

# **LAPORAN TUGAS PEMROGRAMAN WEB LANJUT**

## **“JOBSHEET 8”**



**Oleh :**

**NAMA : ARDAN ANJUNG KUSUMA**

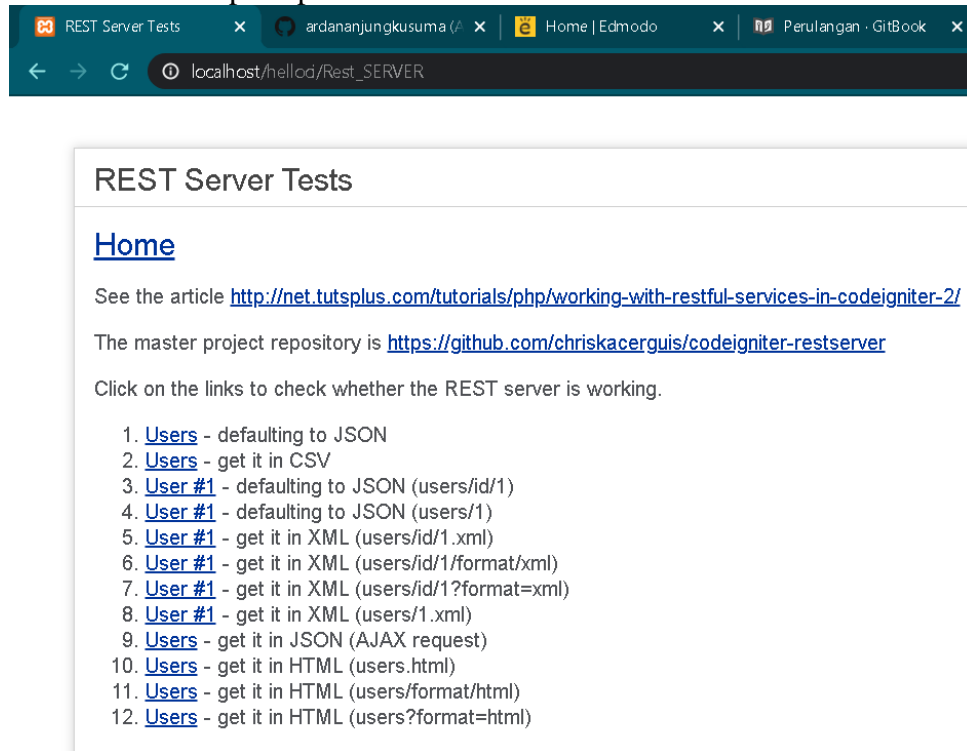
**NIM : 1841720041**

**PROGRAM STUDI TEKNIK INFORMATIKA  
JURUSAN TEKNOLOGI INFORMASI  
POLITEKNIK NEGERI MALANG  
2020**

## Praktikum – Bagian 1: Instalasi library restful codeigniter

1	<div>Mengkonfigurasi config.php</div> <pre>\$config['base_url'] = 'http://localhost/hello-ci/';  /*  -----    Index File  -----      Typically this will be your index.php file, unless   something else. If you are using mod_rewrite to r   variable so that it is blank.    */ \$config['index_page'] = '';</pre> <div>Mengkonfigurasi autoload.php</div> <pre>/* \$config['libraries'] = array('database', 'form_validation', 'session');  /* \$config['helper'] = array('url');</pre> <div>Mengkonfigurasi database.php</div> <pre>76 \$db['default'] = array( 77     'dsn' =&gt; '', 78     'hostname' =&gt; 'localhost', 79     'username' =&gt; 'root', 80     'password' =&gt; '', 81     'database' =&gt; 'rest_coba', 82     'dbdriver' =&gt; 'mysqli',</pre>																																				
2	<div>Membuat dummy data untuk rest server</div> <div></div> <table><tr><th></th><th>id</th><th>nrp</th><th>nama</th><th>email</th><th>jurusan</th></tr><tr><td><input type="checkbox"/></td><td>1</td><td>043040001</td><td>Doddy Ferdiansyah</td><td>doy@gmail.com</td><td>Teknik Mesin</td></tr><tr><td><input type="checkbox"/></td><td>2</td><td>023040123</td><td>Erik</td><td>erik@gmail.com</td><td>Teknik Industri</td></tr><tr><td><input type="checkbox"/></td><td>3</td><td>043040321</td><td>Rommy Fauzi</td><td>rommy@gmail.com</td><td>Teknik Planologi</td></tr><tr><td><input type="checkbox"/></td><td>4</td><td>033040023</td><td>Fajar Darmawan</td><td>fajar@yahoo.com</td><td>Teknik Informatika</td></tr><tr><td><input type="checkbox"/></td><td>5</td><td>113040321</td><td>Ferry Mulyanto</td><td>ferry@yahoo.com</td><td>Manajemen</td></tr></table>		id	nrp	nama	email	jurusan	<input type="checkbox"/>	1	043040001	Doddy Ferdiansyah	doy@gmail.com	Teknik Mesin	<input type="checkbox"/>	2	023040123	Erik	erik@gmail.com	Teknik Industri	<input type="checkbox"/>	3	043040321	Rommy Fauzi	rommy@gmail.com	Teknik Planologi	<input type="checkbox"/>	4	033040023	Fajar Darmawan	fajar@yahoo.com	Teknik Informatika	<input type="checkbox"/>	5	113040321	Ferry Mulyanto	ferry@yahoo.com	Manajemen
