

# **REPORT OF MID TERM ADVANCED WEB PROGRAMMING**



**Created By:**

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**POLITEKNIK NEGERI MALANG**

**2020**

## **A. Description of the Website**

The website that we created is a website about Polinema teaching systems. This website is divided into 2 levels of users, namely admin and lecturer. At the user admin level, it contains all the data of the teaching lecturer. Starting from personal information, teaching data, classes, lecturers' positions, lecturers' research groups, etc. Admin can update, add, read and delete data. At the lecturer user level there is personal information about the lecturer, the teaching schedule of the lecturer concerned, the research group to be followed, and the courses taught. In this level user only can update personal information data.

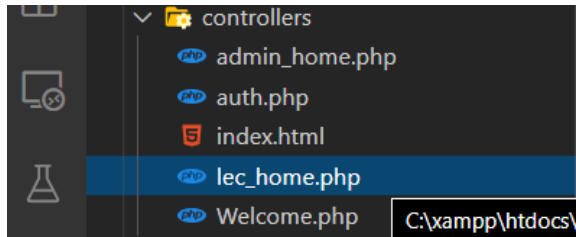
The database inside this web application is from Mr Rosa which teaches my class (TI-2G) on Project course. And since the assignment has similarities on making a web application. Our team has agreed to apply the same database in order to deliver the responsibilities effectively.

For the codes, kindly refer to <https://github.com/ilhamAdhim2/UTS---Web>

## B. Website Code

### Lecturer Level User

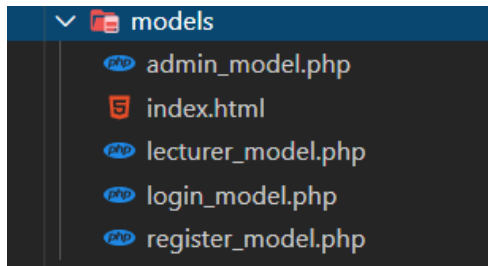
Controller of Lecturer Level User



Details:

- To take lecturers position, year and semester on the database.
- To take lecturer research group and the priority on the database.
- To take what subject that lecturers teach on the database.
- In line 37 is array of the lecturer personal information taken from database. The array uses for display the lecturer personal information.

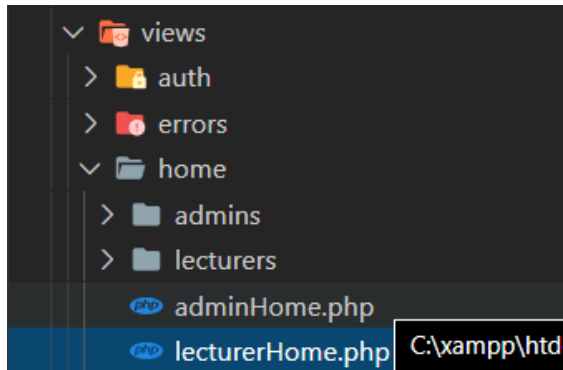
### Model of Lecturer Level User



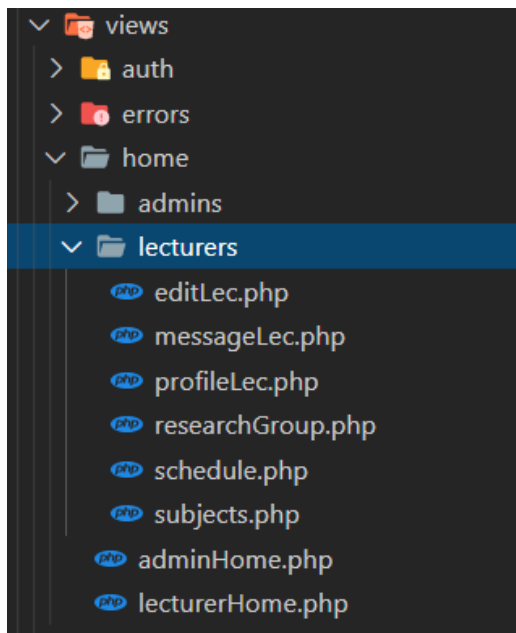
Details:

- Function lecPositionYear is use to get the data of lecturer position from database based on the lecturer code.
- Function lecResearchPriority is use to get the data of lecturer group research and priority from database based on lecturer code.
- Function lecSubject is use to get the data of lecturer subject from database based on the lecturer code.

## Home Lecturer



It's displayed the home page of lecturer. It has navbar contain Personal information, Time schedule, Subject List, Research Group and Logout. And display the combined of all page Below.



### editLec.php

It is used to display the edit page; the user can edit the page and save it. It also makes change in database. It can edit all the data except NIP and NIDN.

## **profileLec.php**

Details:

- This code is to get the lecturer status based on database if in database that lecturer has a status it will return that status, if in the database the lecturer doesn't have status it will return You are a PNS.
- To get the lecturer NIP and NIDN if the lecturer has NIP and NIDN it will return the lecturer NIP and NIDN based on the database, if lecturer hasn't NIP or NIDN it will return not set.
- To get lecturer Position. If the lecturer has position it'll return its position, if hasn't it will return Lecturer of IT Department.

## **ResearchGroup.php**

It displays the point of research group that teacher do and it's priority based on the database.

## **Schedule.php**

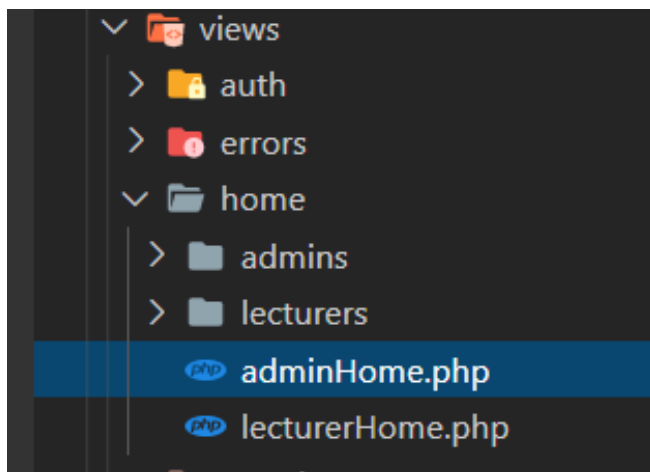
It displays the table the column is the weekday and the row is teaching time it contains the schedule of teacher teaching in one week and the hours of teaching.

