ELECTION MANAGEMENT SYSTEM

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OVERVIEW

- Inspiration
- What is EMS?
- technology used
- Scalibility
- Routes and Snippets
- Conclusion

INSPIRATION

EMPOWERING ELECTIONS THROUGH TECHNOLOGY

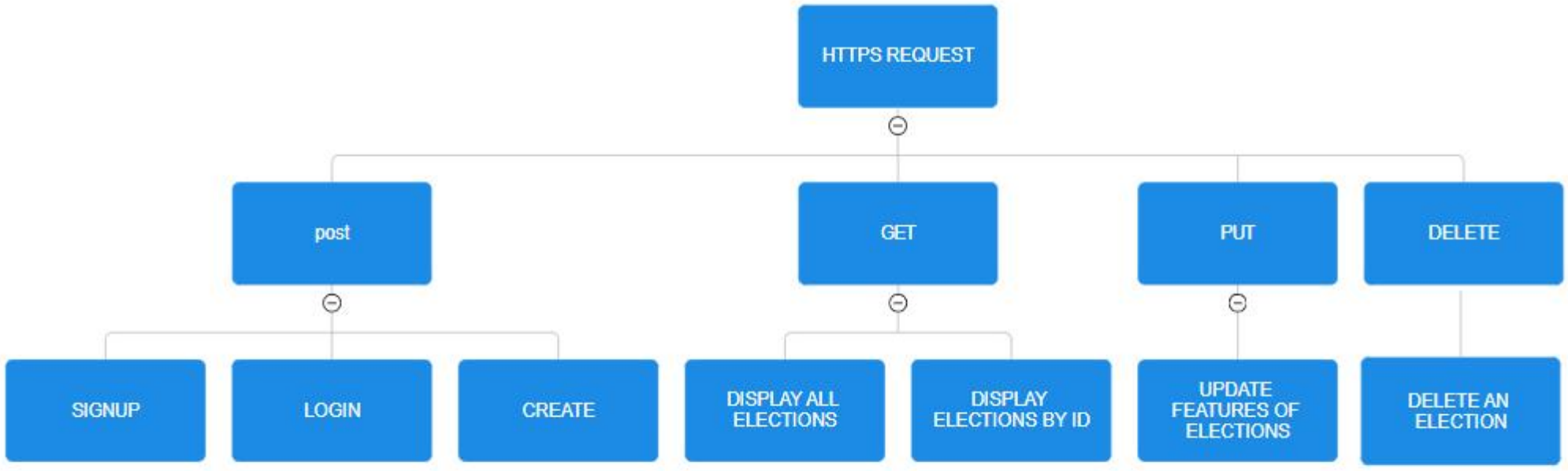
- Leveraging technology in election management enhances security, transparency, and accessibility, addressing current challenges and fostering trust in the democratic process.

CHALLENGES IN ELECTION MANAGEMENT

- Common challenges in election management include security concerns, reliance on manual processes, and a lack of transparency.

WHAT IS EMS ?

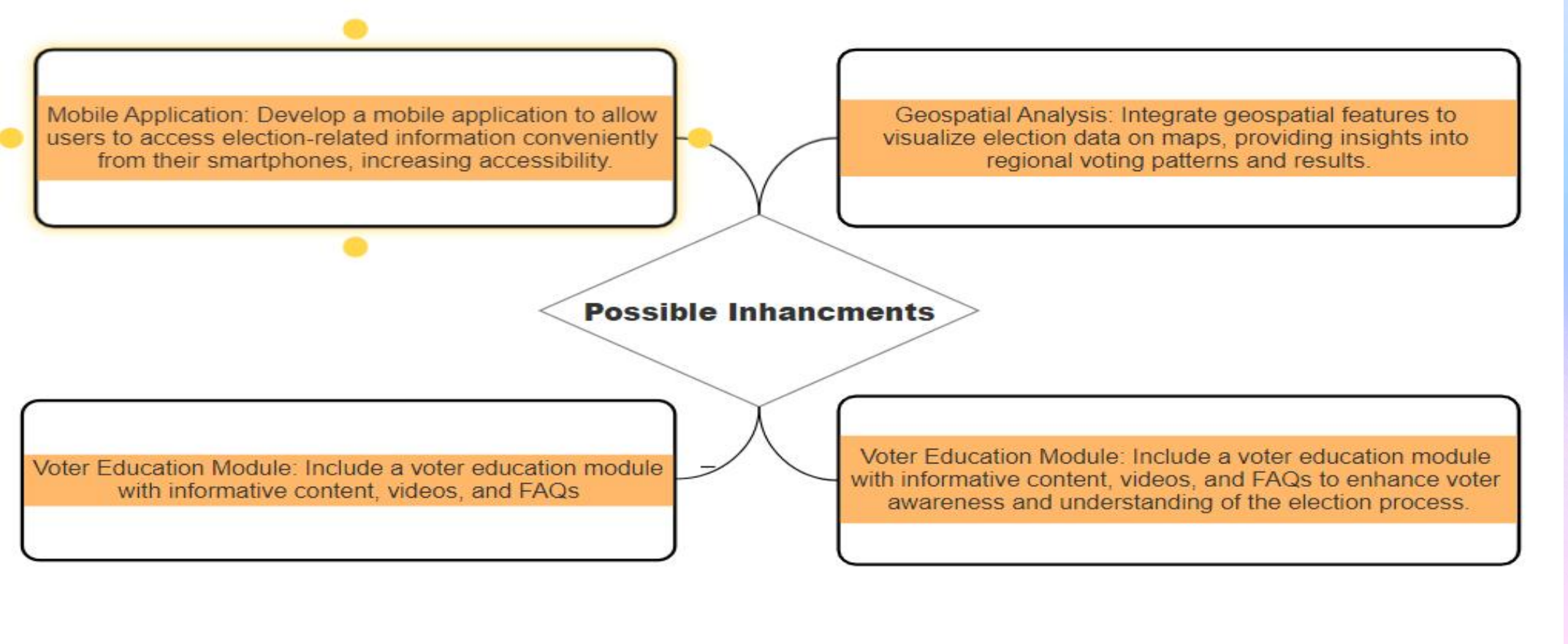
- EMS is an election managment rest API that enable users to do this manipulation:



