

Full Stack Backend Intern - Retool Assignment

Building a Retool UI with APIs and MongoDB Integration

Congratulations on clearing the Assignment Round. It was a great experience to see how you have setup your APIs and MongoDB in the previous assignment! Now, it's time to create an interactive user interface using Retool. We'll be implementing a tab view structure with UI components for various operations, and we'll also display MongoDB collections and their data in a table.

Project Overview:

In this assignment, you are tasked with creating a Retool application that allows users to interact with the API endpoints you've set up in the previous assignment. The UI should have the following components:

1. Tab View Structure:

Create a tab view with multiple tabs to segregate different operations and views. The tabs should be labeled logically, for example:

- Tab 1: Store
- Tab 2: Items

- Tab 3: Item Types
- Tab 4: Data Collections

2. UI Components for Operations:

Each tab should contain UI components to perform the respective operations.

You already know the fields and operations as per previous assignment, Please consider them while building the ReTool UI.

As a minimum, include the following components:

- Tab 1 (Store):
 - Input fields for store details as you already know based on previous assignment.
 - Use Previous Assignment data for fields and Operations!
- Tab 2 (Items):
 - Use Previous Assignment data for fields and Operations!
- Tab 3 (Item Types):
 - Use Previous Assignment data for fields and Operations!
- Tab 4 (MongoDB Collections):
 - Display MongoDB Collections in Tabular format.
 - Create a separate section to show data from all collections in your
 MongoDB. Fetch the data using the connection endpoints you've set up to interact with MongoDB.

Brownie Points:

Additionally, If you can add an analytics dashboard as a brownie point task to showcase data insights.

- Analytics Dashboard: An "Analytics Dashboard" tab, create visualizations (e.g., charts, graphs) based on data from the API or MongoDB. Use Retool's built-in chart components to present analytical insights.
- Add additional features to enhance the user experience.

Submission Guidelines:

- Create a video showcasing your Retool application and its functionality.
 Demonstrate the different tabs, their purpose, and how the operations/components work.
- Share the video with us with some instruction you would like us to know.
- Provide the Retool application link to us so we can access and interact with the application.

Remember, creativity and attention to detail will be highly valued in this assignment.

Have fun building your Retool UI;) Good Luck 👍!

▼ Setup Instruction For ReTool

- 1. Sign up (Create Free Account) and log in to your Retool account.
- 2. Create a new application with a name and region.
- 3. Use the left sidebar to drag and drop components onto the canvas to build your UI.
- 4. Connect data sources (APIs, databases) in the "Resources" tab.
- 5. Configure components by selecting data sources and endpoints.
- 6. Set up actions for interactive functionality (e.g., onClick events).
- 7. Preview your application to test its appearance and behavior.
- 8. Save your progress and deploy the application if needed.