



Jurusan Teknologi Informasi Politeknik Negeri Malang
Jobsheet-6: Pengenalan JSON, penggunaan postman, Public API, Restful API, cURL
Mata Kuliah Pemrograman Web Lanjut
Pengampu: Tim Ajar Pemrograman Web Lanjut
Februari 2020

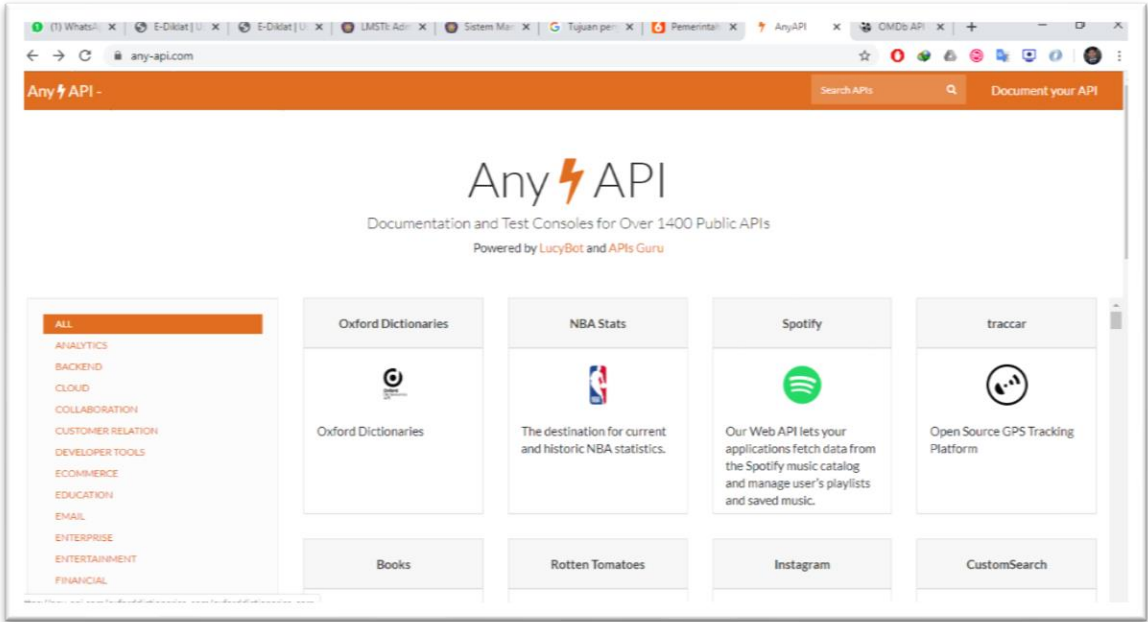
Nama : Alfau Noufal Nasruddin

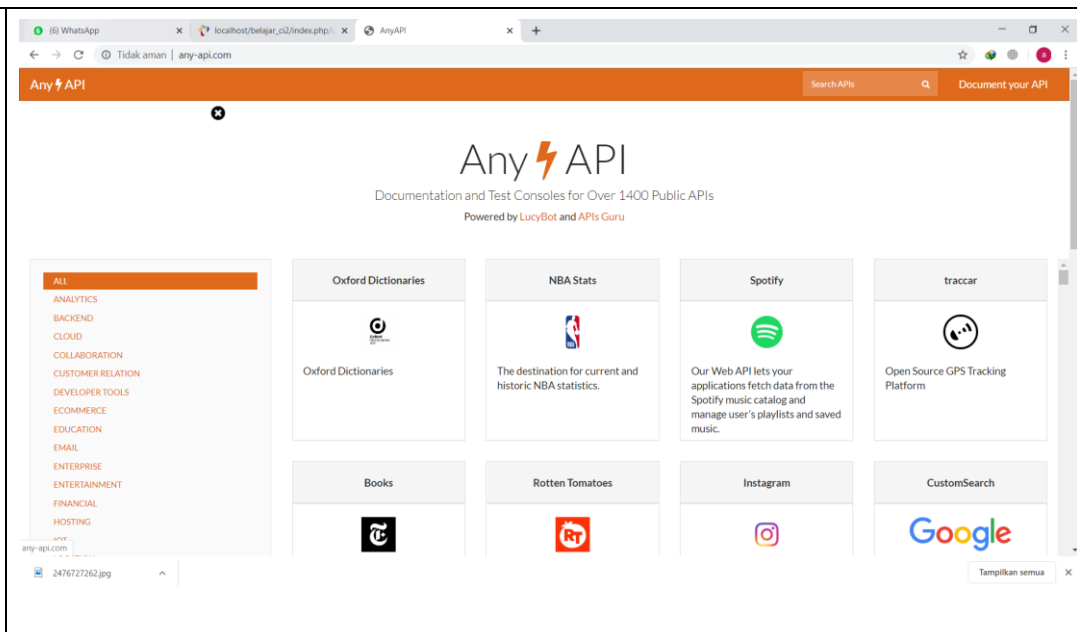
Kelas : TI-2A

NIM : 1841720059

No.absen : 07

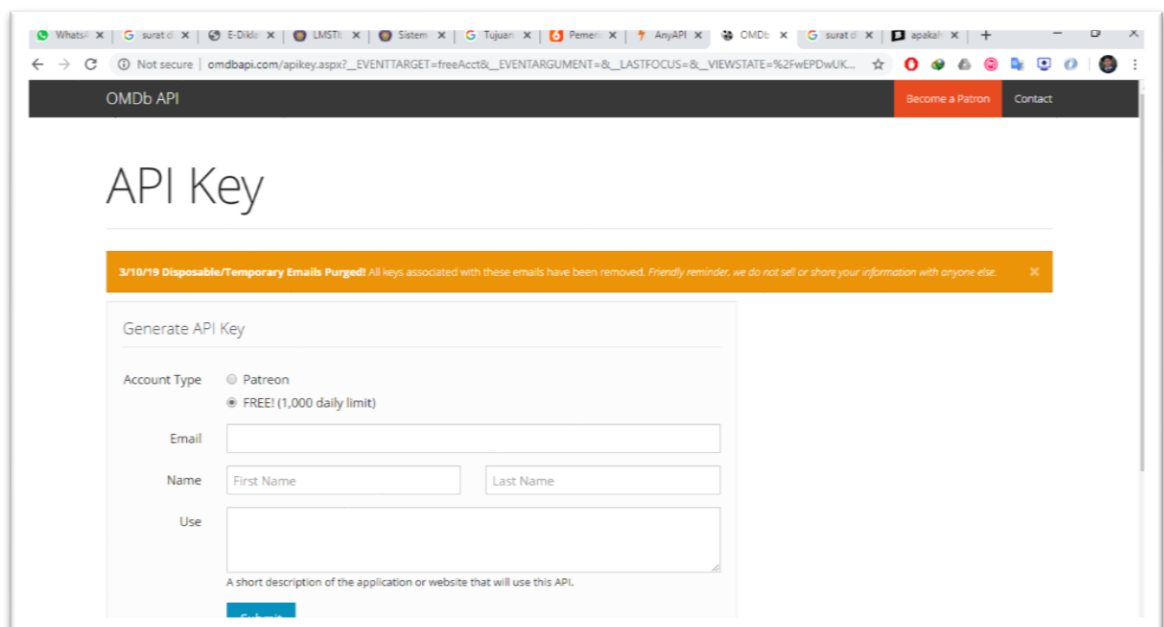
Praktikum – Bagian 1: Registrasi Account di layanan Public API dan Test API menggunakan Postman

Langkah	Keterangan
1	<p>Buka website Any API untuk melihat public api yang bisa digunakan. Pilih OMDB untuk membuat project website pencarian movie.</p> 



2

Registrasi pada website OMDB untuk mendapatkan kunci api. Kunci api ini digunakan sebagai otentifikasi saat menggunakan api di OMDB.



API Key

3/10/19 Disposable/Temporary Emails Purged! All keys associated with these emails have been removed. Friendly reminder, we do not sell or share your information with anyone else. ✕