TECHNOLOGY USED

BACKEND	TESTING	DATABASE MANAGEMENT SYSTEM	SECURITY
node JS	POSTMAN	mongoDB.	JWT
EXPRESS Js			

SCALIBILITY



ROUTES

AUTH ROUTE

```
const express = require('express');
const router = express.Router();
const electionController = require('../controllers/electionsController');


router.post("/create", electionController.createElection);
router.get('/display', electionController.getAllElections);
router.get('/display/:electionId', electionController.getElectionById);
router.put('/update/:electionId', electionController.updateElectionById);
router.delete('/delete/:electionId', electionController.deleteElectionById);

module.exports = router;
```

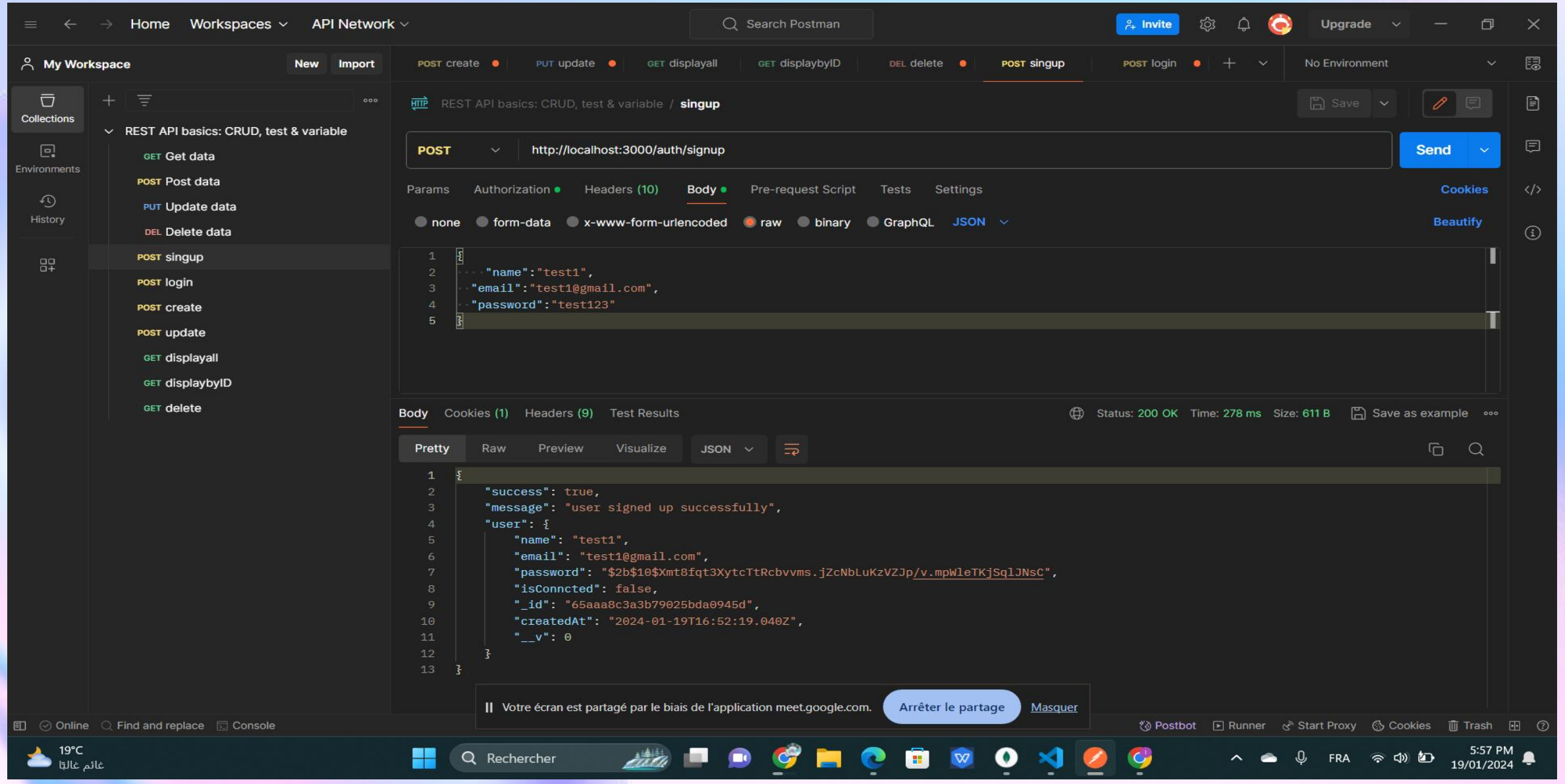
ELECTION ROUTE

routes > JS election.route.js > ...

