

# Product Design

## Team pseudo\_coders

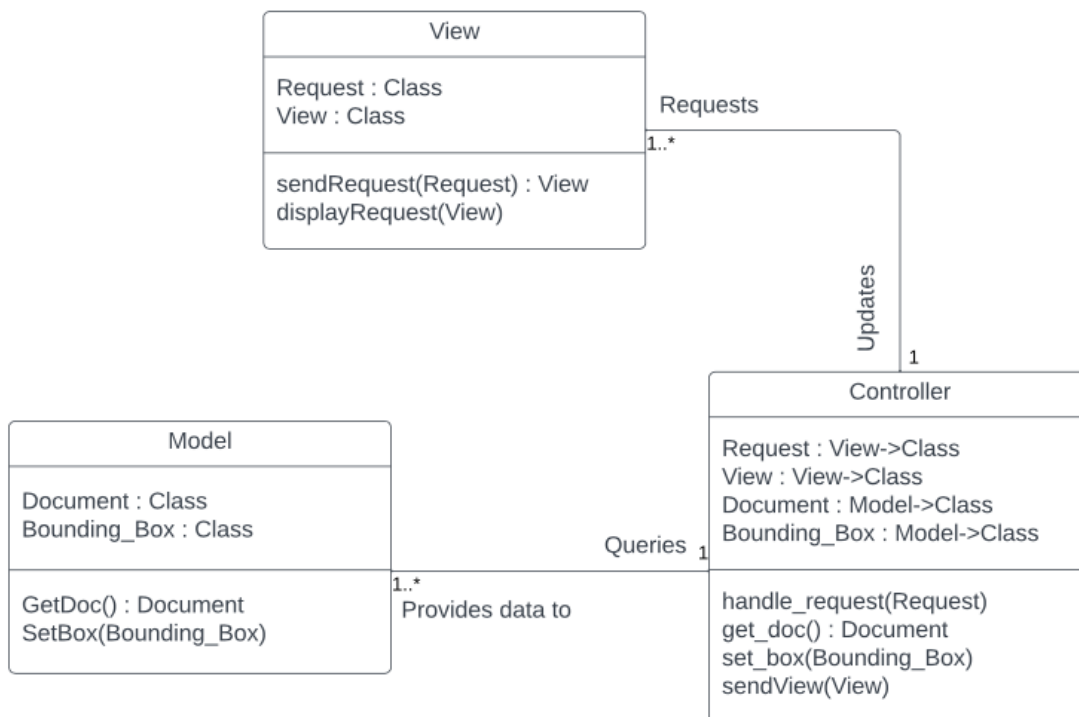
Dennis Byington

Raven Devore

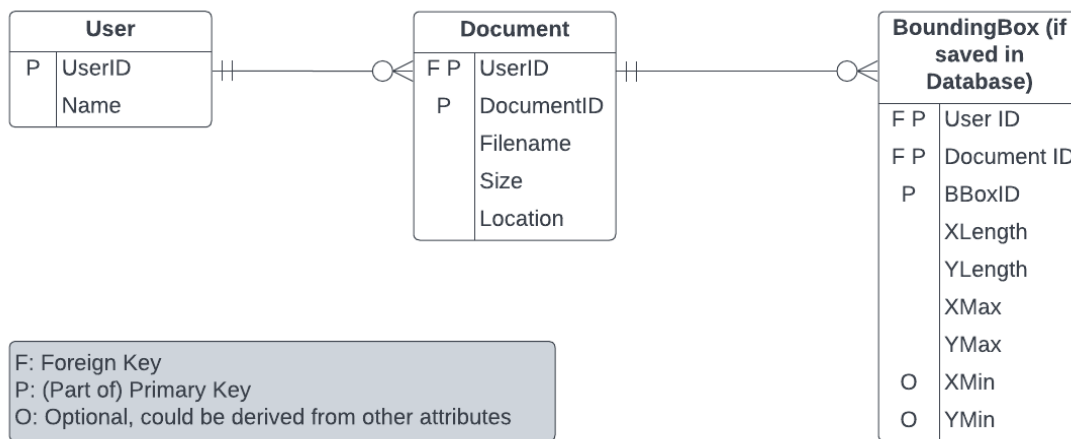
Joseph Heffley

<i>Revision Number</i>	<i>Revision Date</i>	<i>Summary of Changes</i>	<i>Author(s)</i>
0.1	10/01/2022	Initial release	Joseph, Raven, Dennis

