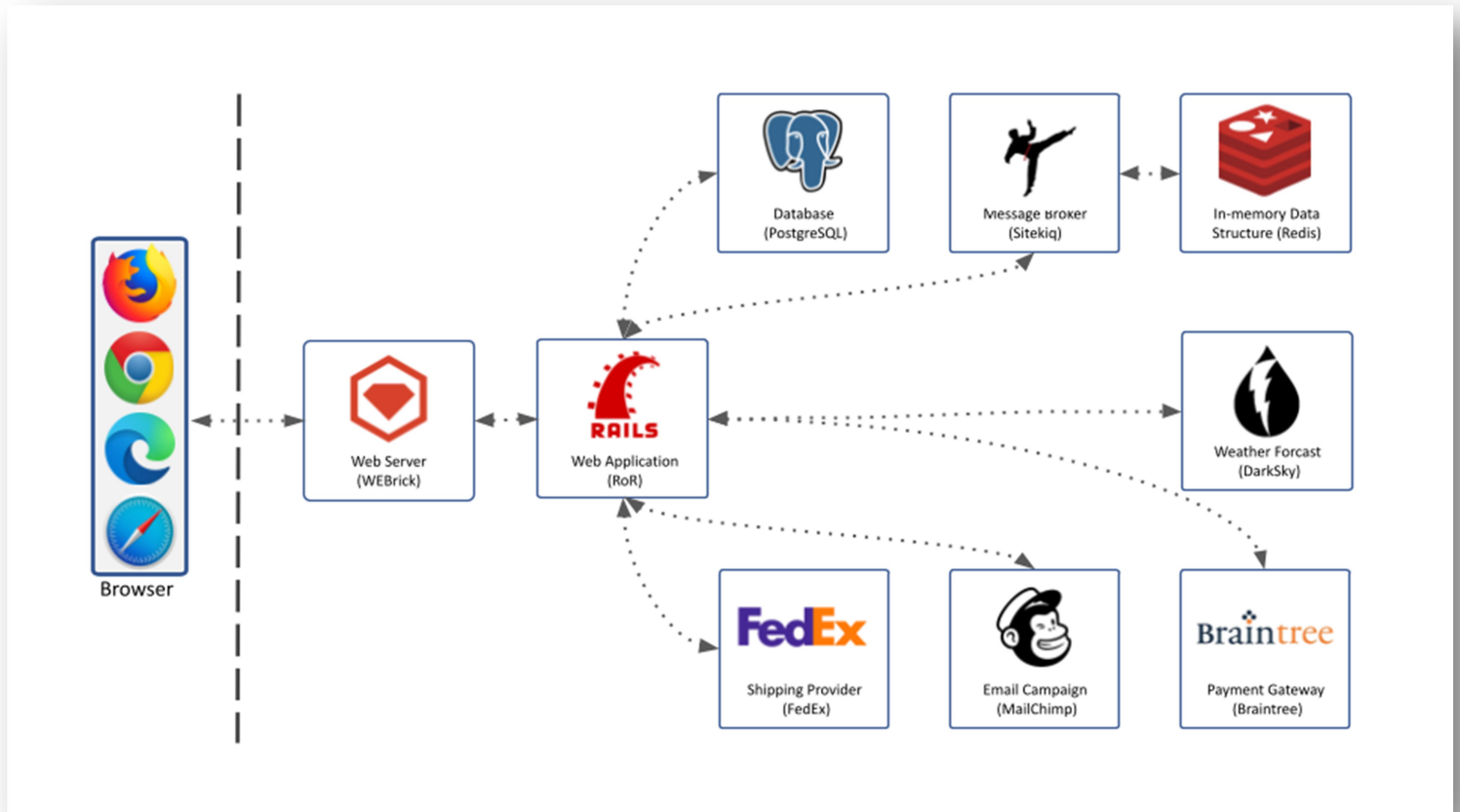
It was critical to have an intuitive, user-friendly UI/UX which would ease the process of booking for the shipments. This is a critical activity and has a direct bearing on the security and on-time transportation of live animals in healthy conditions. This is facilitated by following a sequence of activities that result in generating the right shipping label. The intent is to elicit the exact information required from the customers, and helping them at every stage with all the necessary aids. Some of the salient features are as follows:

- There are “pro tips” and “general information” about shipping made available near every input field to ensure that even a first time customer can book a label. These pro

tips are dynamic and can be changed through a content management system, which make it easy to keep them updated

- The weather at the source and destination can play a crucial role in the health of cold-blooded live animals. This information is required to decide on the need of have heat or cold packs. DarkSky weather API is integrated to get 7-day weather information of desired locations to ensure the right measures are undertaken.
- Shipping items the right way requires a certain amount of skill and knowledge. But, shipping live animals requires an additional quality of finesse. Therefore, there is an exhaustive list of FAQs included covered almost every possible topic related to shipping live animals. There is also a neat search engine to search keywords in order to get access to specific information on the subject.
- Some companies use this app to ship large number of live animals. Therefore, the volume of labels required is quite large for them. This, in turn, makes the process of payment a little cumbersome. In order to overcome this, there is a feature of weekly billing. Using it, customers can book labels in bulk without paying. And the cumulative due amount is charged once a week by the administrator.
- Because FedEx provides invoices for thousands of labels at once, it is almost next to impossible to perform a data entry for all of those manually. To handle this, the invoices are parsed to extract the required data and the same is then saved in the database. All discrepancies related to the dimensions of packaging, expected vs real, are reconciled and those that require additional charges to be levied are identified and mapped to the respective customers

## Architecture:



Screenshots

Book a Shipment

ⓘ Notice: It's Springtime! That means that we're seeing a lot of different temperature ranges which can make shipping a challenge. If you find that your origin and destination temperatures straddle two different temperature categories, please contact us at [info@shipstomemphis.com](mailto:info@shipstomemphis.com) or 303.730.2125 for heat pack and temperature guideline recommendations. We want to ensure the best chance for success on your shipments, and want to make sure your shipments fall within the [FVR](#) shipping parameters in order to be covered for Live Arrival. Remember, heat pack misuse is the #1 cause of DOA's, so please contact us if you have any doubts or concerns.

1) Shipping Details

2) Shipping Methods

3) Order Summary

4) Print Shipping Label & Receipt

Ship From

Ship To

☒ Default Shipping Address

☐ Preferred Shipping Addresses

☐ New Shipping Address

Organization

All Pro Shipping

First Name \*

Jordan

Last Name \*

Peroni

Address \*

3333 Old Hempstead Rd

Apt./Suite

Apartment Suite 100

City

Memphis

State \*

TX, Texas

ZIP Code \*

77060

Phone \*

7777777777

☐ Add to Address Book

☐ Choose from Address Book

☐ Ship to FedEx Facility

☒ Use a new Address

Organization

Gene Patis

First Name \*

Reidley

Last Name \*

Peroni

Address \*

1332 W 90th St

Apt./Suite

Apartment Suite 100

City

Tulsa

State \*

OK, Oklahoma

ZIP Code \*

74103

Phone \*

7777777777

☐ Add to Address Book

Pro Tip!

Pay close attention to address details. Verify the destination address before shipping the package. This not only can prevent costly address correction charges, but can be the difference between a healthy live arrival and a delayed and questionable one.

Hub and National Weather

What hot will my package be routed through?

Memphis Hub Weather

Tulsa Hub Weather

National Weather View

Screenshot 1: Shipment Booking

Organization

All Pro Shipping

First Name \*

Jordan

Last Name \*

Peroni

Address \*

3333 Old Hempstead Rd

Apt./Suite

Apartment Suite 100

City

Memphis

State \*

TX, Texas

ZIP Code \*

77060

Phone \*

7777777777

☐ Add to Address Book

Organization

Gene Patis

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Peroni

Address \*

1332 W 90th St

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Apartment Suite 100

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Tulsa

State \*

OK, Oklahoma

ZIP Code \*

74103

Phone \*

7777777777

☐ Add to Address Book

Warning! Temperature note: Do not ship live reptiles when the daytime highs are below 38°F or high above 100°F. See our [Temperature Guideline FAQ](#) for more information. BE CAREFUL WITH USING HEAT PACKS! Heat pack use in temperatures above 70°F is the number one cause of DOA's! Follow our heat pack use guidelines at the link above.

excess commission charges, we can see the difference between a healthy live arrival and a delayed and questionable one.

Hub and National Weather

What hot will my package be routed through?