You, 2 days ago | 2 authors (smarouen and others)

```
1  const express = require('express');
2  const router = express.Router();
3  const electionController = require('../controllers/electionsController');
4
5
6  router.post("/create", electionController.createElection);
7  router.get('/display', electionController.getAllElections);
8  router.get('/display/:electionId', electionController.getElectionById);
9  router.put('/update/:electionId', electionController.updateElectionById);
10 router.delete('/delete/:electionId', electionController.deleteElectionById);
11
12 module.exports = router;
13
```

sign up


Home
Workspaces
API Network
Search Postman
Invite
Upgrade
My Workspace
New
Import
POST create
PUT update
GET displayall
GET displaybyID
DEL delete
POST singup
POST login
No Environment
Collections
Environments
History
REST API basics: CRUD, test & variable
GET Get data
POST Post data
PUT Update data
DEL Delete data
POST singup
POST login
POST create
POST update
GET displayall
GET displaybyID
GET delete
REST API basics: CRUD, test & variable / singup
Save
POST
http://localhost:3000/auth/signup
Send
Params
Authorization
Headers (10)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"name":"test1",
"email":"test1@gmail.com",
"password":"test123"
}
Body
Cookies (1)
Headers (9)
Test Results
Status: 200 OK
Time: 278 ms
Size: 611 B
Save as example
Pretty
Raw
Preview
Visualize
JSON
{
"success": true,
"message": "user signed up successfully",
"user": {
"name": "test1",
"email": "test1@gmail.com",
"password": "$2b$10$Xmt8fqt3XytcTtRcbvvms.jZcNbLuKzVZJp/v.mpWleTKjSqlJNsC",
"isConncted": false,
"_id": "65aaa8c3a3b79025bda0945d",
"createdAt": "2024-01-19T16:52:19.040Z",
"__v": 0
}
}
Votre écran est partagé par le biais de l'application meet.google.com.
Arrêter le partage
Masquer
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Trash
19°C
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Rechercher
FRA
5:57 PM
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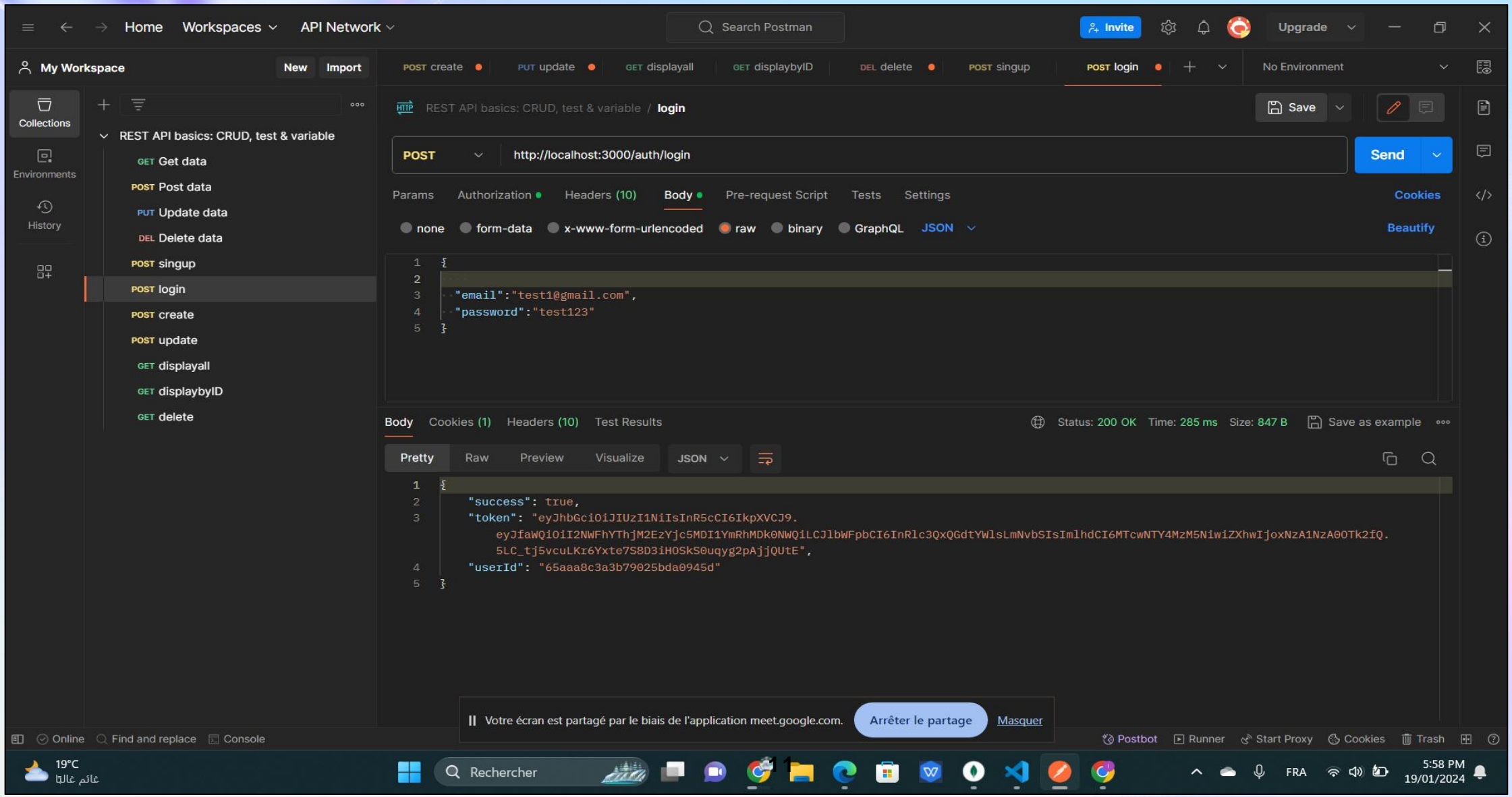
LOGIN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POST singup
POST login
POST create
POST update
GET displayall
GET displaybyID
GET delete
REST API basics: CRUD, test & variable / login
Save
POST
http://localhost:3000/auth/login
Send
Params
Authorization
Headers (10)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"email":"test1@gmail.com",
"password":"test123"
}
Body
Cookies (1)
Headers (10)
Test Results
Status: 200 OK
Time: 285 ms
Size: 847 B
Save as example
Pretty
Raw
Preview
Visualize
JSON
{