## **Subject.php**

It displays the point of Subject that lecturer teach based on database

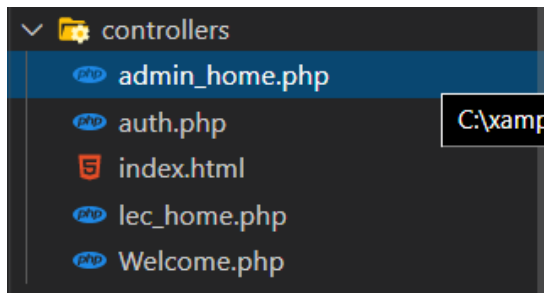
## **Admin Code**

### **Home Admin**



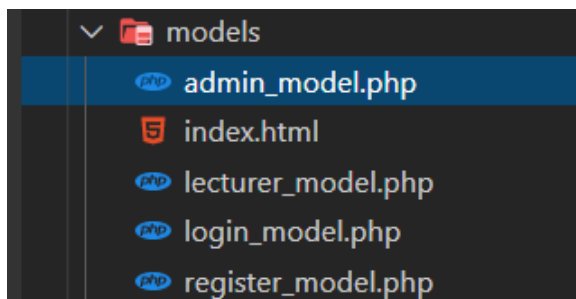
Provide the frame design of the web application in administrator user level

## Admin Controller



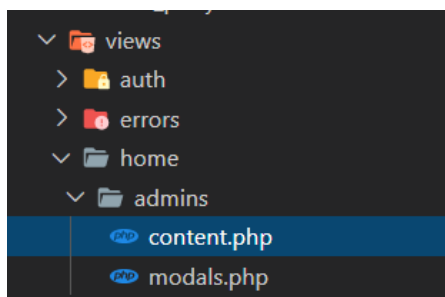
It is used as a data-provider to be used in each view of controllers and title of each page

## Admin Model



This file connects the web application to the database datadosen. Each function will fetch the data based on its purpose

## Content.php



Inside file content.php there are a table and some buttons to access and manipulate the data. But it's restricted since the CRUD is with Postman (REST\_SERVER) up to this point. The data inside the table relies heavily on which function that access it inside the controller

```
<!--  
Target is used to access the modal, title as indicator, and val is the data given  
based on each controller -->  
<?php
```

```

        $this->load-
>view('home/admins/modals', ['target' => 'Create' , 'title' => $title, 'val' => $
data]);

        $this->load-
>view('home/admins/modals', ['target' => 'Update' , 'title' => $title, 'val' => $
data]);

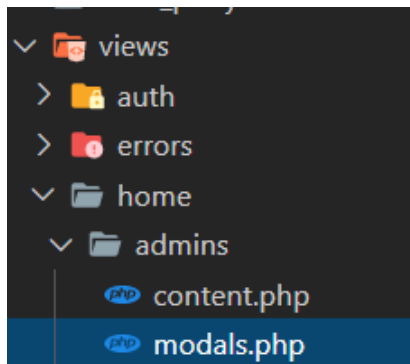
        $this->load-
>view('home/admins/modals', ['target' => 'Delete' , 'title' => $title, 'val' => $
data]);

?>

```

This code is used to call another view which is modals.php. the object inside it is to give title of the modal and as an identifier of button

### Modals.php

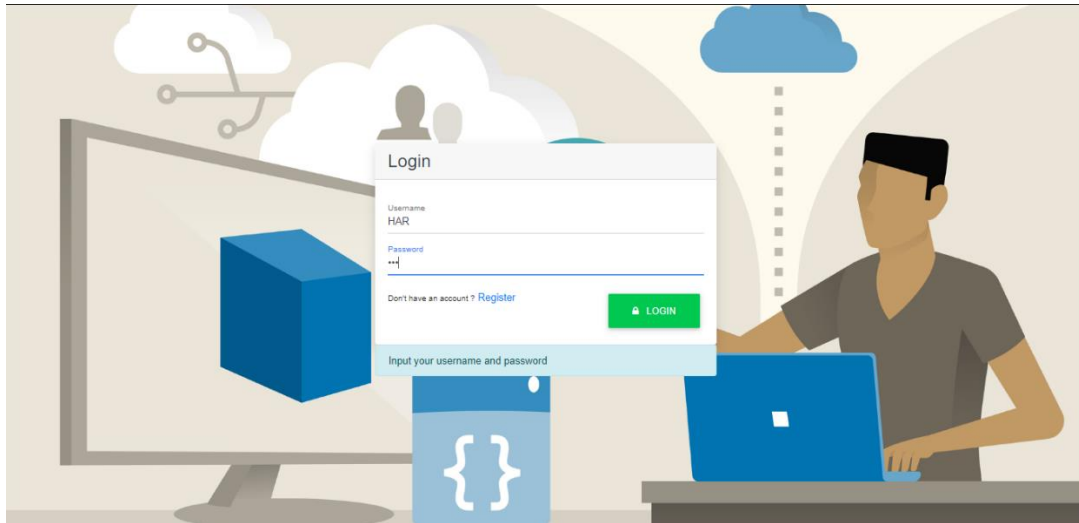


To open the modal of each button, and submit it to enable CRUD via web application

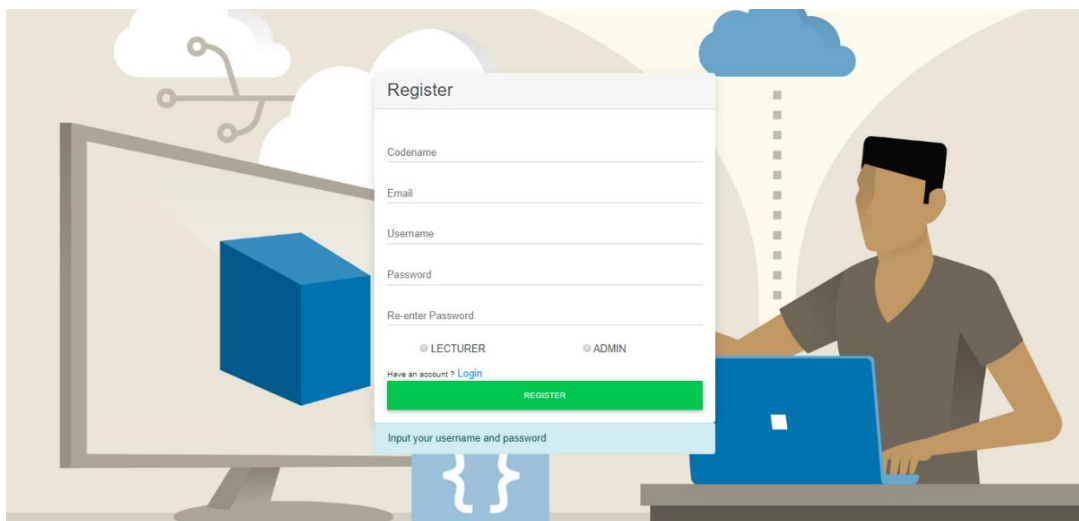
## C. Tutorial

### Lecturer Level User

1. Login with Registered Lecturer



2. Or you can register new account



3. After login you can see the home of lecturer level user

JURUSAN  
TEKNOLOGI INFORMASI  
POLITEKNIK NEGERI MALANG

[Personal Information](#)
[Time Schedule](#)
[Subjects List](#)
[Research Group](#)
[Logout](#)

Dashboard / Lecturer Home /

Upload a different photo

Choose file

**M. Hasyim Ratsanjani**

[Profile](#)
[Messages](#)
[Edit](#)

Codename	NIP
HAR	199003052019031013
Status	NIDN
You are a CPNS / Magang	Not Set
Position	Year
Lecturer in Information Technology Division	2019

**Time Schedule**

#	Monday	Tuesday	Wednesday	Thursday	Friday



Time Schedule					
#	Monday	Tuesday	Wednesday	Thursday	Friday
1	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
2	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
3	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
4	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
5	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
6	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
7	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
8	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar
9	Mengajar	Mengajar	Mengajar	Mengajar	Mengajar


PENGAJAR MATA KULIAH	
• Komputasi Multimedia	• Manajemen Proyek

RESEARCH GROUP	
You are not included in any group research	

You can see the personal information about the lecturer, edit the personal information, See the Time Schedule for weekday, See the subject of lecturer, and Research Group of lecturers.