Generate API Key

Account Type ☐ Patreon
☒ FREE! (1,000 daily limit)

Email

Name

Use

A short description of the application or website that will use this API.

Submit

[Legal](#) [Donate](#)

3

Selanjutnya kita akan menerima email berisi kunci api, kunci api tersebut harus diaktifkan dengan membuka link yang disertakan dalam email.

API Key



The OMDb API <donotreply@omdbapi.com> [Berhenti berlangganan](#)
kepada saya ▾

Kam, 12 Mar 11.07 (2 hari yang lalu)



🌐 Inggris ▾ > Indonesia ▾ [Terjemahkan pesan](#)

[Nonaktifkan untuk: Inggris](#) ✕

Here is your key: ba0896f4

Please append it to all of your API requests,

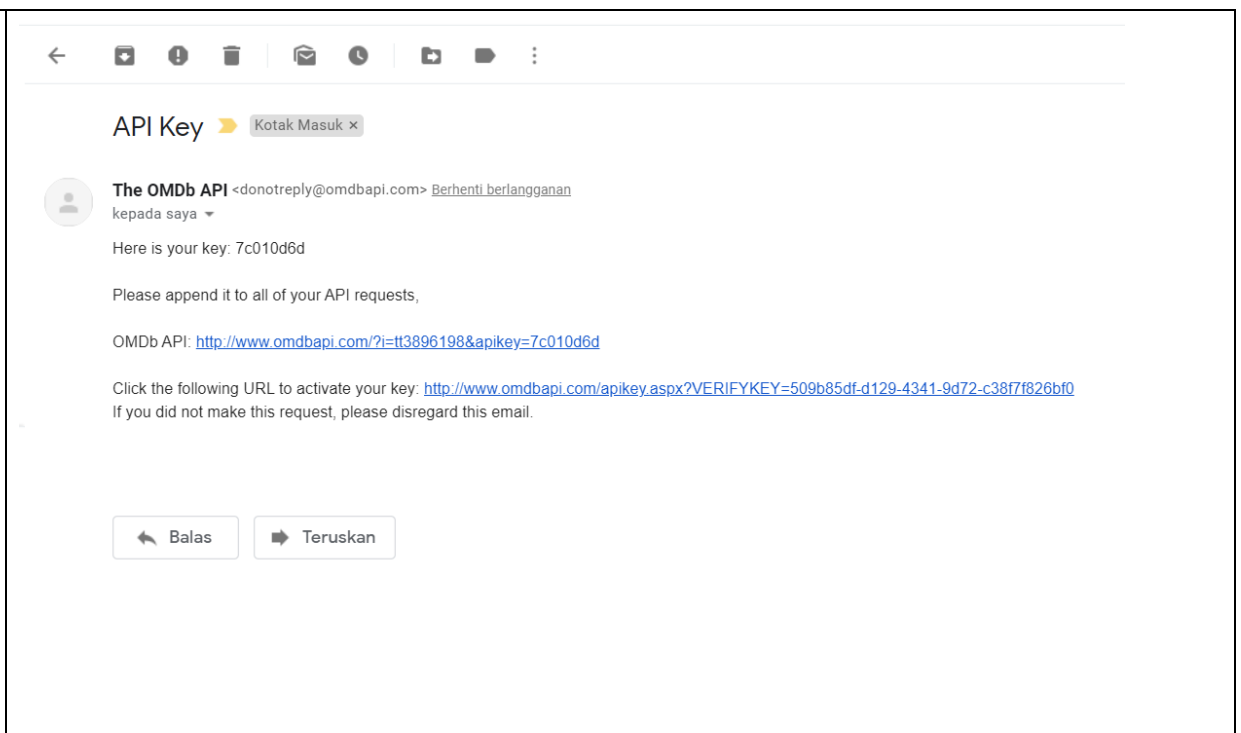
OMDb API: <http://www.omdbapi.com/?i=tt3896198&apikey=ba0896f4>

Click the following URL to activate your key: <http://www.omdbapi.com/apikey.aspx?VERIFYKEY=096ad437-93aa-4b44-81c8-a3a2da09193c>