"success": true,
"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.
eyJfaWQiOiI2NWFhYThjM2EzYjc5MDI1YmRhMDk0NWQiLCJlbWFpbCI6InRlc3QxQGdtYWlsLmNvbSIsImlhdCI6MTcwNTY4MzM5NiwiZXhwIjoxNzA1NzA0OTk2fQ.
5LC_tj5vcuLKr6Yxte7S8D3iHOSkS0uqyg2pAjjQUtE",
"userId": "65aaa8c3a3b79025bda0945d"
}
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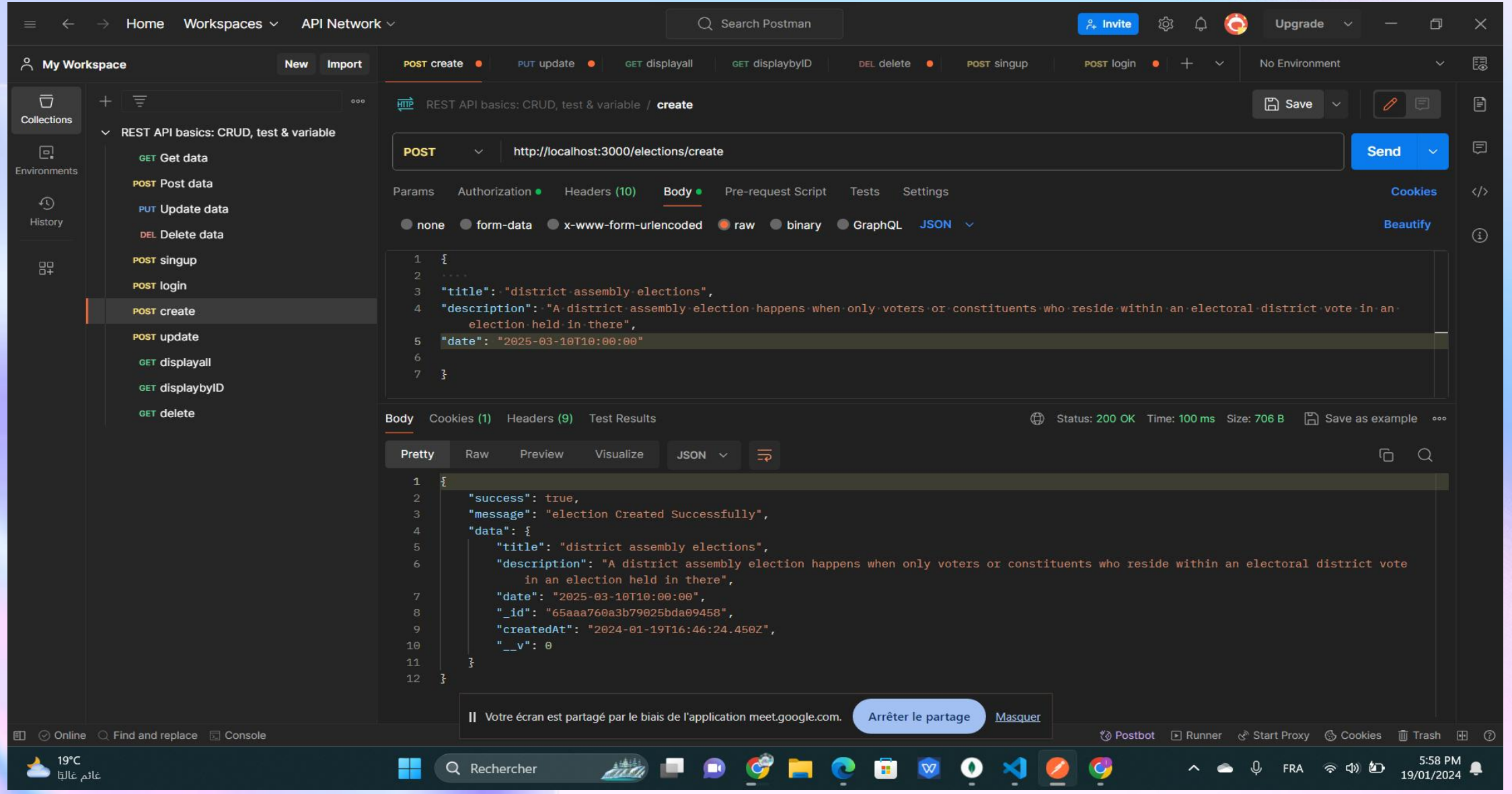
CREATE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POST singup
POST login
POST create
POST update
GET displayall
GET displaybyID
GET delete
REST API basics: CRUD, test & variable / create
Save
POST
http://localhost:3000/elections/create
Send
Params
Authorization
Headers (10)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"title": "district assembly elections",
"description": "A district assembly election happens when only voters or constituents who reside within an electoral district vote in an election held in there",
"date": "2025-03-10T10:00:00"
}
Body
Cookies (1)
Headers (9)
Test Results
Status: 200 OK
Time: 100 ms
Size: 706 B
Save as example
Pretty
Raw
Preview
Visualize
JSON
{
"success": true,
"message": "election Created Successfully",
"data": {
"title": "district assembly elections",
"description": "A district assembly election happens when only voters or constituents who reside within an electoral district vote in an election held in there",