4. You can can edit your personal information, click the edit



150 x 150

Upload a different photo

Choose file

M. Hasyim Ratsanjani

Profile Messages Edit

Edit Personal Information Edit Subjects

Username HAR

NIP 199003052019031013

NIDN

Email email@gmail.com

Phone Number Phone Number

Address Street

City State

Time Zone (GMT-06:00) Central Time (US & Canada)

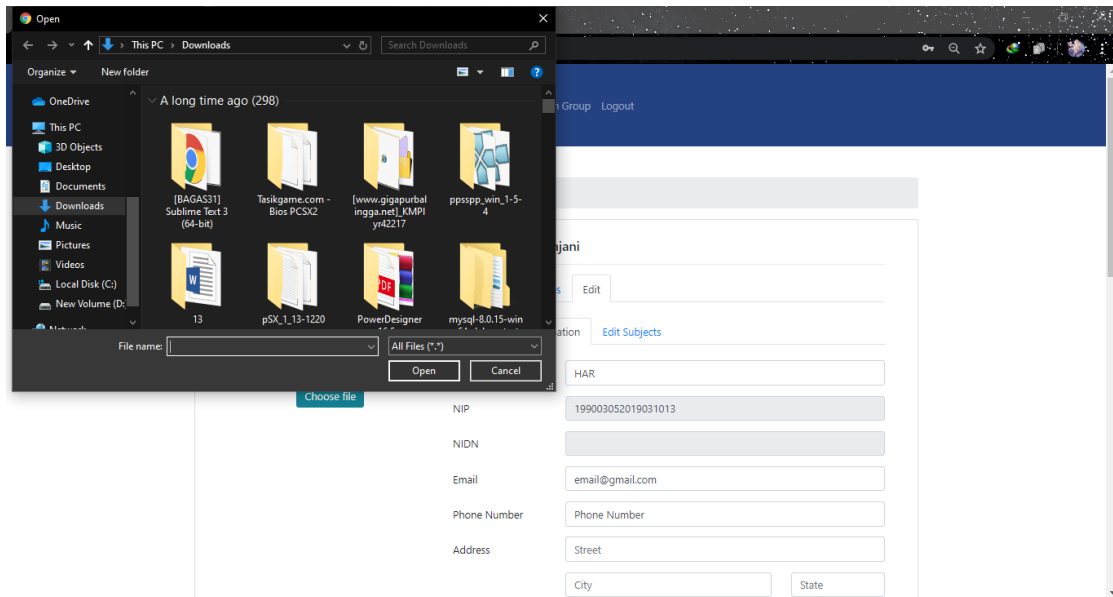
Password Set new password...

Confirm password Re-type new password...

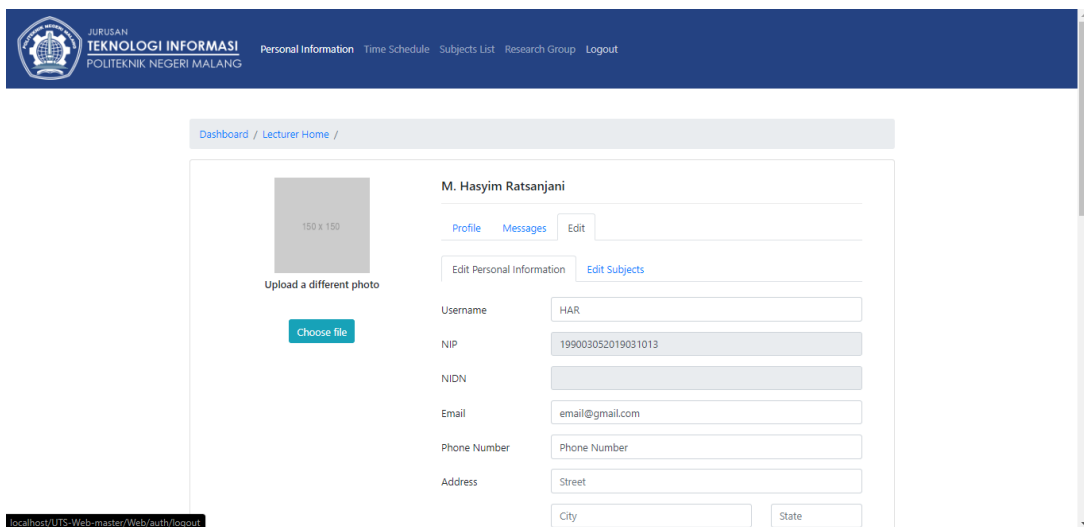
Save Changes Reset

And save the changes to save the changes or reset to reset the personal information.

5. Click the choose file in the behind of photo box to upload your photo

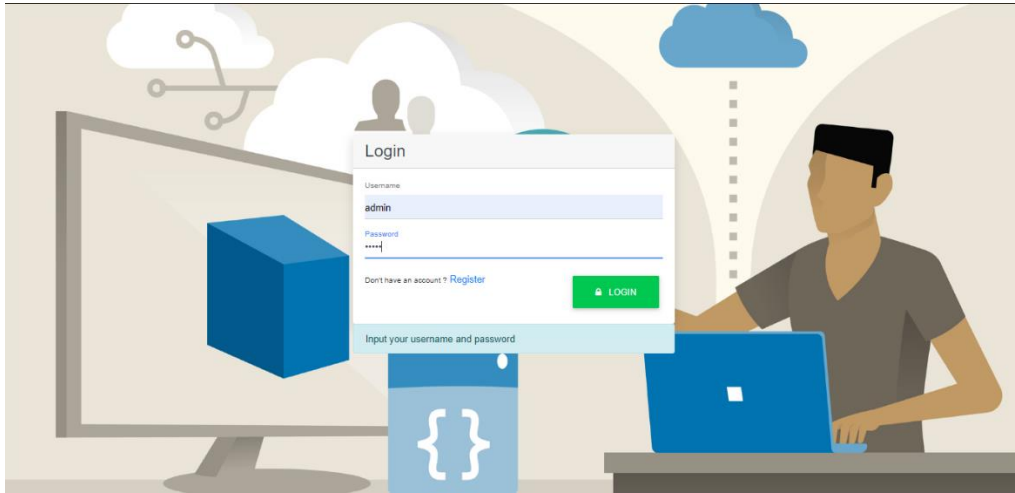


6. Click Logout to logout from lecturer



## Admin Level User

### 1. Login with Admin



### 2. This is the admin home

A screenshot of the admin home dashboard. On the left is a dark blue sidebar with the 'JTI' logo and a menu with items: 'Research Groups', 'Classes', 'Subjects', 'Lecturers', and 'Logout'. The main content area has a title 'Data Research Group' and a search bar. Below the search bar is a table with 6 entries. The table has two columns: 'rs\_id' and 'research'. The rows are: 0 (None), 1 (SI), 2 (CERDAS), 3 (JARINGAN), 4 (MULTIMEDIA), and 5 (VISION). At the bottom of the table, it says 'Showing 1 to 6 of 6 entries'. To the right of the table are three buttons: 'CREATE', 'UPDATE', and 'DELETE'. A small notification box at the top right says 'The CRUD is available via Postman'.

