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*

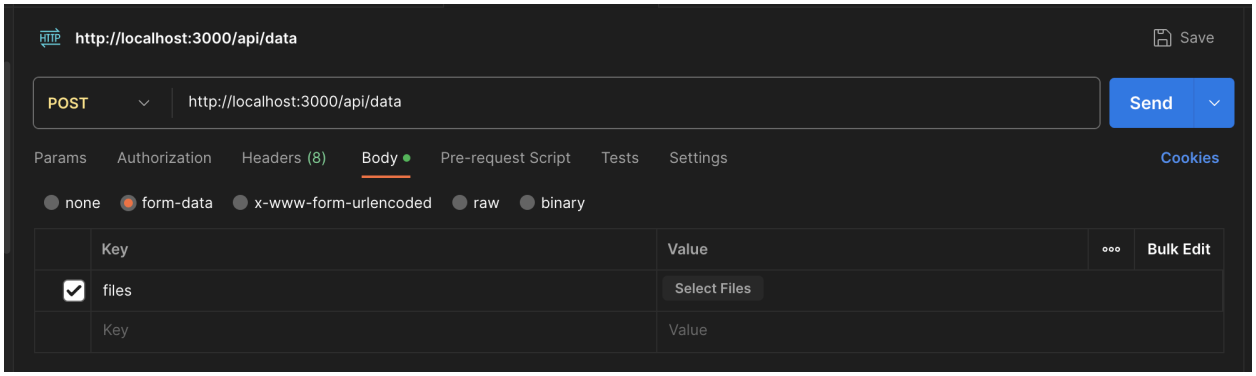
/api/data (upload general information)

1. Dataset should look like this:

t5_10_data.txt

```
param n:=5;
param p:=1.2;
param c:=1;
param Q:=1;
param v:=0.1;
param DIS:=20;
param w :=
1       1       0
1       2       0.4
1       3       0.8
1       4       0.7
1       5       0.1
2       1       0.5
2       2       0
2       3       0.8
2       4       0.1
2       5       0.2
3       1       0.8
3       2       0.8
3       3       0
```