"date": "2025-03-10T10:00:00",
"_id": "65aaa760a3b79025bda09458",
"createdAt": "2024-01-19T16:46:24.450Z",
"__v": 0
}
}
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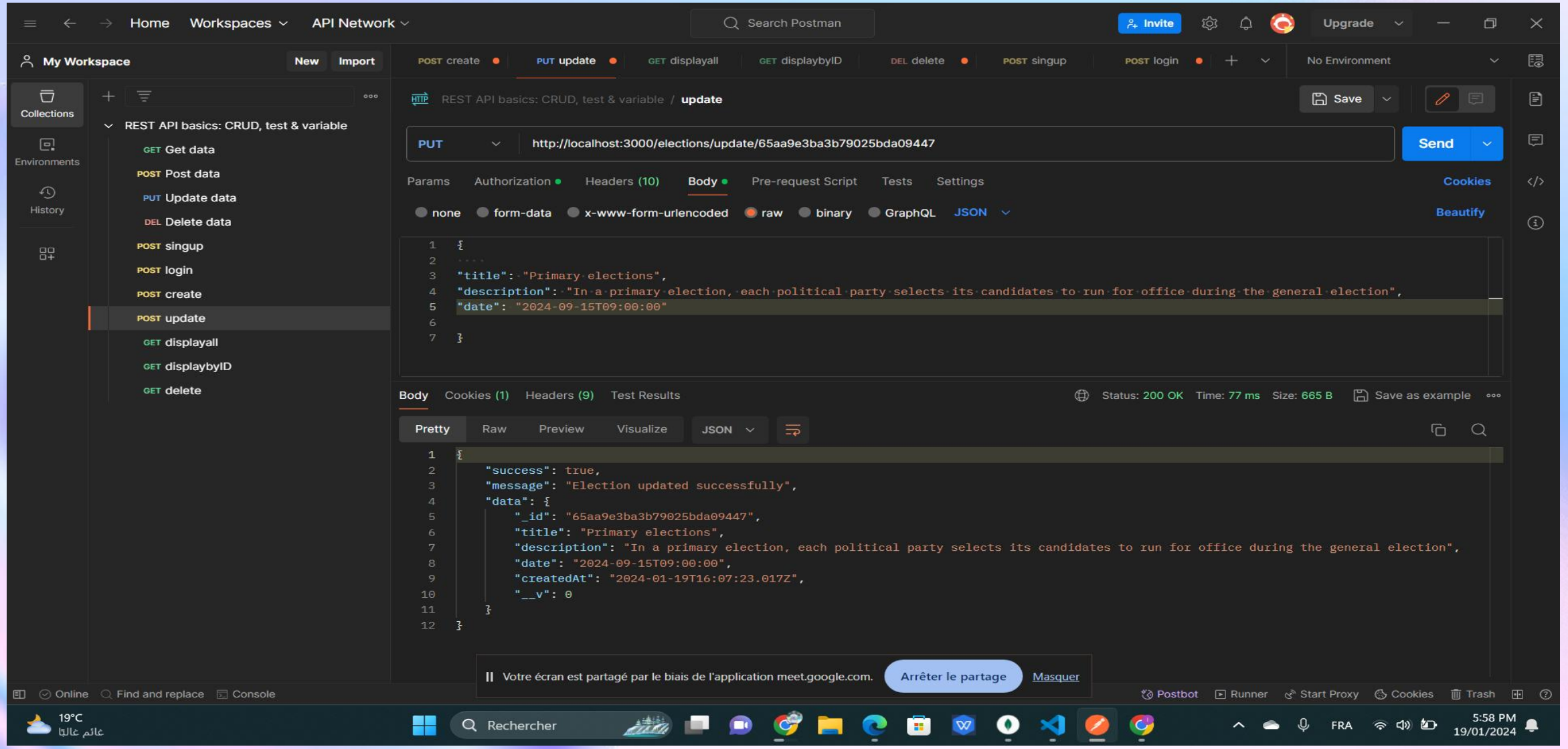
UPDATE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PUT Update data
DEL Delete data
POST singup
POST login
POST create
POST update
GET displayall
GET displaybyID
GET delete
REST API basics: CRUD, test & variable / update
Save
PUT
http://localhost:3000/elections/update/65aa9e3ba3b79025bda09447
Send
Params
Authorization
Headers (10)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"title": "Primary elections",
"description": "In a primary election, each political party selects its candidates to run for office during the general election",
"date": "2024-09-15T09:00:00"
}
Body
Cookies (1)
Headers (9)
Test Results
Status: 200 OK
Time: 77 ms
Size: 665 B
Save as example
Pretty
Raw
Preview
Visualize
JSON
{
"success": true,
"message": "Election updated successfully",
"data": {
"_id": "65aa9e3ba3b79025bda09447",
"title": "Primary elections",
"description": "In a primary election, each political party selects its candidates to run for office during the general election",