### 3. You can click classes for class table

**JTI**

- Research Groups
- Classes
- Subjects
- Lecturers
- Logout

### Data Classes

Show 10 entries

cl_id	cl_major	cl_level	cl_name
0	-	0	-
01	Ti	1	A
02	Ti	1	B
03	Ti	1	C
04	Ti	1	D
05	Ti	1	E
06	Ti	1	F
07	Ti	1	G
08	Ti	1	H
09	Mt	1	A

Showing 1 to 10 of 52 entries

The **CRUD** is available via Postman

**CREATE**

**UPDATE**

**DELETE**

4. You can click subject for the subject table

**JTI**

- Research Groups
- Classes
- Subjects
- Lecturers
- Logout

### Data Subjects

Show 10 entries

subject_code	subject	credit_hour	T/P	semester	level	major	year
RF175001	Sistem Terdistribusi	3	P	5	3	D3	2017
RF175002	Proyek 2	4	P	5	3	D3	2017
RF175003	Kecerdasan Buatan	2	P	5	3	D3	2017
RF175004	Keamanan Sistem Dan Jaringan Komputer	3	P	5	3	D3	2017
RF175005	Proposal Laporan Akhir	2	P	5	3	D3	2017
RF175006	Pemrograman Jaringan	3	P	5	3	D3	2017
RF176001	Digital Entrepreneurship	2	T	6	3	D3	2017
RF176002	Bahasa Inggris Persiapan Kerja	2	T	6	3	D3	2017
RF176003	Etika Profesi Bidang Ti	2	T	6	3	D3	2017
RF176004	Praktek Kerja Lapangan	3	P	6	3	D3	2017

Showing 1 to 10 of 108 entries

The **CRUD** is available via Postman

**CREATE**

**UPDATE**

**DELETE**

5. You can click the lecturer to show dropdown lecturer information

Status

JTI

Research Groups

Classes

Subjects

Lecturers

Status

Fields

Position

DPA

Research

Hour Dist.

Logout

Data Status Lecturer

Show 10 entries

Search:

code	name	status	phone_num
AB	Ahmad Bahaudin	MKU	
ACH	Abdul Chalim SAg, MPdI	MKU	
ADE	Ada Ismail	CPNS / Magang	
AFN	Ane Fany Navitasari	MKU	
ANP	Agung Nugroho Pramudhita, ST, MT.	CPNS/kontrak	
ANR	Anugrah Nur Rahmanto, SSn, MDS.	CPNS/kontrak	
APK	Annisia Puspa Kirana, MKom	CPNS/kontrak	
ARI	Ariyanti, SH,MH	LB	
ARP	Arief Prasetya, SKom, MKom.	PNS	

Showing 1 to 10 of 108 entries

Previous

1

2

3

4

5

...

11

Next

The **CRUD** is available via Postman

+

CREATE

↺

UPDATE

🗑

DELETE

## Fields

JTI

Research Groups

Classes

Subjects

Lecturers

Logout

Data Field Lecturer

Show 10 entries

Search:

code	name	field_of_study
AB	Ahmad Bahaudin	MKU
ACH	Abdul Chalim SAg, MPdI	
ADE	Ada Ismail	
AFN	Ane Fany Navitasari	MKU
ANP	Agung Nugroho Pramudhita, ST, MT.	TI
ANR	Anugrah Nur Rahmanto, SSn, MDS.	TI
APK	Annisia Puspa Kirana, MKom	TI
ARI	Ariyanti, SH,MH	MP
ARP	Arief Prasetya, SKom, MKom.	TI

Showing 1 to 10 of 108 entries

Previous

1

2

3

4

5

...

11

Next

The **CRUD** is available via Postman

+

CREATE

↺

UPDATE

🗑

DELETE

## Position

JTI

Research Groups

Classes

Subjects

Lecturers

Logout

Data Position Lecturer

Show 10 entries

Search:

code	name	position	year	semester
ARP	Arief Prasetya, SKom, MKom.	Ka.Lab. Sistem Komputer dan Jaringan	2019	Odd
ATQ	Atiqah Nurul Asri, SPd, MPd.	KaPakJar. MK, MKU, Wajib, dan Penunjang D4	2019	Odd
DWI	Dwi Puspitarsari, SKom, MKom.	KaPakJar. MK, Keahlian D4	2019	Odd
DWW	Dimas Wahyu Wibowo, ST, MT.	Ka. Lab. Image dan Graphics	2019	Odd
ELA	Eka Larasati Amalia, SST, MT.	KaPakJar MK, Inti D3	2019	Odd
ERF	Erfan Rohadi, ST, MEng, PhD.	Ka. Lab. Sistem Informasi	2019	Odd
GBP	Gunawan Budi Prasetya, ST, MMT, Ph.D.	Ka. Lab. Sistem Cerdas	2019	Odd
HJT	Budi Harjanto, ST, MMKom.	Ka. Lab. Informatika Dasar	2019	Odd
IDW	Indra Dharma Wijaya, ST, MMT.	Ka. Lab. Basisdata	2019	Odd
KPA	Deddy Kusianto PA, Ir., MMkom.	Ka. Lab. Project	2019	Odd

Showing 1 to 10 of 20 entries

Previous

1

2

Next

The **CRUD** is available via Postman

+

CREATE

↺

UPDATE

🗑

DELETE

## DPA

JTI

Research Groups

Classes

Subjects

Lecturers

Logout

Data DPA Lecturer

Show 10 entries

Search:

code	name	class_name	year
ANP	Agung Nugroho Pramudhita, S.T., MT.	M-IF	2018
ANP	Agung Nugroho Pramudhita, S.T., MT.	M-2F	2019
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	Th-2A	2018
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	Th-3A	2019
ARP	Arief Prasetyo, SKom, MKom.	Th-IF	2019
ARP	Arief Prasetyo, SKom, MKom.	Th-4F	2018
ARS	Arie Rachmad Syulistya, SKom, MKom	Th-IB	2018
ARS	Arie Rachmad Syulistya, SKom, MKom	Th-2B	2019
ATF	Annisia Taufika Firdausi, ST., MT.	M-IC	2018
ATF	Annisia Taufika Firdausi, ST., MT.	Th-2C	2019