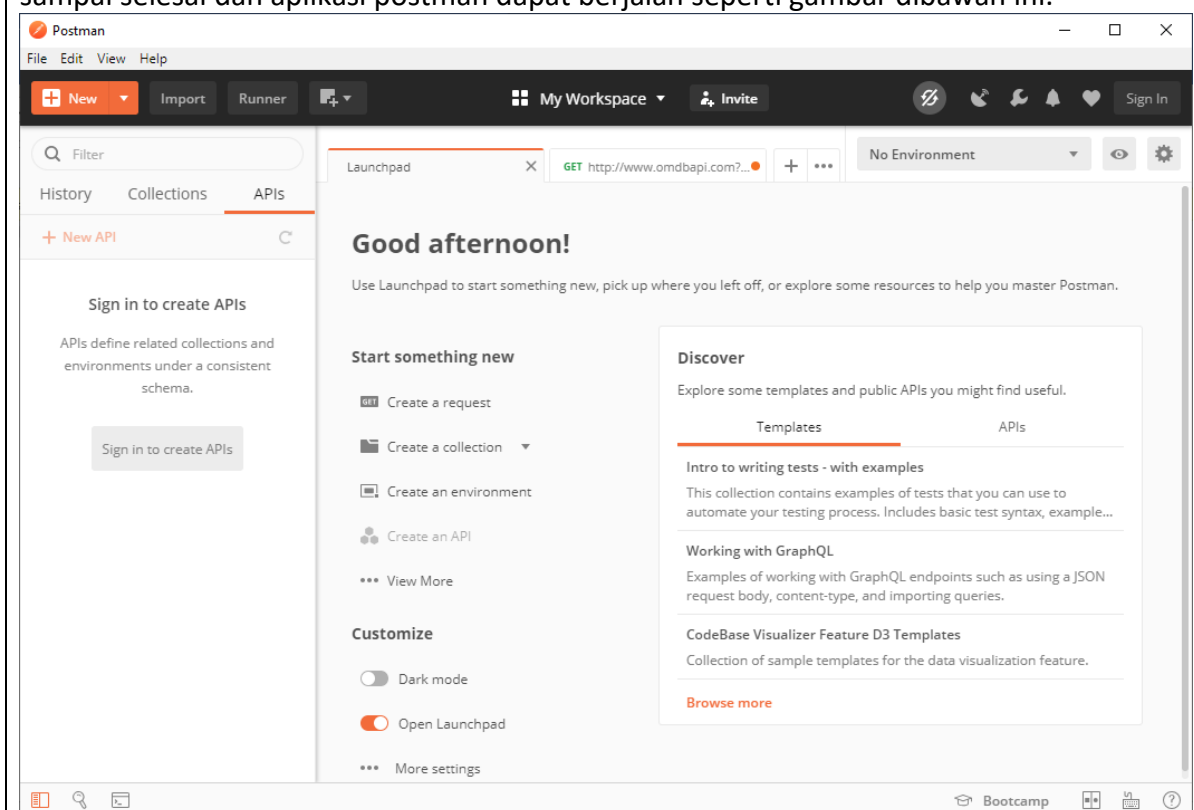
If you did not make this request, please disregard this email.