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<input type="checkbox"/>	5	113040321	Ferry Mulyanto	ferry@yahoo.com	Manajemen																																
3	<div>Copy semua data rest-server</div>																																				

4 Jika sukses maka akan tampil seperti berikut



## Praktikum – Bagian 2: Membuat Aplikasi CRUD Restful Codeigniter

1 Membuat mahasiswa controller pada folder api

application > controllers > api > Mahasiswa.php > PHP Intelephense > Mahasiswa > \_\_cons

```
1  <?php
2
3  defined('BASEPATH') or exit('No direct script access allowed');
4
5  // This can be removed if you use __autoload() in config.php OR us
6  /** @noinspection PhpIncludeInspection */
7  require APPPATH . '/libraries/REST_Controller.php';
8
9  // use namespace
10 use Restserver\Libraries\REST_Controller;
11 use Restserver\Libraries\Format;
12
13 /**
14  * This is an example of a few basic user interaction methods you
15  * all done with a hardcoded array
16  *
17  * @package      CodeIgniter
18  * @subpackage   Rest Server
19  * @category     Controller
20  * @author       Phil Sturgeon, Chris Kacerguis
21  * @license      MIT
22  * @link         https://github.com/chriskacerguis/codeigniter-
23  */
24 class Mahasiswa extends REST_Controller
25 {
26
```

```
function __construct()
{
    parent::__construct();
    $this->load->model('mahasiswa2_model', 'mahasiswa');
}

public function index_get()
{
    $id = $this->get('id');
    if ($id === NULL) {
        $mahasiswa = $this->mahasiswa->getMahasiswa();
    } else {
        $mahasiswa = $this->mahasiswa->getMahasiswa($id);
    }

    if ($mahasiswa) {
        $this->response([
            'status' => true,
            'data' => $mahasiswa
        ], REST_Controller::HTTP_OK);
    } else {
        $this->response([
            'status' => FALSE,
            'message' => 'Tidak Ditemukan Mahasiswa'
        ], REST_Controller::HTTP_NOT_FOUND);
    }
}
```

## 2 Membuat mahasiswa2\_model

```
application > models > Mahasiswa2_model.php > ...
1  <?php
2
3  defined('BASEPATH') or exit('No direct script access allowed');
4
5  class mahasiswa2_model extends CI_Model
6  {
7      public function getMahasiswa($id = null)
8      {
9          if ($id === null) {
10             return $this->db->get('mahasiswa')->result_array();
11          } else {
12             return $this->db->get_where('mahasiswa', ['id' => $id])->result_array();
13          }
14      }
15  }
```