Showing 1 to 10 of 97 entries

Previous12345...10Next

The CRUD is available via Postman

CREATE

UPDATE

DELETE

## Research

JTI

Research Groups

Classes

Subjects

Lecturers

Logout

Data Research Group Lecturer

Show 10 entries

Search:

code	name	research	priority
ANP	Agung Nugroho Pramudhita, S.T., MT.	CERDAS	Primary
ANP	Agung Nugroho Pramudhita, S.T., MT.	SI	Secondary
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	MULTIMEDIA	Primary
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	SI	Secondary
APK	Annisia Puspa Kirana, MKom	SI	Primary
APK	Annisia Puspa Kirana, MKom	CERDAS	Secondary
ARP	Arief Prasetyo, SKom, MKom.	JARINGAN	Primary
ARP	Arief Prasetyo, SKom, MKom.	MULTIMEDIA	Secondary
ARS	Arie Rachmad Syulistya, SKom, MKom	CERDAS	Primary
ATF	Annisia Taufika Firdausi, ST., MT.	CERDAS	Primary

Showing 1 to 10 of 102 entries

Previous12345...11Next

The CRUD is available via Postman

CREATE

UPDATE

DELETE

## Hour Dist

JTI

Research Groups

Classes

Subjects

Lecturers

Logout

Data Research Group Lecturer

Show 10 entries

Search:

code	name	research	priority
ANP	Agung Nugroho Pramudhita, S.T., MT.	CERDAS	Primary
ANP	Agung Nugroho Pramudhita, S.T., MT.	SI	Secondary
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	MULTIMEDIA	Primary
ANR	Anugrah Nur Rahmanto, S.Sn, MDs.	SI	Secondary
APK	Annisia Puspa Kirana, MKom	SI	Primary
APK	Annisia Puspa Kirana, MKom	CERDAS	Secondary
ARP	Arief Prasetyo, SKom, MKom.	JARINGAN	Primary
ARP	Arief Prasetyo, SKom, MKom.	MULTIMEDIA	Secondary
ARS	Arie Rachmad Syulistya, SKom, MKom	CERDAS	Primary
ATF	Annisia Taufika Firdausi, ST., MT.	CERDAS	Primary

Showing 1 to 10 of 102 entries

Previous12345...11Next

The CRUD is available via Postman

CREATE

UPDATE

DELETE

6. You can search in all the table to show data what you want

The screenshot shows the JTI application interface. On the left is a dark blue sidebar with navigation links: Research Groups, Classes, Subjects, Lecturers, and Logout. The main content area is titled 'Data Research Group Lecturer'. It features a search bar with the text 'cerdas' and a dropdown menu set to 'Show 10 entries'. Below the search bar is a table with four columns: code, name, research, and priority. The table contains 10 rows of data. To the right of the table are three large blue buttons: CREATE, UPDATE, and DELETE. A notification box at the top right states 'The CRUD is available via Postman'.

code	name	research	priority
ANP	Agung Nugraha Pramudhita, ST, MT.	CERDAS	Primary
APK	Annisia Puspa Kirana, MKom	CERDAS	Secondary
ARS	Arie Rachmad Syulistya, SKom, MKom	CERDAS	Primary
ATF	Annisia Taufika Firdausi, ST, MT.	CERDAS	Primary
CR	Cahya Rahmad, ST, MKom, Dr. Eng.	CERDAS	Secondary
DOD	Dodit Suprianto SKom, MT.	CERDAS	Secondary
DRY	Dika Rizky Yudianto, SKom, MKom	CERDAS	Secondary
DS	Dhebya Suryani, SKom, MT	CERDAS	Secondary
DWI	Dwi Puspitasari, SKom, MKom.	CERDAS	Primary
ELA	Eka Larasati Amalia, SST, MT.	CERDAS	Secondary

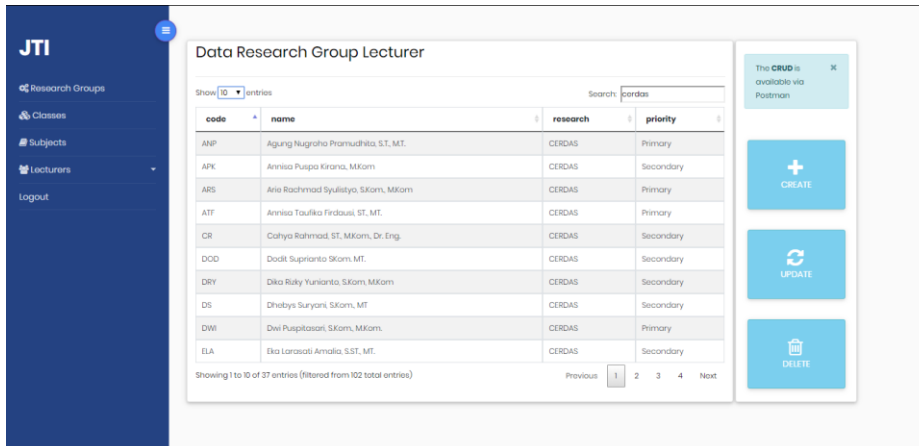
7. You can click the menu bar to hide the navbar or click again to show the navbar

This screenshot shows the same application as the previous one, but the sidebar menu bar is hidden. A small hamburger menu icon is visible in the top left corner of the main content area. The rest of the interface, including the search bar, table, and buttons, remains the same.

8. You can change the number of row table

This screenshot shows the application with the row count dropdown menu open. The dropdown menu is located at the top left of the table and displays the following options: 10, 25, 50, and 100. The table content and other interface elements are identical to the previous screenshots.