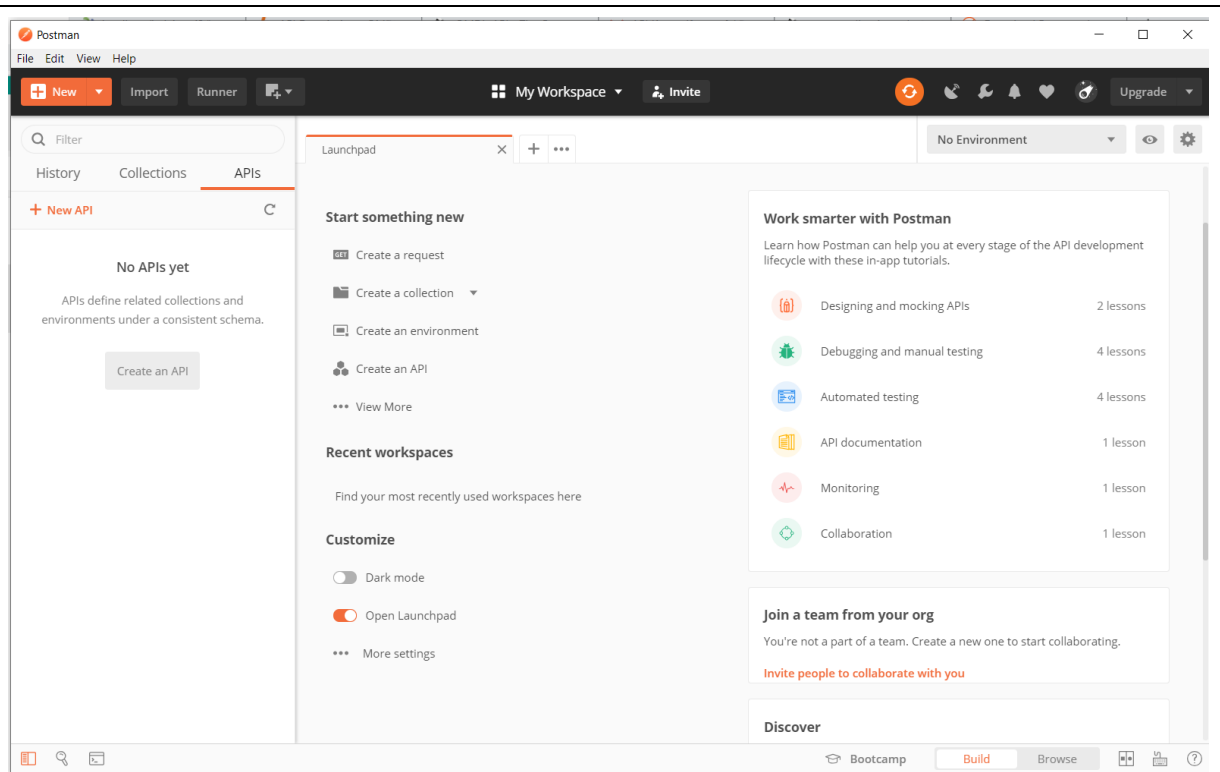
↩ Balas

➡ Teruskan



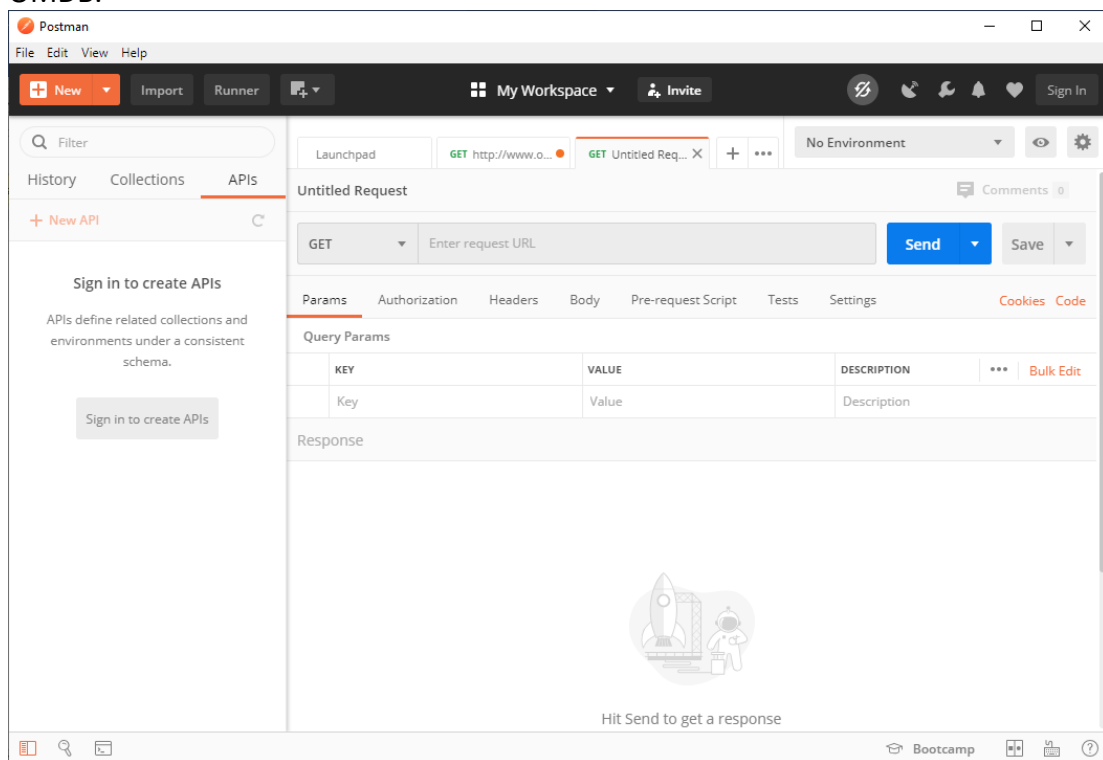
- 4 Setelah mendapat kunci api, kita dapat melakukan ujicoba kunci api tersebut dengan menggunakan aplikasi Postman. Sebelumnya lakukan instalasi aplikasi postman yang sudah didownload pada halaman <https://www.postman.com/downloads/>. Lakukan instalasi sampai selesai dan aplikasi postman dapat berjalan seperti gambar dibawah ini.

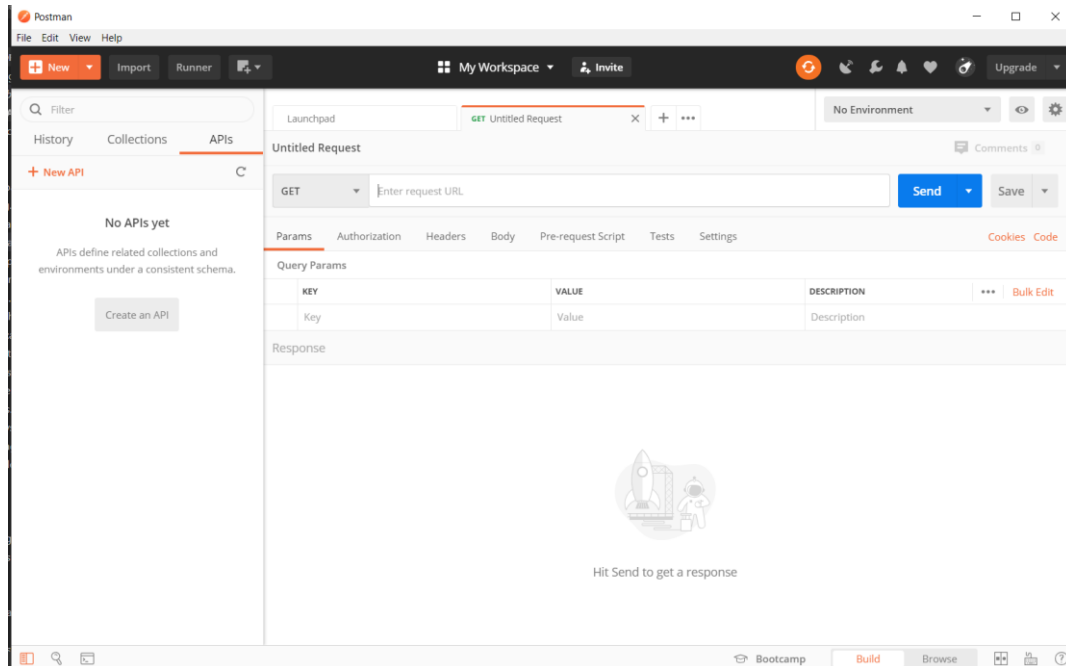




5

Selanjutnya Klik + **new tab** pada jendela postman, dan masukkan parameter untuk api OMDB.





- 6 Untuk list parameter dapat dilihat pada website <http://www.omdbapi.com/>. Kita gunakan parameter **s** untuk mencari film berdasarkan judul film.