## 3 Membuka insomnia dan menggunakan GET untuk mendapatkan data

Insomnia – My Request

Application Edit View Window Tools Help

Insomnia GET http://localhost/helloapi/api/mahasiswa Send

No Environment Cookies Filter GET My Request

Form Auth Query Header 1 Docs

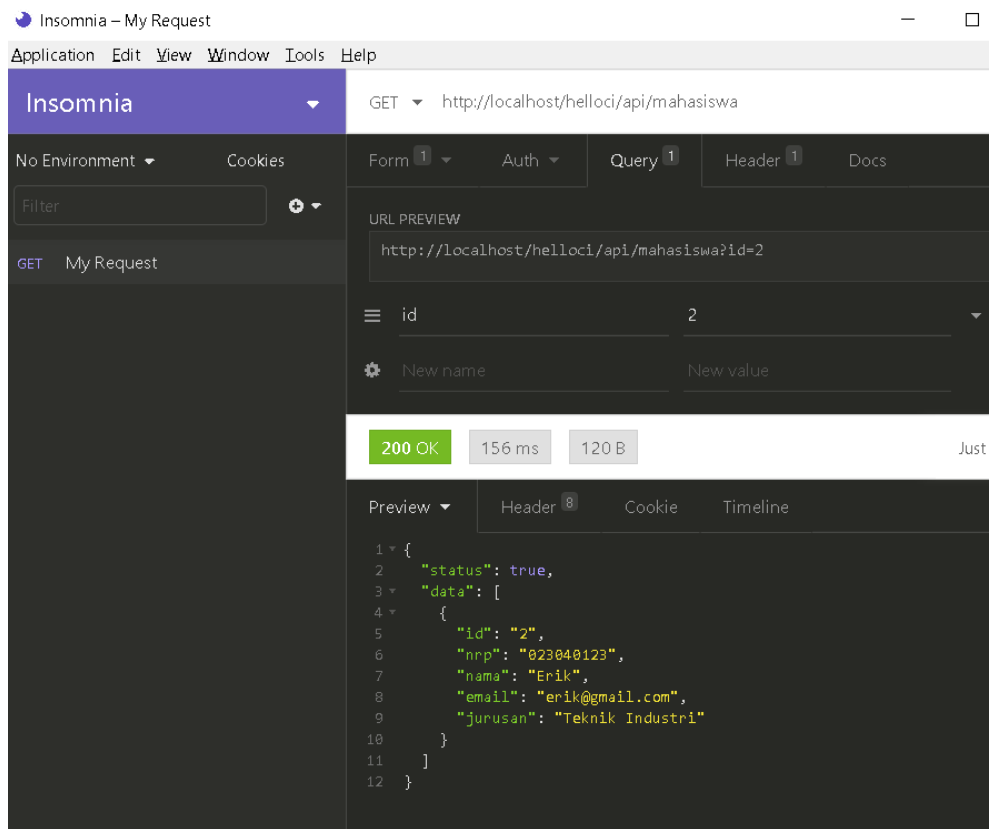
id\_barang 18

200 OK 125 ms 542 B 3 Minutes Ago

Preview Header 8 Cookie Timeline

```
1 {
2   "status": true,
3   "data": [
4     {
5       "id": "1",
6       "nnp": "043040001",
7       "nama": "Doddy Ferdiansyah",
8       "email": "doy@gmail.com",
9       "jurusan": "Teknik Mesin"
10    },
11    {
12      "id": "2",
13      "nnp": "023040123",
14      "nama": "Erik",
15      "email": "erik@gmail.com",
16      "jurusan": "Teknik Industri"
17    },
18    {
19      "id": "3",
20      "nnp": "043040321",
21      "nama": "Rommy Fauzi",
22      "email": "rommy@gmail.com",
23      "jurusan": "Teknik Planologi"
24    },
25    {
26      "id": "4",
27      "nnp": "033040023",
28      "nama": "Fajar Darmawan ",
29      "email": "fajar@yahoo.com",
30      "jurusan": "Teknik Informatika"
31    },
32    {
33      "id": "5",
```