9. You can click logout to logout

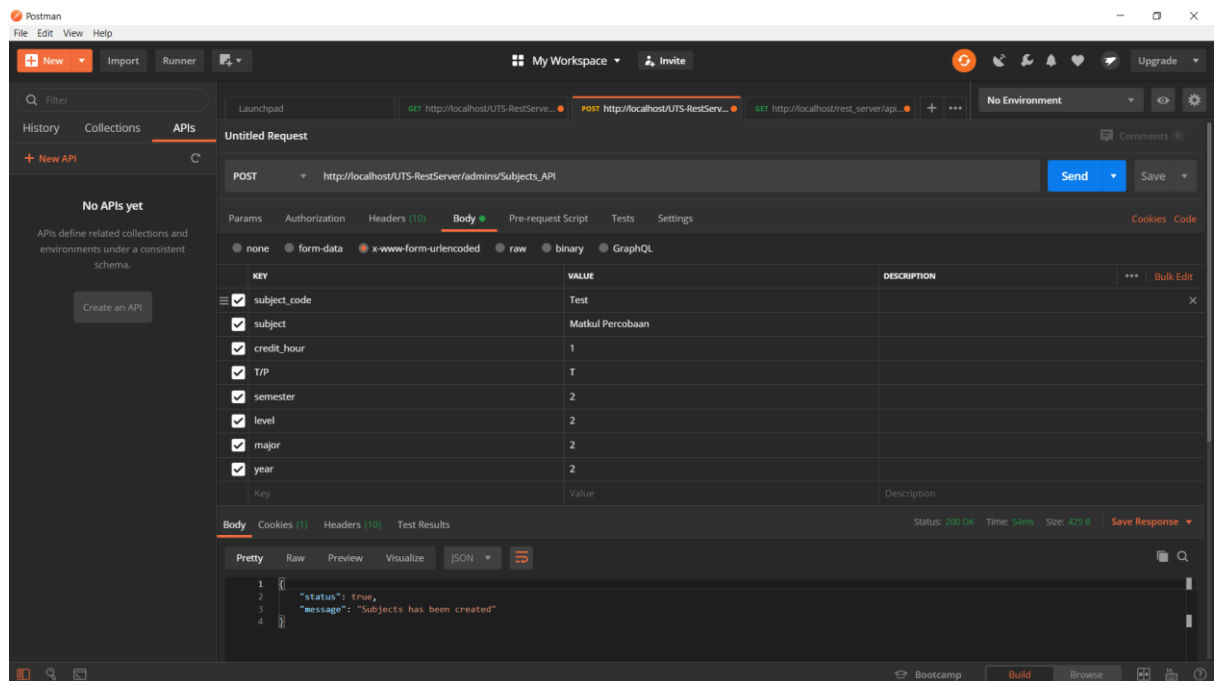


## D. Admins Rest Server

The Rest Server is in another application, the server only can give responses to HTTP access via search bar on the browser with its related parameters. Scroll down for further informations

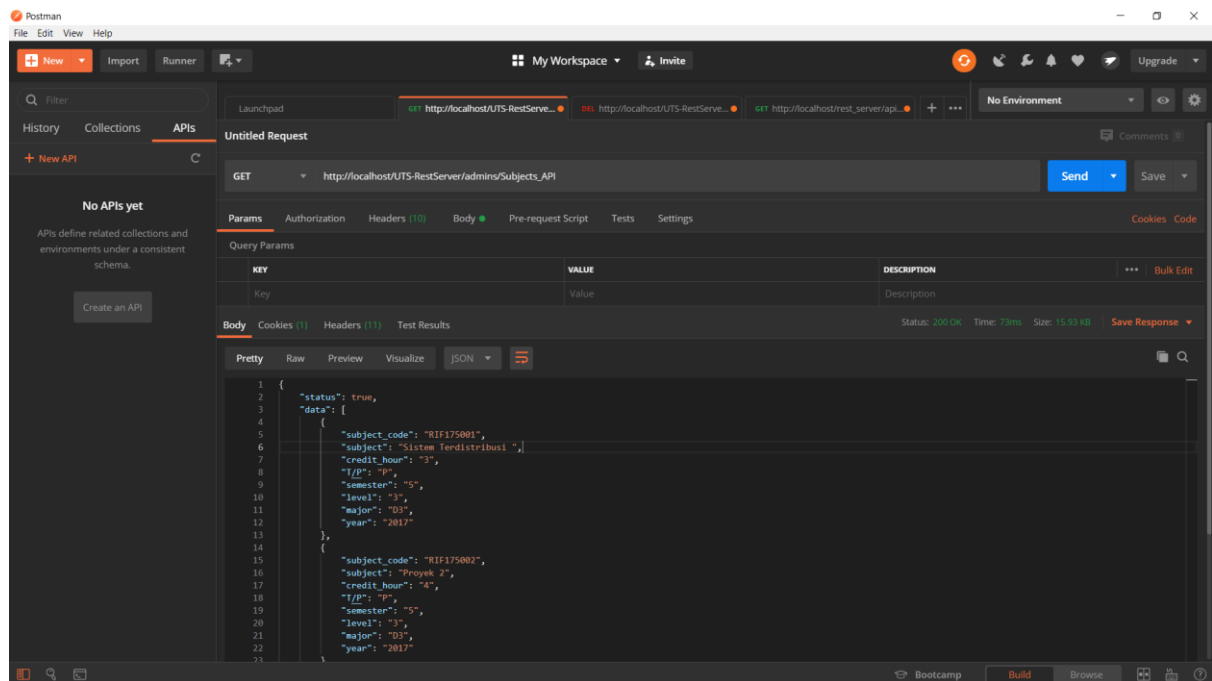
### Subjects\_API

Create a new subject inside the system

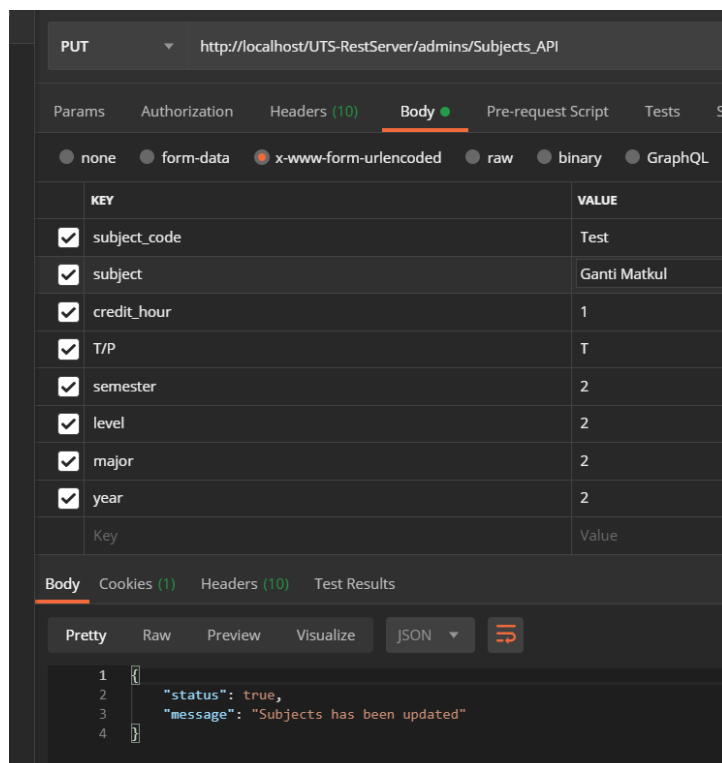




Query all the result of existing subjects in the database



Based on subject\_code, we input all the parameter on form-urlencoded to update the subject



## Delete subject based on subject\_code

DELETE ▼ http://localhost/UTS-RestServer/admins/Subjects\_API

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

KEY	VALUE
<input checked="" type="checkbox"/> subject_code	Test
<input checked="" type="checkbox"/> subject	Ganti Matkul
<input checked="" type="checkbox"/> credit_hour	1
<input checked="" type="checkbox"/> T/P	T
<input checked="" type="checkbox"/> semester	2
<input checked="" type="checkbox"/> level	2
<input checked="" type="checkbox"/> major	2
<input checked="" type="checkbox"/> year	2
Key	Value

Body Cookies (1) Headers (10) Test Results

Pretty Raw Preview Visualize JSON ▼

```
1 {
2   "status": true,
3   "id": "Test",
4   "message": "deleted"
5 }
```