Download Postman App x OMDb API - The Open Movie Database x

← → Not secure | omdbapi.com

OMDb API Usage Parameters Examples Change Log API Key [Become a Patron](#) [Contact](#)

Parameters

By ID or Title

Parameter	Required	Valid Options	Default Value	Description
i	Optional*		<empty>	A valid IMDb ID (e.g. tt1285016)
t	Optional*		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
plot	No	short, full	short	Return short or full plot.
r	No	json, xml	json	The data type to return.
callback	No		<empty>	JSONP callback name.
v	No		1	API version (reserved for future use).

*Please note while both "i" and "t" are optional at least one argument is required.

By Search

Parameter	Required	Valid options	Default Value	Description
s	Yes		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
r	No	json, xml	json	The data type to return.
page	No	1-100	1	Page number to return.
callback	No		<empty>	JSONP callback name.

OMDb API Usage Parameters Examples Change Log API Key [Become a Patron](#) [Contact](#)

By ID or Title

Parameter	Required	Valid Options	Default Value	Description
i	Optional*		<empty>	A valid IMDb ID (e.g. tt1285016)
t	Optional*		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
plot	No	short, full	short	Return short or full plot.
r	No	json, xml	json	The data type to return.
callback	No		<empty>	JSONP callback name.
v	No		1	API version (reserved for future use).

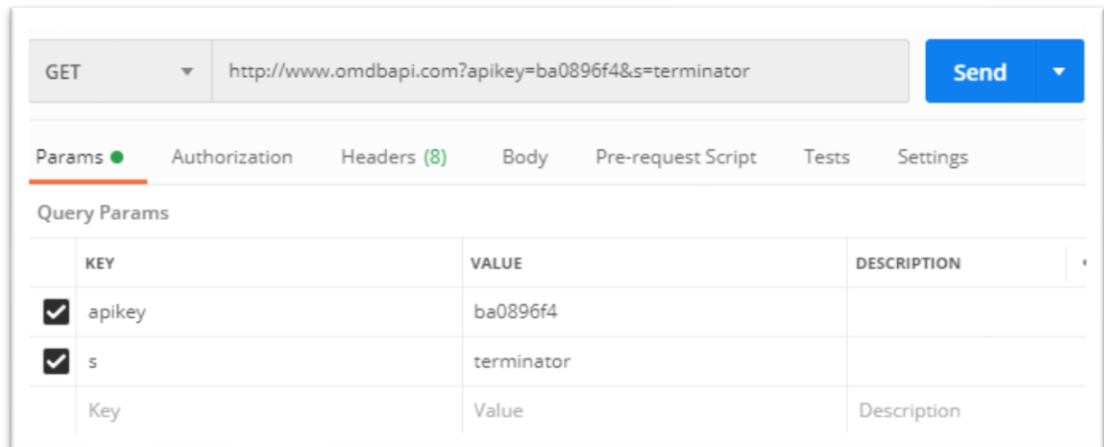
*Please note while both "i" and "t" are optional at least one argument is required.

By Search

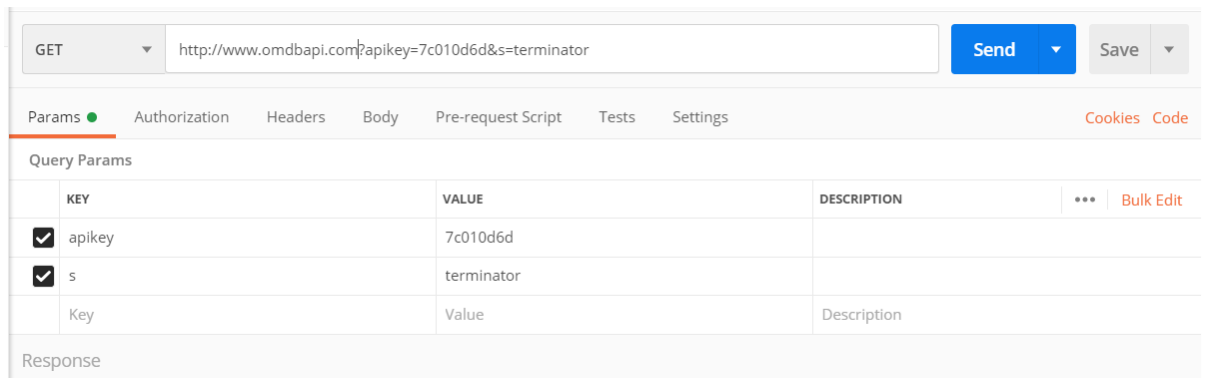
Parameter	Required	Valid options	Default Value	Description
s	Yes		<empty>	Movie title to search for.
type	No	movie, series, episode	<empty>	Type of result to return.
y	No		<empty>	Year of release.
r	No	json, xml	json	The data type to return.
page	No	1-100	1	Page number to return.

7

Masukan parameter key dan value berupa **api key**, value berupa **key**, code pencarian **s** dan judul film yang akan dicari, misalnya **terminator**.