2. Make selection like in the image below

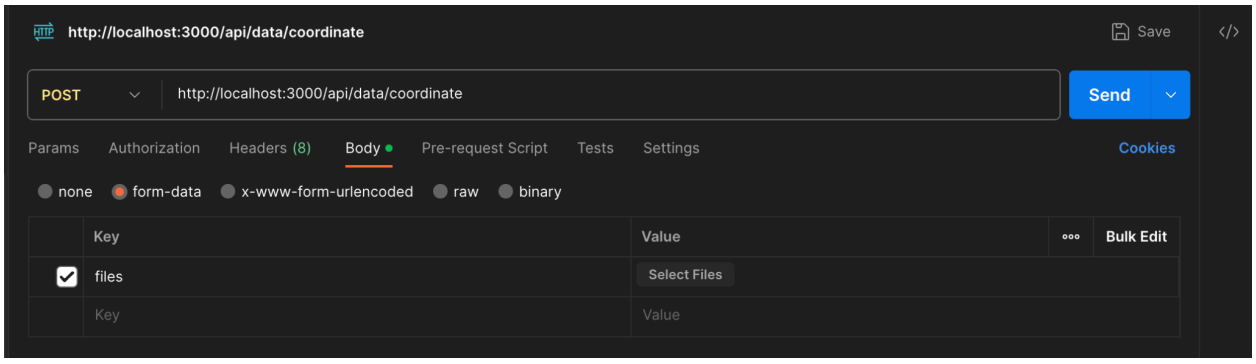


3. Insert file(s) to the value
4. Send and Should give you json response of the dataset

/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

2. Make selection like image below

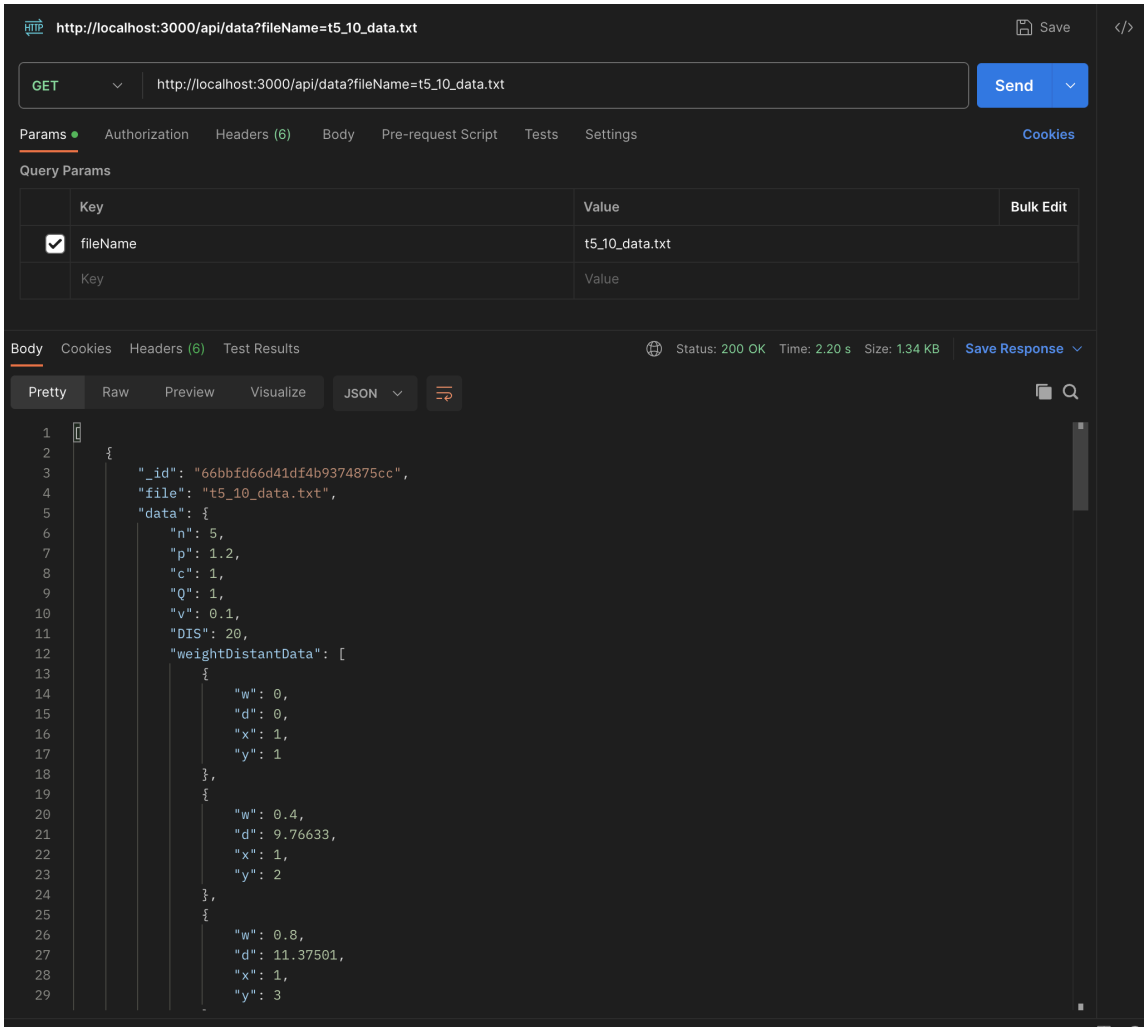


/api/data/optimalSolution (upload optimal)

1. Dataset: Format should looks like image below

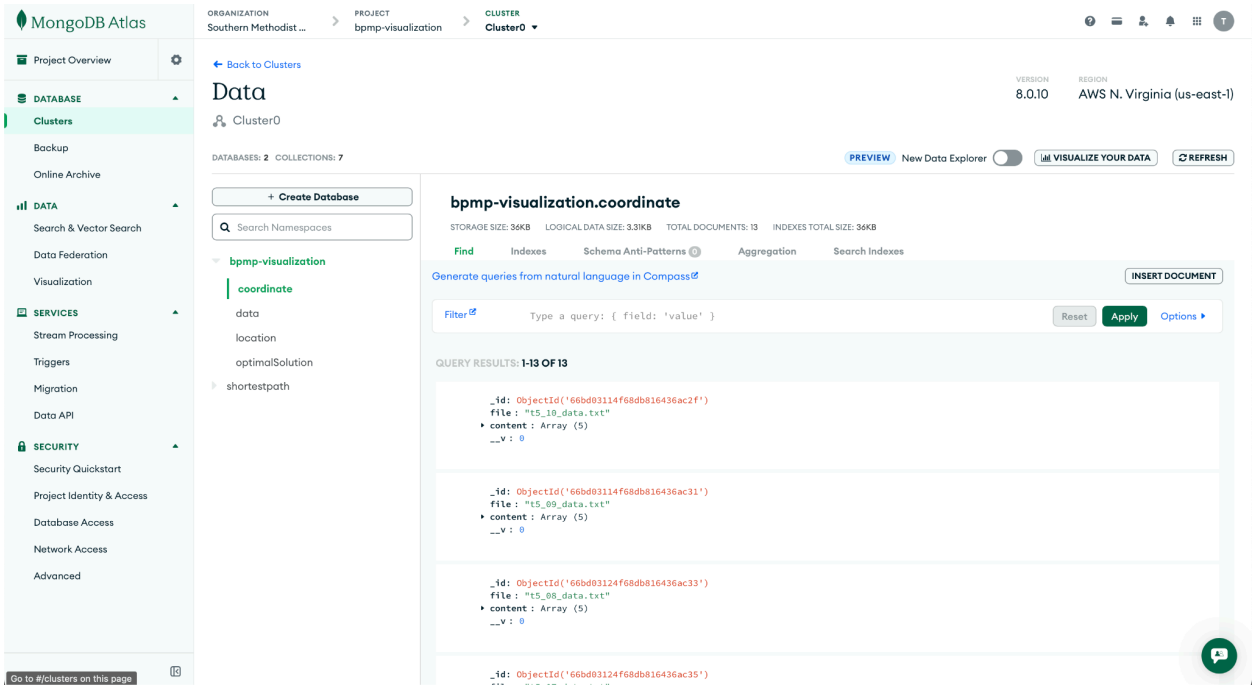
2. Postman API should be similar to above requests.

Test if file existing using API



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