## RsGroup\_API

Create a new research group. Input all the information to be stored on database

POST ▼ http://localhost/UTS-RestServer/admins/rsGroup\_API

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

KEY	VALUE
<input checked="" type="checkbox"/> rs_id	6
<input checked="" type="checkbox"/> research	DOTA
Key	Value

Body Cookies (1) Headers (10) Test Results

Pretty Raw Preview Visualize JSON ▼

```
1 {
2   "status": true,
3   "message": "Research Group has been created"
4 }
```

Query all the result of existing research group in database

GET [http://localhost/UTS-RestServer/admins/rsGroup\\_API](http://localhost/UTS-RestServer/admins/rsGroup_API)

Params Authorization Headers (10) Body ● Pre-request Script Tests Settings

Query Params

KEY	VALUE
Key	Value

Body Cookies (1) Headers (10) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "status": true,
3   "data": [
4     {
5       "rs_id": "5",
6       "research": "VISION"
7     },
8     {
9       "rs_id": "4",
10      "research": "MULTIMEDIA"
11    },
12    {
13      "rs_id": "3",
14      "research": "JARINGAN"
15    },
16    {
17      "rs_id": "2",
18      "research": "CERDAS"
19    }
20  ]
21 }
```

We update the research group based on the id

PUT [http://localhost/UTS-RestServer/admins/rsGroup\\_API](http://localhost/UTS-RestServer/admins/rsGroup_API)

<input checked="" type="checkbox"/>	research	Web Lanjut
	Key	Value

Body Cookies (1) Headers (10) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "status": true,
3   "message": "Research Group has been updated"
4 }
```

Delete a research group on a table inside the database

DELETE ▼ http://localhost/UTS-RestServer/admins/rsGroup\_API

Params Authorization Headers (10) **Body** ● Pre-request Script Tests Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL

	KEY	VALUE
<input checked="" type="checkbox"/>	rs_id	6
<input checked="" type="checkbox"/>	research	Web Lanjut
	Key	Value

Body Cookies (1) Headers (10) Test Results

Pretty Raw Preview Visualize JSON ▼

```
1 {  
2   "status": true,  
3   "id": "6",  
4   "message": "Research Group deleted"  
5 }
```

## Class\_API

Create a new class data in database

POST ▼ http://localhost/UTS-RestServer/admins/Class\_API

Params Authorization Headers (10) **Body** ● Pre-request Script Tests Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL

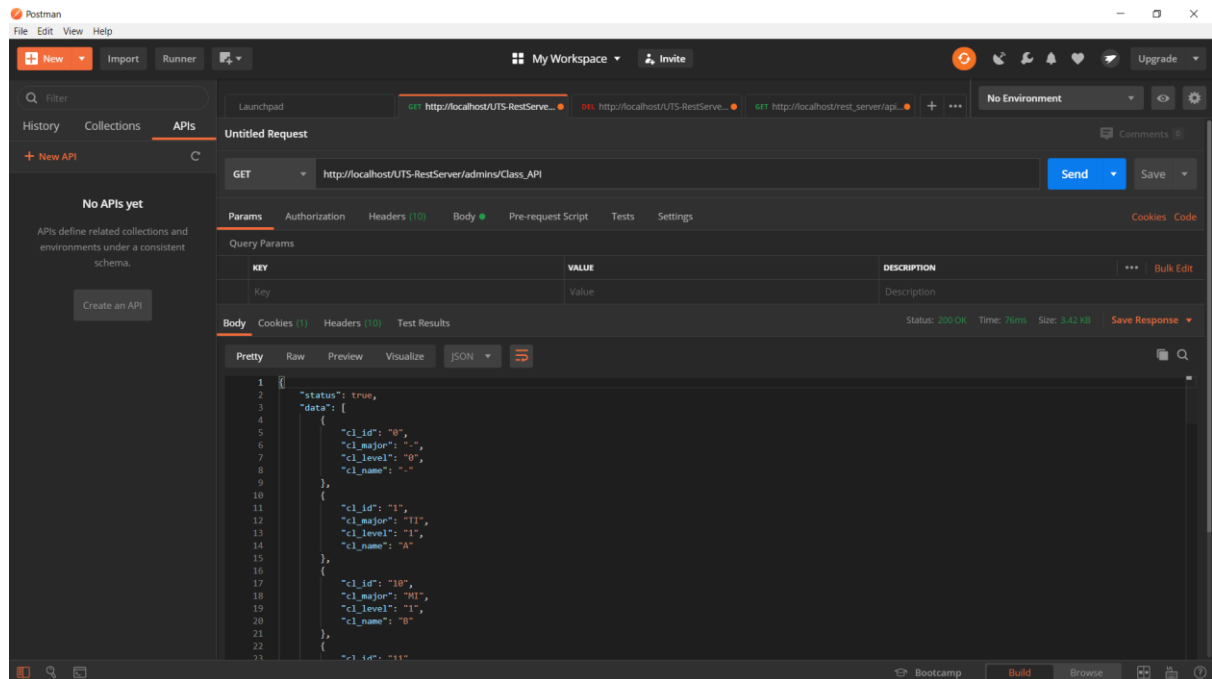
	KEY	VALUE
<input checked="" type="checkbox"/>	cl_id	53
<input checked="" type="checkbox"/>	cl_major	CO
<input checked="" type="checkbox"/>	cl_level	3
<input checked="" type="checkbox"/>	cl_name	A
	Key	Value

Body Cookies (1) Headers (10) Test Results

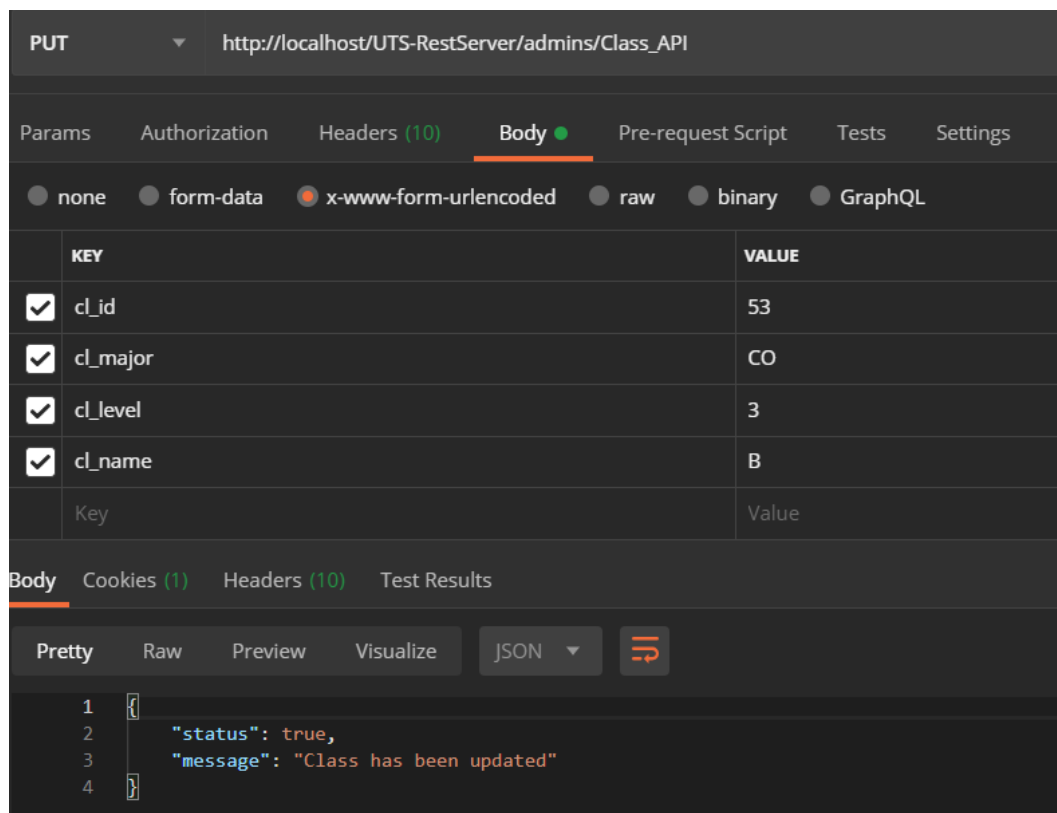
Pretty Raw Preview Visualize JSON ▼

```
1 {  
2   "status": true,  
3   "message": "Class has been created"  
4 }
```