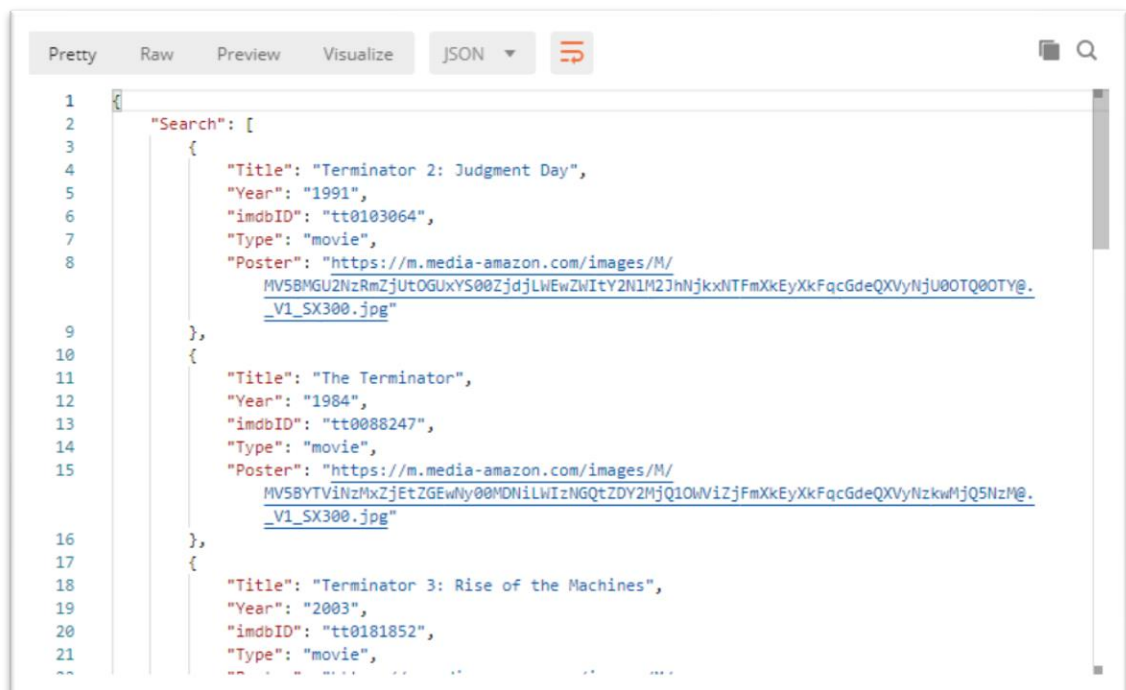
KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> apikey	ba0896f4	
<input checked="" type="checkbox"/> s	terminator	
Key	Value	Description



KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> apikey	7c010d6d	
<input checked="" type="checkbox"/> s	terminator	
Key	Value	Description

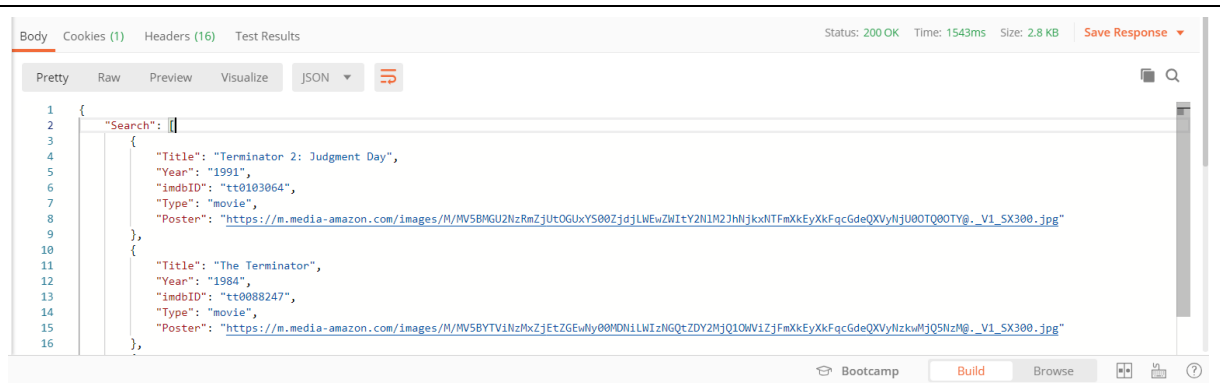
8

Jika parameter sesuai, akan didapatkan hasil berupa respon JSON dari website OMDB seperti gambar ini.