## Mendapatkan mahasiswa berdasarkan id



## 4 Membuat post, put dan delete Controller

```
public function index_post()
{
    $data = [
        'nrp' => $this->post('nrp'),
        'nama' => $this->post('nama'),
        'email' => $this->post('email'),
        'jurusan' => $this->post('jurusan')
    ];

    if ($this->mahasiswa->createMahasiswa($data) > 0) {
        $this->response([
            'status' => true,
            'message' => 'Data Mahasiswa Dibuat'
        ], REST_Controller::HTTP_CREATED);
    } else {
        //id not found
        $this->response([
            'status' => true,
            'message' => 'Gagal membuat data mahasiswa baru'
        ], REST_Controller::HTTP_BAD_REQUEST);
    }
}
```

```

public function index_put()
{
    $id = $this->put('id');
    $data = [
        'nrp' => $this->put('nrp'),
        'nama' => $this->put('nama'),
        'email' => $this->put('email'),
        'jurusan' => $this->put('jurusan')
    ];

    if ($this->mahasiswa->updateMahasiswa($data, $id) > 0) {
        $this->response([
            'status' => true,
            'message' => 'Data mahasiswa Diupdate'
        ], REST_Controller::HTTP_OK);
    } else {
        $this->response([
            'status' => false,
            'message' => 'Gagal mengupdate data'
        ], REST_Controller::HTTP_BAD_REQUEST);
    }
}

```

```

public function index_delete()
{
    $id = $this->delete('id');

    if ($id === null) {
        $this->response([
            'status' => false,
            'message' => 'Berikan id yang valid'
        ], REST_Controller::HTTP_BAD_REQUEST);
    } else {
        if ($this->mahasiswa->deleteMahasiswa($id) > 0) {
            $this->response([
                'status' => true,
                'id' => $id,
                'message' => 'Sukses Terhapus'
            ], REST_Controller::HTTP_OK);
        } else {
            $this->response([
                'status' => false,
                'message' => 'ID Tidak ditemukan'
            ], REST_Controller::HTTP_BAD_REQUEST);
        }
    }
}

```

## Membuat Model

```
public function createMahasiswa($data)
{
    $this->db->insert('mahasiswa', $data);
    return $this->db->affected_rows();
}

public function updateMahasiswa($data, $id)
{
    $this->db->update('mahasiswa', $data, ['id' => $id]);
    return $this->db->affected_rows();
}

public function deleteMahasiswa($id)
{
    $this->db->delete('mahasiswa', ['id' => $id]);
    return $this->db->affected_rows();
}
```

## 5 Melakukan operasi create dengan menggunakan form url encoded

POST ▼ http://localhost/helloapi/api/mahasiswa Send

Form 4 ▼ Auth ▼ Query 1 Header 1 Docs

nrp	0985390843	<span>▼</span> <span>✓</span> <span>🗑</span>
nama	Kusuma Ardan	<span>▼</span> <span>✓</span> <span>🗑</span>
email	ardan@gmail.com	<span>▼</span> <span>✓</span> <span>🗑</span>
jurusan	Teknik Informatika	<span>▼</span> <span>✓</span> <span>🗑</span>
⚙ New name	New value	

**201 Created** 94 ms 49 B Just Now ▼

Preview ▼ Header 9 Cookie 1 Timeline

```
1 {
2   "status": true,
3   "message": "Data Mahasiswa Dibuat"
4 }
```