## Class Diagram(s)

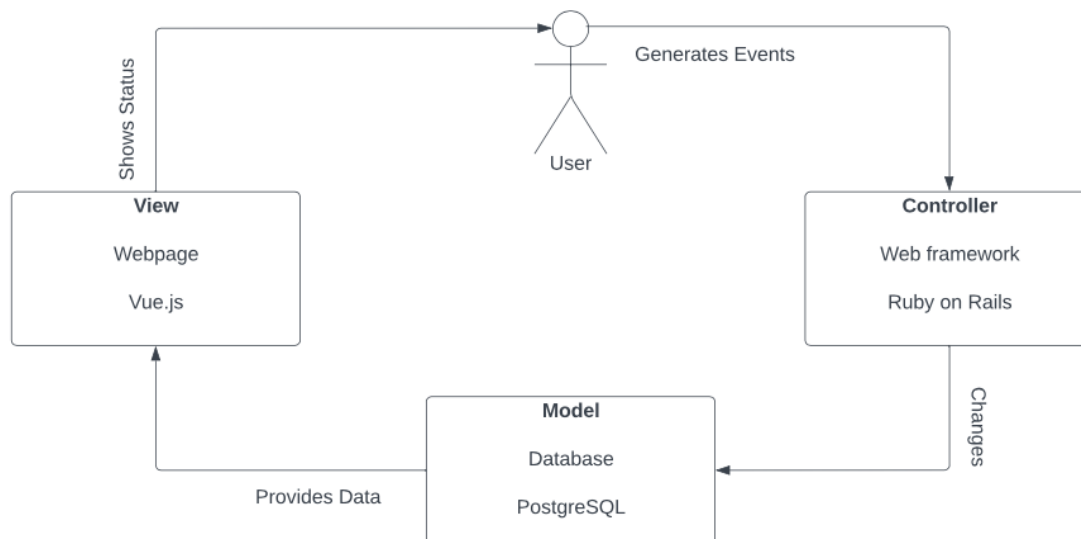


## ER Diagram(s)

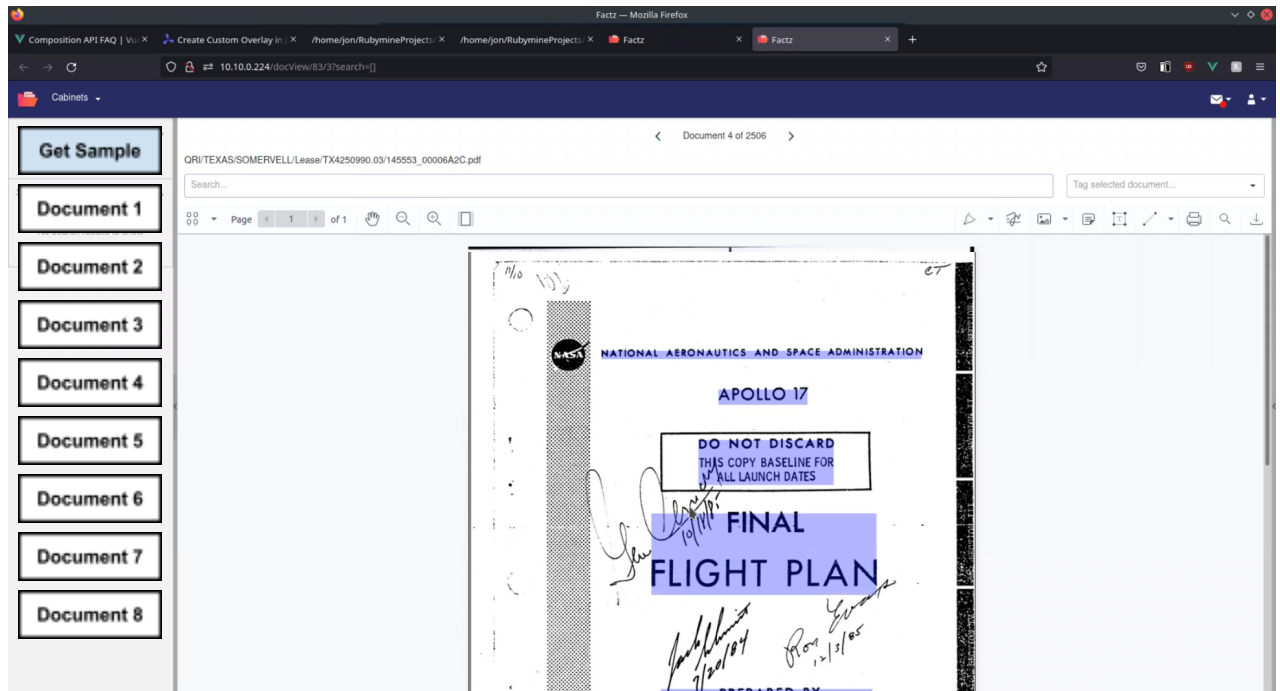


## Information Architecture Diagram

### Model - View - Controller Architecture



## User Interface Wireframe(s)/Screenshot(s)



screenID: 1

The middle of the webapp displays the PDF document, with partially transparent blue bounding boxes displayed on top of the blocks of text. The arrows above the document switch between documents. Other documents can also be accessed by clicking one of the document names in the list on the left side. The “Get Sample” button above the list of documents obtains a list of documents from the backend.

### Design Summary

Our design will be based on the Model-View-Controller architecture:

- View: Vue.js
- Controller: Ruby on Rails
- Model: PostgreSQL

We will mirror Lease Analytics’ frontend as closely as possible as shown in the screenshot above. This user interface screenshot is based on Lease Analytics’ demonstration of their Factz.io system. The bounding boxes are based on Lease Analytics’ design, which has blue boxes covering the entire block of text. The

panel to switch between documents is on the left, and the “Get Sample” button is above the documents panel.

## **Design Rationale**

Lease Analytics plans to integrate our product into their current system (factz.io) which is a web app developed with Ruby on Rails and is implemented with the MVC architecture.

### Architecture Design Rationale:

These factors dictated that we use the MVC architecture with Lease Analytics’ tech stack so that the future integration into factz.io is feasible without the need for excessive refactoring.

MVC’s segmented data, UI and control logic gives it multiple strengths such as:

- Ease of development
- Ease of debugging
- Scalable
- Ease of maintenance

MVC also has weaknesses such as:

- Focus must be placed on APIs as they are the key to the modules communicating
- The design itself is inherently complex

### UI Design Rationale:

The screenshot is based on Lease Analytics’ demonstration of their Factz.io system, since they want to incorporate parts of our solution into Factz. The bounding boxes are based on Lease Analytics’ design, since their issue was with the algorithm to make the boxes and not the way the boxes were displayed. They had also shown us a document view with every word highlighted in a different color, but that made the document harder to read, so we did not choose that method. The panel to switch between documents is on the left because Lease Analytics requested that positioning. Finally, they wanted the “Get Sample” button to be at the top of the screen, and we put it above the documents panel since the button gets a sample of documents.