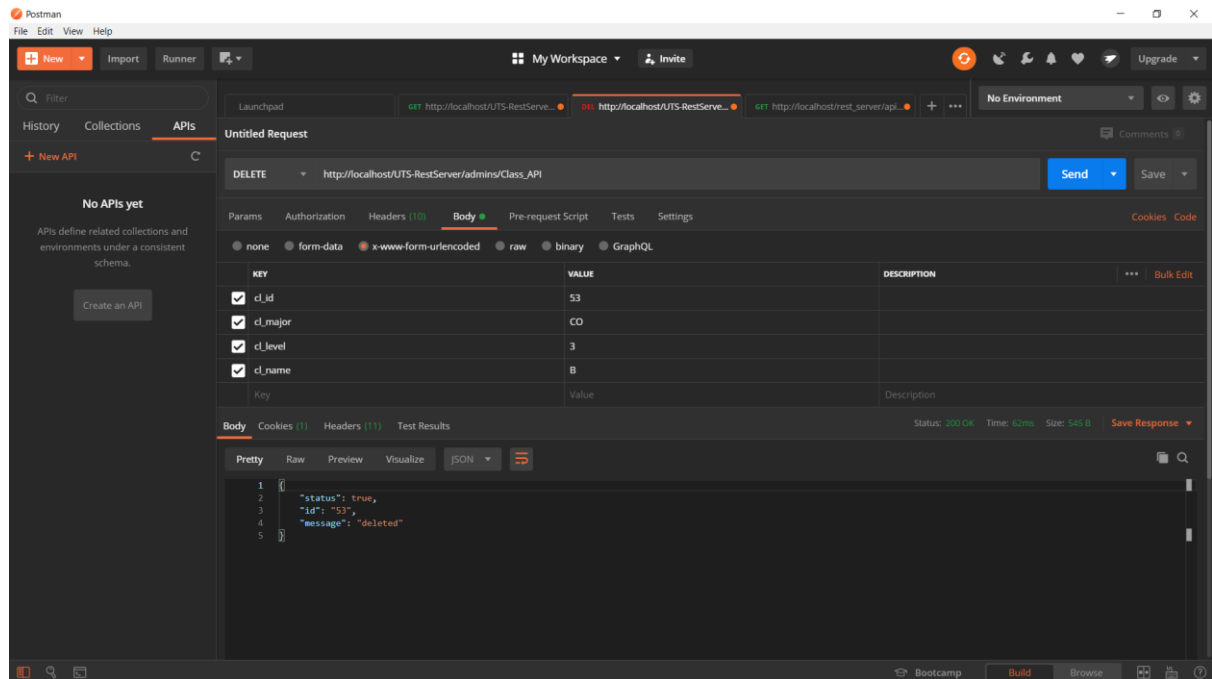
Query all the result of the class that is exist on the database



Input all the details that will be updated on the data that are written on cl\_id

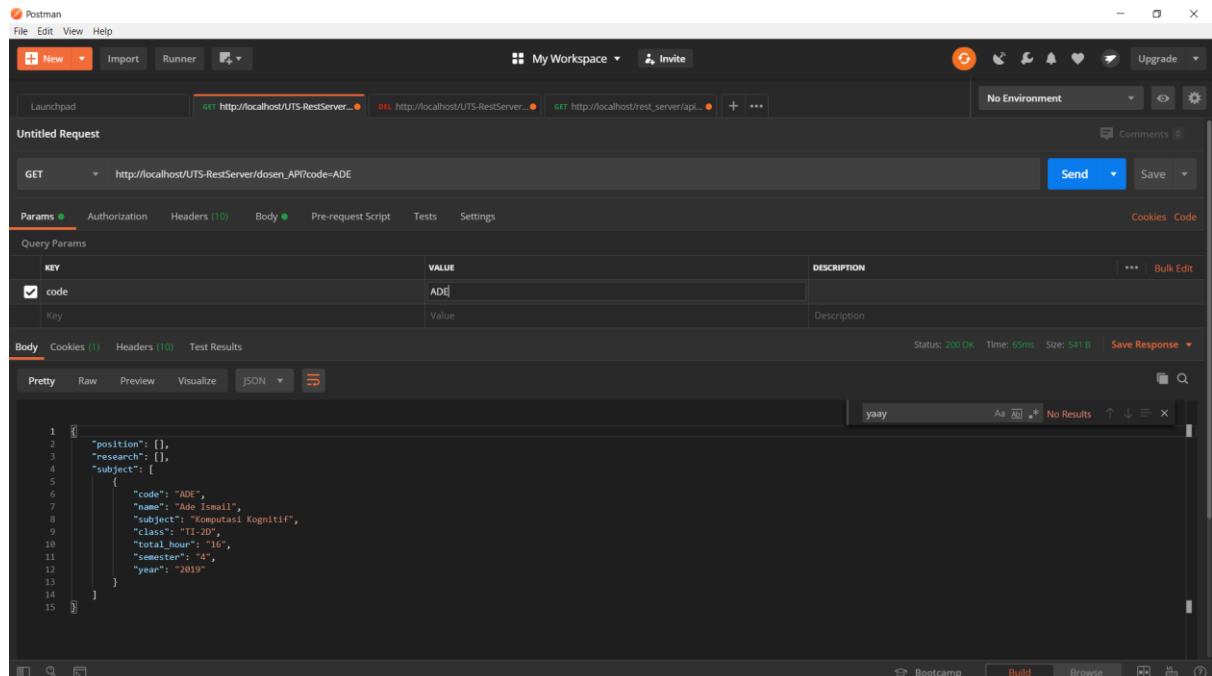


## Delete Class based on its cl\_id



## dosen\_API

For lecturer's, the API will only read data inside the database based on the codename



Result:

