BPMP Web Onboard

Prerequisite

- VSCode: IDE
- MongoDB : Database
- Postman : Upload new dataset
- Vercel.com account : Deploy
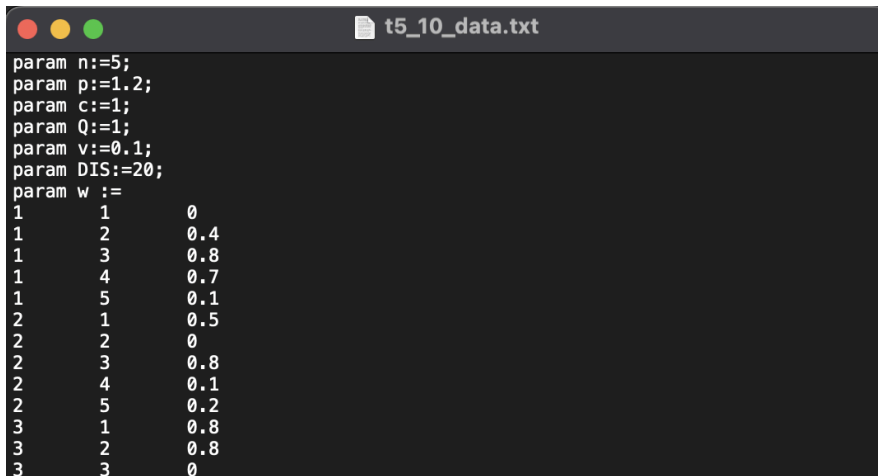
Run Application Locally

1. Clone repository
2. Add .env file (contact tnlam@smu.edu)
3. Run 'yarn install' to install dependencies
4. Run 'yarn dev' to run the application. Should be running on localhost:3000

Upload dataset to Database

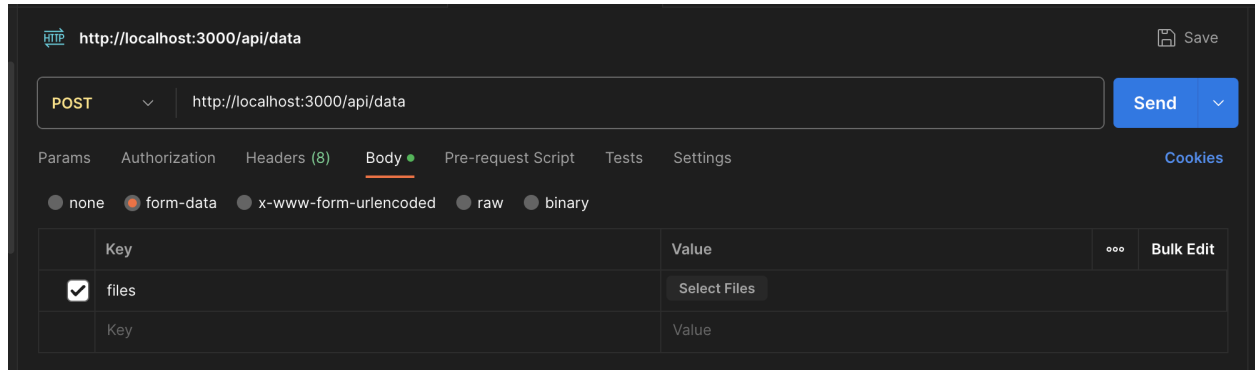*Make sure the application is running to use API uploading dataset*

/api/data (upload general information)
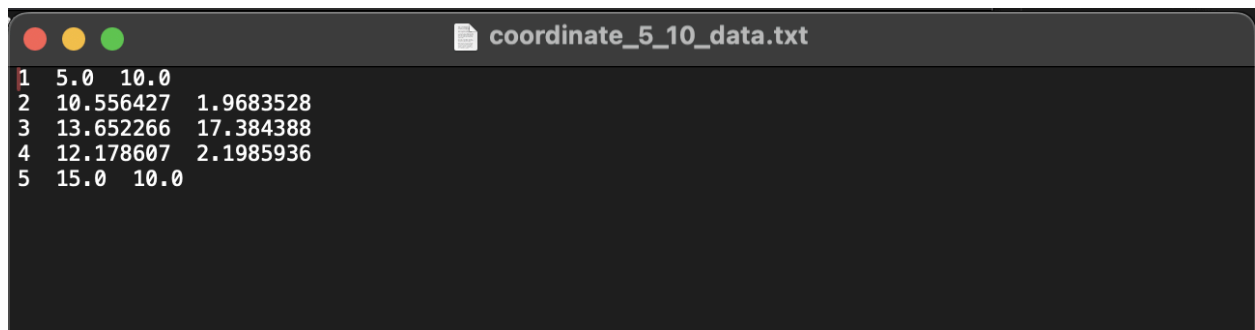
1. Dataset should look like this:

2. Make selection like in the image below

3. Insert file(s) to the value
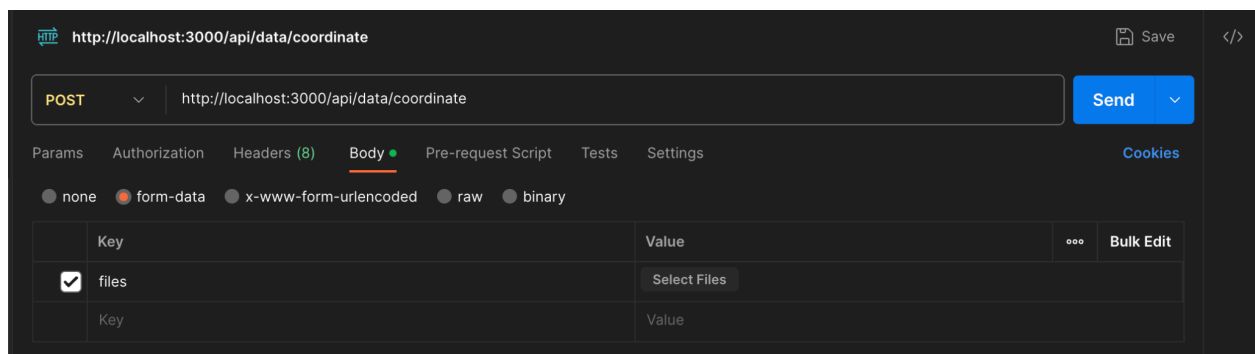4. Send and Should give you json response of the dataset

/api/data/coordinate (upload coordinates)

1. Dataset (make sure the filename should be the same at all times). Below should rename to t5_10_data.txt


```
1  5.0   10.0
2  10.556427   1.9683528
3  13.652266   17.384388
4  12.178607   2.1985936
5  15.0   10.0
```
coordinate_5_10_data.txt

2. Make selection like image below

/api/data/optimalSolution (upload optimal)

1. Dataset: Format should looks like image below

v1   **t5_05_data.txt**
📁 Optimal · Updated Dec 2, 2024 by Eli Olinick

```
[1,3,2,5]
[[1,3],[2,5],[3,2]]
1.0272
```

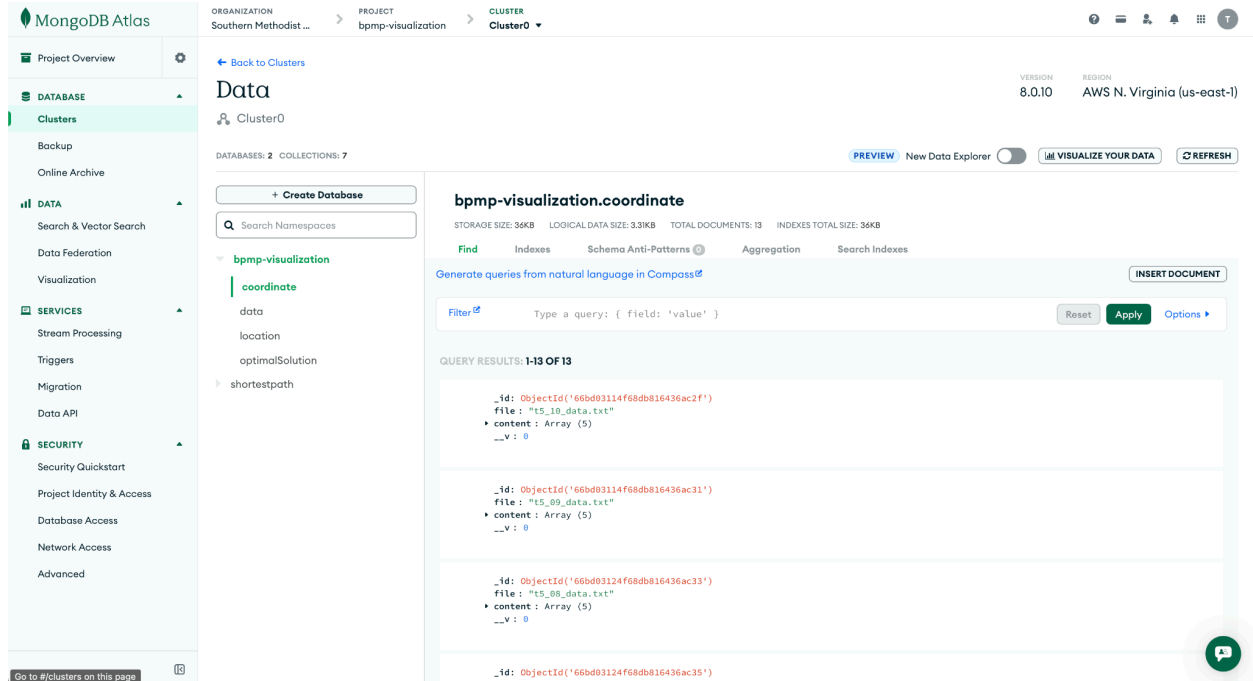2. Postman API should be similar to above requests.

Test if file existing using API


```
http://localhost:3000/api/data?fileName=t5_10_data.txt                    Save   </>

GET ∨   http://localhost:3000/api/data?fileName=t5_10_data.txt              Send ∨

Params ●   Authorization   Headers (6)   Body   Pre-request Script   Tests   Settings        Cookies
Query Params
```

	Key	Value	Bulk Edit
☑	fileName	t5_10_data.txt	
	Key	Value	

```
Body   Cookies   Headers (6)   Test Results        🌐 Status: 200 OK   Time: 2.20 s   Size: 1.34 KB   Save Response ∨

Pretty   Raw   Preview   Visualize   JSON ∨

 1  [
 2    {
 3      "_id": "66bbfd66d41df4b9374875cc",
 4      "file": "t5_10_data.txt",
 5      "data": {
 6        "n": 5,
 7        "p": 1.2,
 8        "c": 1,
 9        "Q": 1,
10        "v": 0.1,
11        "DIS": 20,
12        "weightDistantData": [
13          {
14            "w": 0,
15            "d": 0,
16            "x": 1,
17            "y": 1
18          },
19          {
20            "w": 0.4,
21            "d": 9.76633,
22            "x": 1,
23            "y": 2
24          },
25          {
26            "w": 0.8,
27            "d": 11.37501,
28            "x": 1,
29            "y": 3
```

Database (MongoDB)

Navigate to *Organization: **Southern Methodist University** > Project: **bpmp-visualization** > Cluster: **Cluster0***

We have two database ***bpmp-visualization*** and ***shortestpath***.

Bpmp-visualization (consists of 4 collections which need to has the same filename in **file** field)
- Coordinate (required): x and y coordinates of the nodes
- Data (required): general information about the datasets (num of nodes, vehicle cost, etc.)
- Location (optional): corresponding location
- optimalSolution (optional): optimal Profit and Path

Vercel

Vercel is a cloud platform that deploys websites and web applications. After you make your commit changes to the main repository, Vercel will pull the latest changes, build and update the website automatically. If there is any error, it will show in the deployments tab. Go back and fix your code and commit changes again until achieve 'green' mode.

Deployments

⟳ Automatically created for pushes to ⬡ lnttran/BPMP-GraphVisualization

Upgrade to Pro for 2x more CPUs and faster builds ✕   •••

🔍 All Branches...   ▾   📅 Select Date Range   All Environments   ▾   Status 5/6 ▾

52m4evDGD Production · ⊕ Current	● Ready 1m 23s (8m ago)	⑂ main ⊶ b00db44 Add files via upload	10m ago by lnttran	•••
FogYKWYK7 Production ⓘ	● Ready 1m 21s (20d ago)	⑂ main ⊶ 8cfbe8f add corresponding locations	Jun 11 by lnttran	•••
BkyC8Koue Production ⓘ	● Ready 1m 21s (64d ago)	⑂ main ⊶ 7990b4d fix bugs	Apr 28 by lnttran	•••
C7GvncpmV Production	● Error 59s (64d ago)	⑂ main ⊶ 43bb892 responsive	Apr 28 by lnttran	•••
GR18Rnxsj Production ⓘ	● Ready 53s (92d ago)	⑂ main ⊶ 065d04b update remove method	Mar 31 by lnttran	•••
4djabt4rc Production ⓘ	● Ready 1m 29s (98d ago)	⑂ main ⊶ 49b4dc8 update website	Mar 25 by lnttran	•••
3Dbm43ZZB Production ⓘ	● Ready 1m 3s (115d ago)	⑂ main ⊶ 7a613e8 fix database	Mar 9 by lnttran	•••
2VW3hCnGq Production ⓘ	● Ready 1m 3s (115d ago)	⑂ main ⊶ 1cf6769 add responsive	Mar 8 by lnttran	•••