"date": "2024-09-15T09:00:00",
"createdAt": "2024-01-19T16:07:23.017Z",
"__v": 0
}
}
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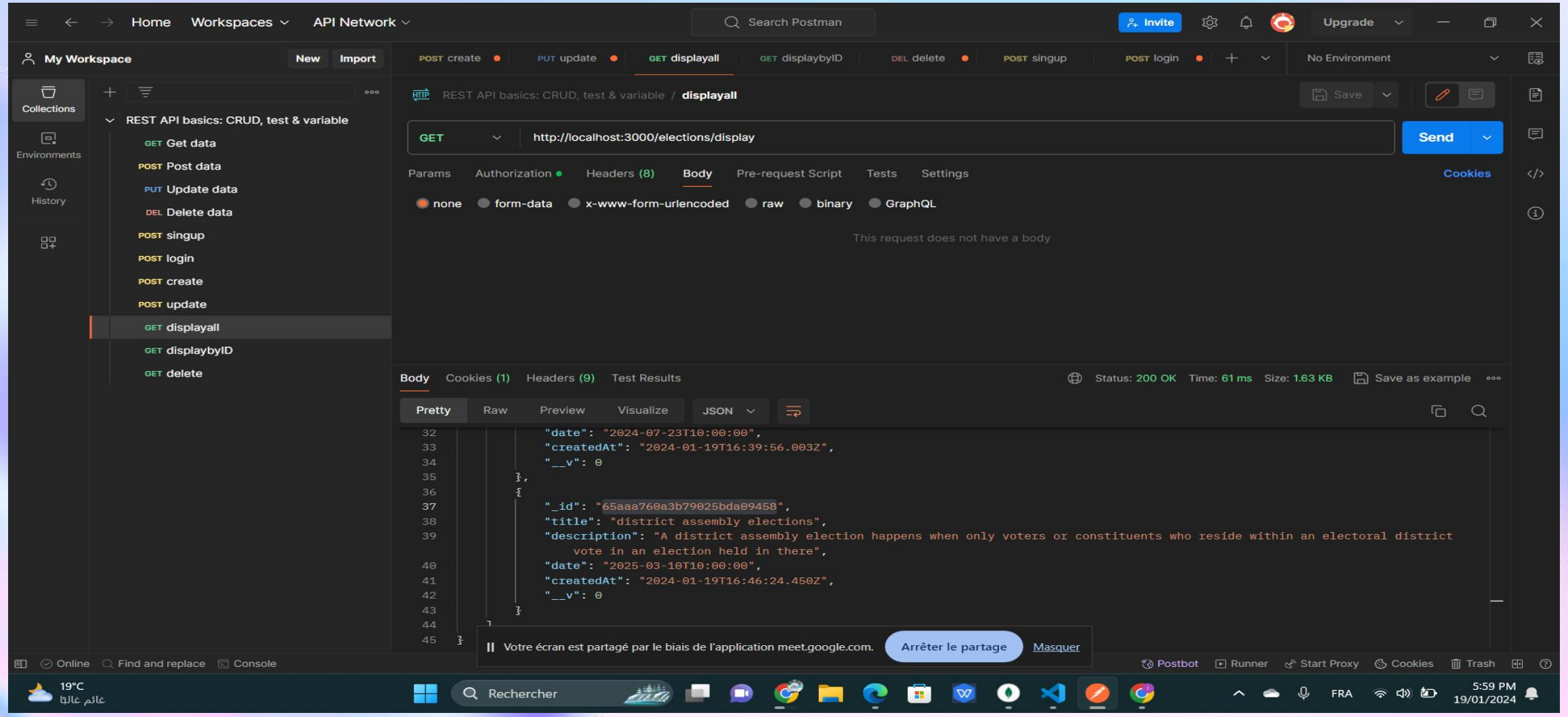
DISPLAY ALL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POST login
POST create
POST update
GET displayall
GET displaybyID
GET delete
REST API basics: CRUD, test & variable / displayall
Save
GET
http://localhost:3000/elections/display
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies (1)
Headers (9)
Test Results
Status: 200 OK
Time: 61 ms
Size: 1.63 KB
Save as example
Pretty
Raw
Preview
Visualize
JSON
"date": "2024-07-23T10:00:00",
"createdAt": "2024-01-19T16:39:56.003Z",
"__v": 0
},
{
"_id": "65aaa760a3b79025bda09458",
"title": "district assembly elections",
"description": "A district assembly election happens when only voters or constituents who reside within an electoral district vote in an election held in there",
"date": "2025-03-10T10:00:00",
"createdAt": "2024-01-19T16:46:24.450Z",
"__v": 0
}
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19°C
Rechercher
FRA
5:59 PM
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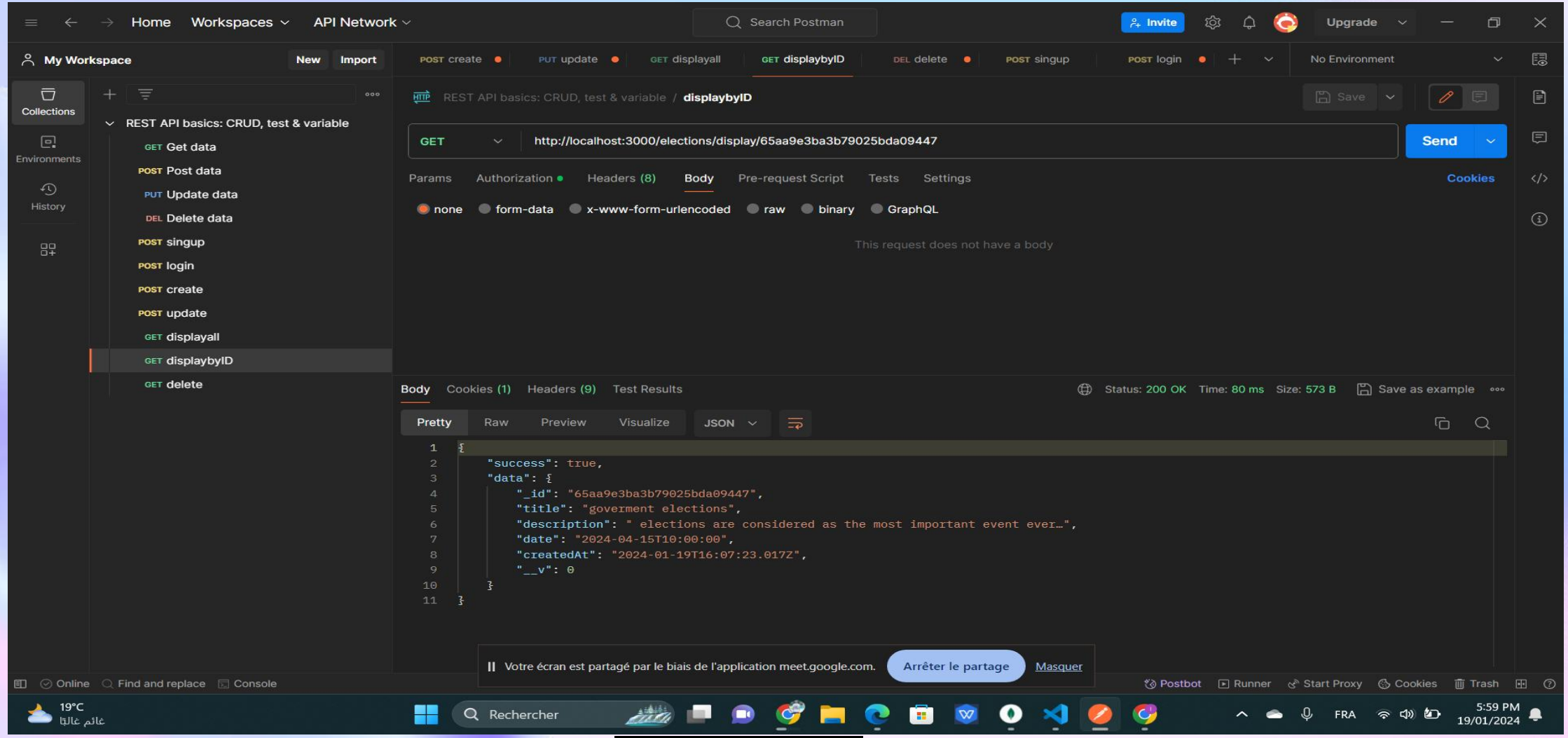
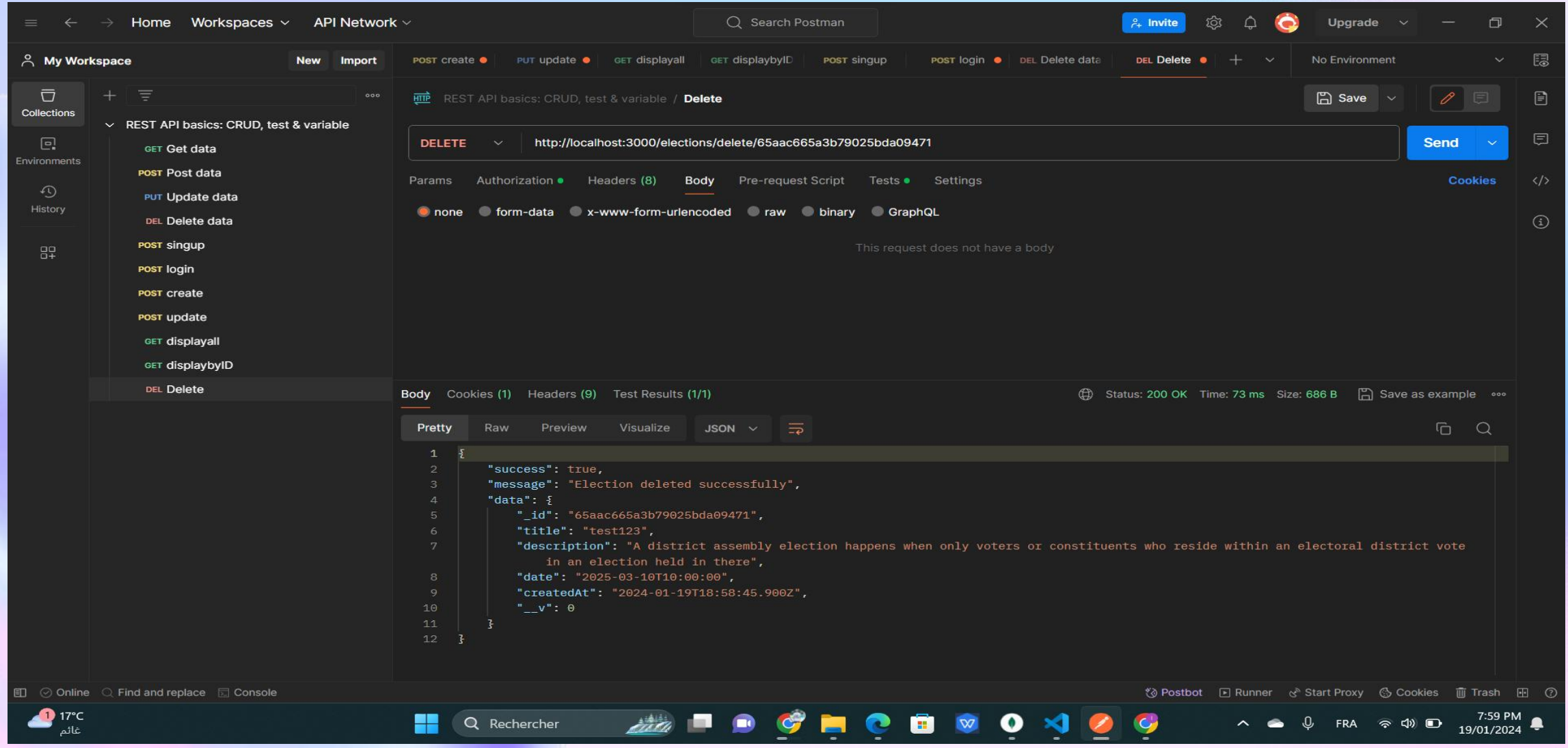
DISPLAY BY ID



DELETE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DEL Delete
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PUT Update data
DEL Delete data
POST singup
POST login
POST create
POST update
GET displayall
GET displaybyID
DEL Delete
REST API basics: CRUD, test & variable / Delete
Save
DELETE
http://localhost:3000/elections/delete/65aac665a3b79025bda09471
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies (1)
Headers (9)
Test Results (1/1)
Status: 200 OK
Time: 73 ms
Size: 686 B
Save as example
Pretty
Raw
Preview
Visualize
JSON
{
"success": true,
"message": "Election deleted successfully",
"data": {
"_id": "65aac665a3b79025bda09471",
"title": "test123",
"description": "A district assembly election happens when only voters or constituents who reside within an electoral district vote in an election held in there",
"date": "2025-03-10T10:00:00",
"createdAt": "2024-01-19T18:58:45.900Z",
"__v": 0
}
}
Online
Find and replace
Console
Postbot
Runner
Start Proxy
Cookies
Trash
17°C
غائم
Rechercher
FRA
7:59 PM
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CONCLUSION

In conclusion, our Election Management System leverages advanced tech for secure and efficient administration. Its structured design and ongoing enhancements ensure adaptability, promoting transparency in the democratic process.

THANK YOU