Memphis Hub Weather

Tulsa Hub Weather

National Weather View

Screenshot 2: Filing up of Addresses

Package Information

Package Dimensions

To avoid additional charges be sure to enter accurate dimensions, weight, and address. Dimensions should be rounded up to the nearest inch and weight rounded up to the nearest pound in all cases, as that is how FedEx prices each shipment. Failure to do so may result in additional charges to your account. Please see the tips at right to ensure your package is accurately priced and to avoid additional charges.

Length \*

9

Width \*

9

Height \*

9

Package Weight

To avoid additional charges be sure to enter accurate dimensions, weight, and address. Weight should be rounded up to the nearest pound in all cases, as that is how FedEx prices each shipment. Failure to do so may result in additional charges to your account.

Weight \*

5

Diagram of a box with labels: Length, Width, Height.

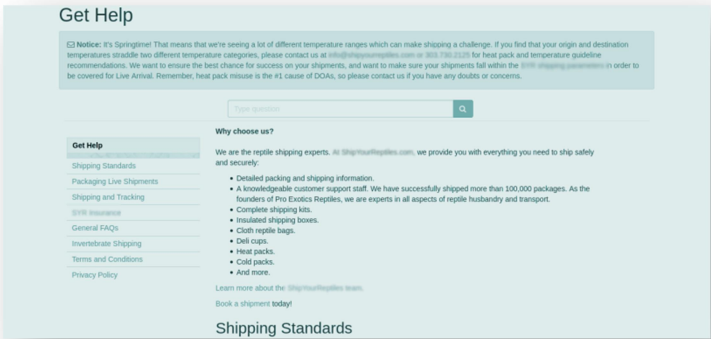
Avoid additional charges!

We charge you based on the information you enter. FedEx charges us based on their measurements and experience with your shipment. When FedEx charges us an additional fee, we charge it to the credit card you used for the shipment. If that charge is declined, we will charge it to another card you've used on our site.

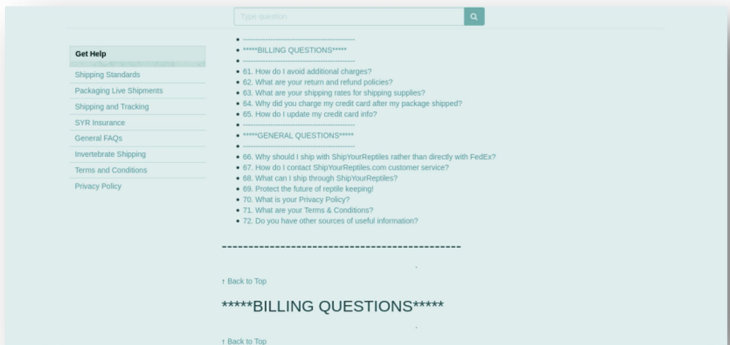
The best ways to avoid additional fees:  
1. Measure and weigh your package. Round up to the nearest inch or pound. Enter accurate information.  
FedEx charges based on the greater of dimensional weight or actual weight. Learn more about dimensional weight.  
NOTE: The measurements shown on your box, for example 12x10x10 inches, indicate the internal size of the box. This is the standard used by the packaging industry. However, FedEx measures the external size of the box, and they round up to the nearest inch. For example, FedEx might measure our popular 12x10x10 box as 12x10.7 inches—and, when they do, that's what they will charge for.

4

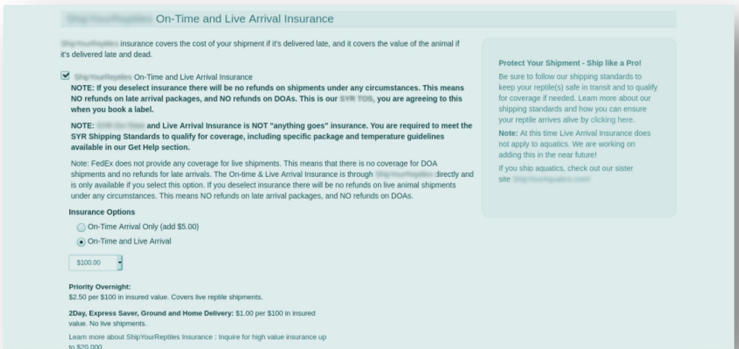
Screenshot 3: Package Dimensions



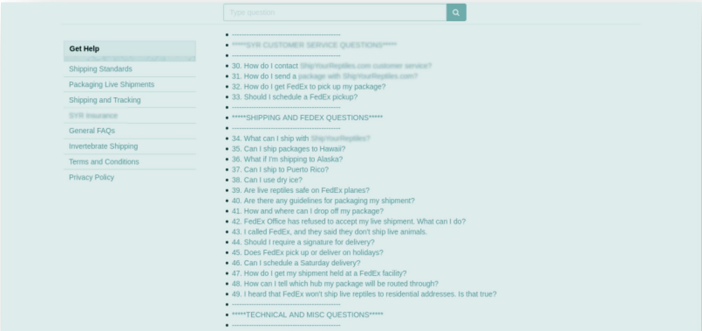
Screenshot 4: Shipping Standards Information



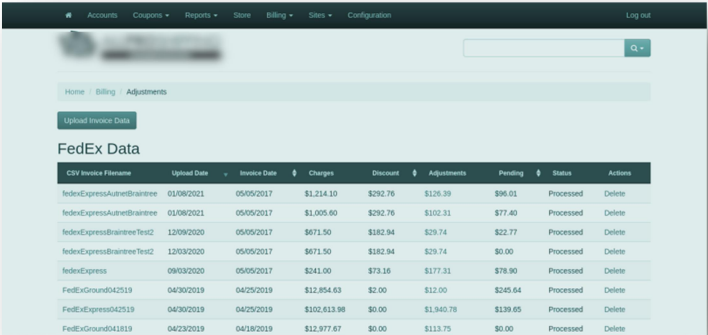
Screenshot 5: Billing related Questions



Screenshot 6: Insurance



Screenshot 7: FAQs



The screenshot shows a web application interface with a top navigation bar containing links for Accounts, Coupons, Reports, Store, Billing, Sales, Configuration, and Log out. Below the navigation bar, there is a search bar and a 'Home' link. The main content area is titled 'FedEx Data' and contains a table of invoices.

CSV Invoice Filename	Upload Date	Invoice Date	Charges	Discount	Adjustments	Pending	Status	Actions
FedExExpressAutent@rainree	01/08/2021	05/05/2017	\$1,214.10	\$292.76	\$126.39	\$96.01	Processed	Delete
FedExExpressAutent@rainree	01/08/2021	05/05/2017	\$1,005.60	\$292.76	\$102.31	\$77.40	Processed	Delete
FedExExpress@rainreeTest2	12/09/2020	05/05/2017	\$671.50	\$182.94	\$29.74	\$22.77	Processed	Delete
FedExExpress@rainreeTest2	12/03/2020	05/05/2017	\$671.50	\$182.94	\$29.74	\$0.00	Processed	Delete
FedExExpress	09/03/2020	05/05/2017	\$241.00	\$73.16	\$177.31	\$78.90	Processed	Delete
FedExGround042519	04/30/2019	04/25/2019	\$12,854.63	\$2.00	\$12.00	\$245.64	Processed	Delete
FedExExpress042519	04/30/2019	04/25/2019	\$102,613.98	\$0.00	\$1,940.78	\$139.85	Processed	Delete
FedExGround041819	04/23/2019	04/18/2019	\$12,977.87	\$0.00	\$113.75	\$0.00	Processed	Delete

Screenshot 8: FedEx Invoices



The screenshot shows a web application interface with a top navigation bar containing links for Home, Accounts, Christopher Chappell, and Weekly Billing. The main content area is titled 'Weekly Billing: Christopher Chappell' and includes a 'Consumer - Preferred - WB' label. Below the title, there is a 'Weekly Billing' section with a 'NO PAYMENT PROFILE' message. The table below shows the billing details for the customer.

No of Orders	Total Amount	Invoice date	Status
4	177.02		Pending
6	396.15	04/30/2019	Charged
3	276.62	04/23/2019	Charged
8	774.31	04/16/2019	Charged
9	1152.14	04/09/2019	Charged
8	908.29	04/02/2019	Charged
4	345.27	03/26/2019	Charged
8	829.32	03/19/2019	Charged
2	627.71	03/12/2019	Charged
5	128.85	03/05/2019	Charged
7	638.94	02/26/2019	Charged
7	1026.54	02/19/2019	Charged
6	566.08	02/12/2019	Charged

## Screenshot 9: Weekly Billing