200 OK

141 ms

651 B

Just Now

Preview

Header 8

Cookie

Timeline

```

26     id : 4 ,
27     "nrp": "033040023",
28     "nama": "Fajar Darmawan ",
29     "email": "fajar@yahoo.com",
30     "jurusan": "Teknik Informatika"
31   },
32   {
33     "id": "5",
34     "nrp": "113040321",
35     "nama": "Ferry Mulyanto",
36     "email": "ferry@yahoo.com",
37     "jurusan": "Manajemen"
38   },
39   {
40     "id": "33",
41     "nrp": "098539084",
42     "nama": "Kusuma Ardan",
43     "email": "ardan@gmail.com",
44     "jurusan": "Teknik Informatika"
45   }
46 ]
47 }

```

\$.store.books[\*].author

## 6 Melakukan operasi update

PUT <http://localhost/helloapi/mahasiswa> Send

Form 5

Auth

Query

Header 1

Docs

nrp	0985390843		
nama	Ardan Kusuma		
email	ardan@gmail.com		
jurusan	Teknik Informatika		
id	33		

200 OK

188 ms

51 B

Just Now

Preview Header 8 Cookie Timeline

## Data yang diupdate nama Kusuma Ardan Menjadi Ardan Kusuma

200 OK

125 ms

651 B

Just Now ▾

Preview ▾

Header 8

Cookie

Timeline

```
26   id : 4 ,
27   "nrp": "033040023",
28   "nama": "Fajar Darmawan ",
29   "email": "fajar@yahoo.com",
30   "jurusan": "Teknik Informatika"
31 },
32 {
33   "id": "5",
34   "nrp": "113040321",
35   "nama": "Ferry Mulyanto",
36   "email": "ferry@yahoo.com",
37   "jurusan": "Manajemen"
38 },
39 {
40   "id": "33",
41   "nrp": "098539084",
42   "nama": "Ardan Kusuma",
43   "email": "ardan@gmail.com",
44   "jurusan": "Teknik Informatika"
45 }
46 ]
47 }
```

## 7 Melakukan operasi delete

DELETE ▾ http://localhost/helloapi/api/mahasiswa

Send

Form 1 ▾

Auth ▾

Query

Header 1

Docs

id	33	✓	🗑
nrp	0985390843	❑	🗑
nama	Ardan Kusuma	❑	🗑
email	ardan@gmail.com	❑	🗑
jurusan	Teknik Informatika	❑	🗑

200 OK

172 ms

53 B

Just Now ▾

Preview ▾

Header 8

Cookie

Timeline

```
1 {
2   "status": true,
3   "id": "33",
4   "message": "Sukses Terhapus"
5 }
```

## Data sukses terhapus

GET ▼ http://localhost/helloapi/api/mahasiswa Send

Form 1 ▼ Auth ▼ Query Header 1 Docs

id	33	<span>▼</span> <span>✓</span> <span>🗑</span>
nrp	0985390843	<span>▼</span> <span>□</span> <span>🗑</span>
nama	Ardan Kusuma	<span>▼</span> <span>□</span> <span>🗑</span>
email	ardan@gmail.com	<span>▼</span> <span>□</span> <span>🗑</span>
jurusan	Teknik Informatika	<span>▼</span> <span>□</span> <span>🗑</span>

**200 OK** 203 ms 542 B Just Now ▼

Preview ▼ Header 8 Cookie Timeline

```
19  "id": "3",
20  "nrp": "043040321",
21  "nama": "Rommy Fauzi",
22  "email": "rommy@gmail.com",
23  "jurusan": "Teknik Planologi"
24  },
25  {
26    "id": "4",
27    "nrp": "033040023",
28    "nama": "Fajar Darmawan ",
29    "email": "fajar@yahoo.com",
30    "jurusan": "Teknik Informatika"
31  },
32  {
33    "id": "5",
34    "nrp": "113040321",
35    "nama": "Ferry Mulyanto",
36    "email": "ferry@yahoo.com",
37    "jurusan": "Manajemen"
38  }
39  ]
40 }
```

\$.store.books[\*].author ?