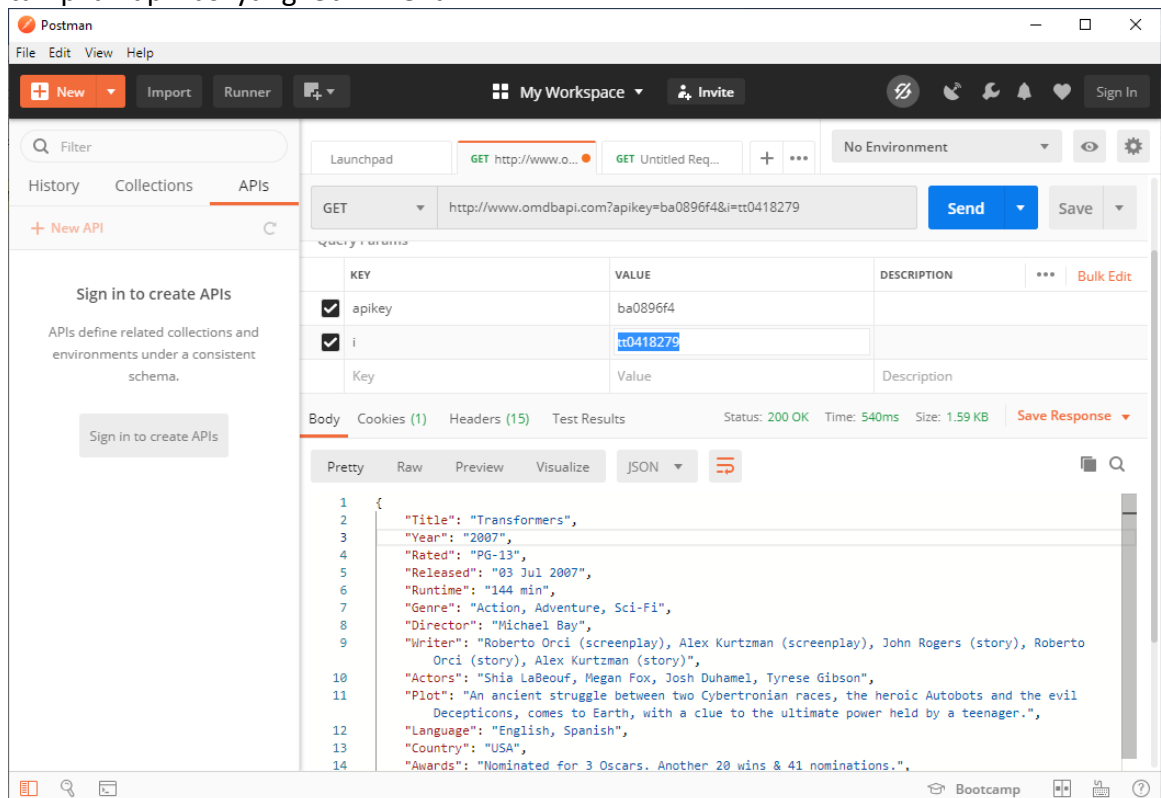
```

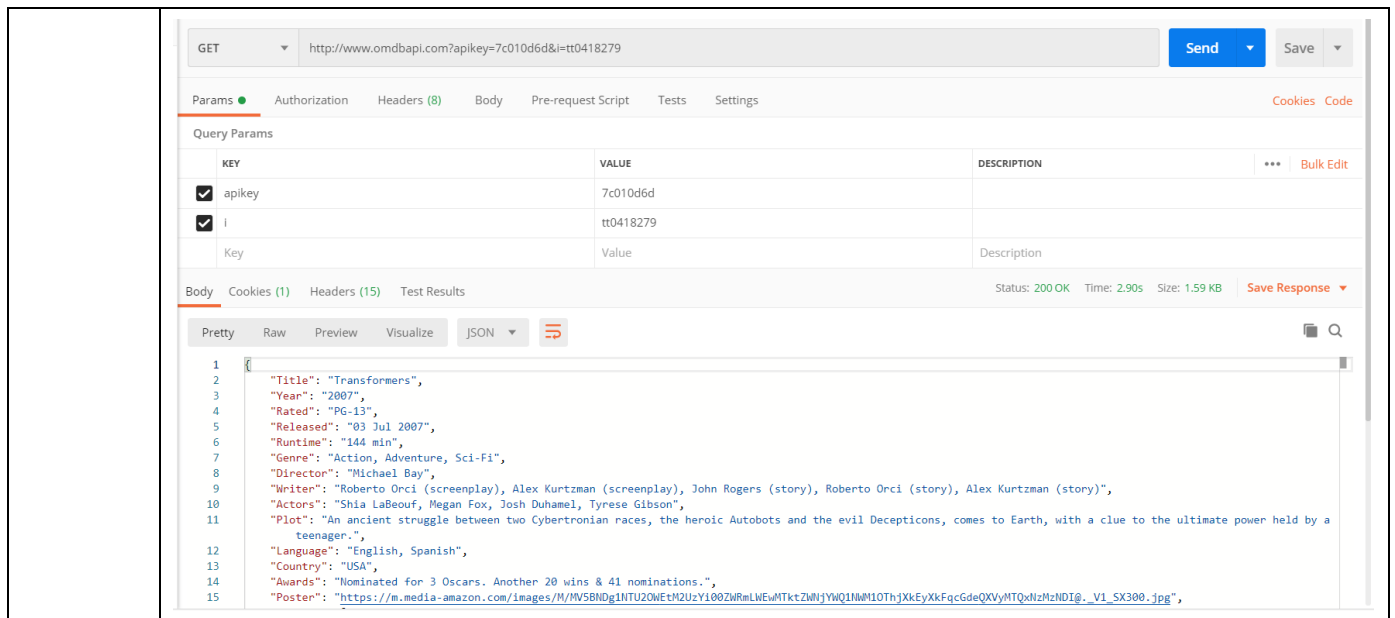
1  {
2    "Search": [
3      {
4        "Title": "Terminator 2: Judgment Day",
5        "Year": "1991",
6        "imdbID": "tt0103064",
7        "Type": "movie",
8        "Poster": "https://m.media-amazon.com/images/M/
9          MV5BMGU2NzRmZjUtOGUxYS00ZjdjLWZlZjY2N1M2JhNjkxNTFmXkEyXkFqcGdeQXVyNjU0OTQ0OTY@.
10         _V1_SX300.jpg"
11      },
12      {
13        "Title": "The Terminator",
14        "Year": "1984",
15        "imdbID": "tt0088247",
16        "Type": "movie",
17        "Poster": "https://m.media-amazon.com/images/M/
18          MV5BYTViNzRmZjUtZGZlZjY2N1M2JhNjkxNTFmXkEyXkFqcGdeQXVyNzkwMjQ5NzY@.
19         _V1_SX300.jpg"
20      },
21      {
22        "Title": "Terminator 3: Rise of the Machines",
23        "Year": "2003",
24        "imdbID": "tt0181852",
25        "Type": "movie",
26        "Poster": "https://m.media-amazon.com/images/M/
27          MV5BMGU2NzRmZjUtOGUxYS00ZjdjLWZlZjY2N1M2JhNjkxNTFmXkEyXkFqcGdeQXVyNjU0OTQ0OTY@.
28         _V1_SX300.jpg"
29      }
30    ]
31  }
  
```



9

Kita juga dapat mencari detail dari sebuah film dengan menggunakan parameter **i**. hasilnya akan didapatkan data detail dari sebuah film berdasarkan **imdbID**. Misal kita mencari film dengan ID **tt0418279**. Maka akan ditampilkan informasi detail dari film tersebut. Selanjutnya kita bisa memasukkan JSON kedalam aplikasi codeigniter untuk membuat tampilan aplikasi yang lebih menarik.





Praktikum – Bagian 2: Membuat Aplikasi Movie List Code Igniter Menggunakan Public API

Langkah	Keterangan
1	Duplikasi Project Code-Ketiga dan berilah nama project Code-ketujuh
2	<p>Lakukan perubahan konfigurasi <code>\$config['base_url'] = 'http://localhost/rest-api/Code-ketujuh/';</code> pada <code>config.php</code></p> <pre> 21 22 If you need to allow multiple domains, remember that this file is still 23 a PHP script and you can easily do that on your own. 24 25 */ 26 \$config['base_url'] = 'http://localhost/rest-api/Code-ketujuh/'; 27 </pre> <p><code>\$config['base_url'] = 'http://localhost/rest-api/belajar_cit/';</code></p>
3	<p>Buatlah sebuah file index.php pada folder view/movie/ dan tuliskan script seperti gambar dibawah ini:</p> <pre> views ├── errors ├── home ├── mahasiswa ├── movie └── index.php </pre>

application > views > movie > index.php

```
1 <div class="container mt-3">
2   <div class="row justify-content-center">
3     <div class="col-md-8">
4       <div class="input-group mb-3">
5         <input type="text" id="search-text" class="form-control" placeholder="Input Movie Title"
6           aria-label="Recipient's username" aria-describedby="button-addon2">
7         <div class="input-group-append">
8           <button class="btn btn-primary ml-2" type="button" id="btn-search">Search <i class="fa
9             fa-search"></i></button>
10        </div>
11      </div>
12    </div>
13  </div>
14  <hr>
15  <div class="row" id="movie-list">
16  </div>
17 </div>
18
19 <!-- Modal -->
20 <div class="modal fade" id="exampleModal" tabindex="-1" role="dialog"
21   aria-labelledby="exampleModalLabel" aria-hidden="true">
22   <div class="modal-dialog modal-lg" role="document">
23     <div class="modal-content">
24       <div class="modal-header">
25         <h5 class="modal-title" id="exampleModalLabel">Movie Details</h5>
26         <button type="button" class="close" data-dismiss="modal" aria-label="Close">
27           <span aria-hidden="true">&times;</span>
28         </button>
29       </div>
30       <div class="modal-body">
31
32       </div>
33       <div class="modal-footer">
34         <button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
35       </div>
36     </div>
37   </div>
38 </div>
```

```
1 <div class="container mt-3">
2   <div class="row justify-content-center">
3     <div class="col-md-8">
4       <div class="input-group mb-3">
5         <input type="text" class="form-control" name="search-text" id="search-text"
6           placeholder="Input Movie Title" aria-label="Recipient's username" aria-describedby="button-addon2">
7         <div class="input-group-append">
8           <button class="btn btn-primary ml-2" type="button" id="btn-search">Search <i
9             class="fa fa-search"></i></button>
10        </div>
11      </div>
12    </div>
13  </div>
14  <hr>
15  <div class="row" id="movie-list">
16  </div>
17 </div>
18
19 <!-- Modal -->
20 <div class="modal fade" id="exampleModal" tabindex="-1" role="dialog" aria-labelledby="exampleModalLabel"
21   aria-hidden="true">
22   <div class="modal-dialog modal-lg" role="document">
23     <div class="modal-content">
24       <div class="modal-header">
25         <h5 class="modal-title" id="exampleModalLabel">Movie Details</h5>
26         <button type="button" class="close" data-dismiss="modal" aria-label="Close">
27           <span aria-hidden="true">&times;</span>
28         </button>
29       </div>
30       <div class="modal-body">
31
32       </div>
33       <div class="modal-footer">
34         <button type="button" class="btn btn-secondary" data-dismiss="modal">Close</button>
35       </div>
36     </div>
37   </div>
38 </div>
```

```
</div>
</div>
```

4

Buatlah sebuah file controller **Movie.php** pada folder **controller** dan tuliskan script seperti gambar dibawah ini:

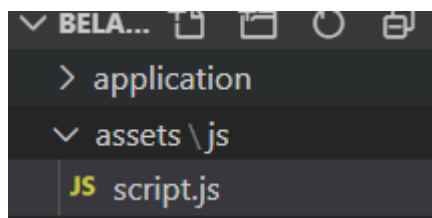
- ▼ assets
 - > css
 - ▼ js
 - JS bootstrap.bundle.js
 - JS bootstrap.bundle.js.map
 - JS bootstrap.bundle.min.js
 - JS bootstrap.bundle.min.js.map
 - JS bootstrap.js
 - JS bootstrap.js.map
 - JS bootstrap.min.js
 - JS bootstrap.min.js.map
 - JS script.js**

```
assets > js > JS script.js > ...
1  $('#search-text').on('keyup', function(e){
2    if(e.keyCode == 13)
3    {
4      searchMovies();
5    }
6  })
7
8  $('#btn-search').on('click', function(e){
9    searchMovies();
10 })
11
12 $('#movie-list').on('click', '#btn-details', function(e){
13   $.ajax({
14     url: 'http://www.omdbapi.com',
15     type: 'GET',
16     dataType: 'json',
17     data: {
18       'apikey' : 'ba0896f4', //API Key
19       'i' : $(this).data('id') //Parameter i untuk pencarian film berdasarkan id film / omdbID
20     },
21     success: function(result){
22       if(result.Response === "True"){
23         $('.modal-body').html('');
24         $('.modal-body').append(`
25           <div class="container-fluid">
26             <div class="row">
27               <div class="col-md-4">
28                 <img src="" + result.Poster + "" class="img-fluid">
29               </div>
30               <div class="col-md-8">
```

```

31         <ul class="list-group">
32             <li class="list-group-item"><h4>`+ result.Title +`</h4></li>
33             <li class="list-group-item">Released : `+ result.Released +`</li>
34             <li class="list-group-item">Genre : `+ result.Genre +`</li>
35             <li class="list-group-item">Writer : `+ result.Writer +`</li>
36             <li class="list-group-item">Actors : `+ result.Actors +`</li>
37             <li class="list-group-item">Production : `+ result.Production +`</li>
38             <li class="list-group-item">Plot : `+ result.Plot +`</li>
39         </ul>
40     </div>
41 </div>
42 </div>
43 `);
44 }
45 }
46 });
47 })
48
49
50 function searchMovies(){
51     $.ajax({
52         url: 'http://www.omdbapi.com',
53         type: 'GET',
54         dataType: 'json',
55         data: {
56             'apikey' : 'ba0896f4', //API Key
57             's' : $('#search-text').val() //Parameter s pencarian film berdasarkan judul
58         },
59         success: function(result){
60             let movies = result.Search;
61             $('#movie-list').html('');
62             if(result.Response == "True"){
63                 $.each(movies, function(i, data){
64                     $('#movie-list').append(`<div class="col-md-4 mb-3">
65                         <div class="card" style="width: 18rem;">
66                             <img src="" + data.Poster +`" class="card-img-top" height="300px">
67                             <div class="card-body"><h5 class="card-title">`+ data.Title +`</h5>
68                             <p class="card-text">Year : `+ data.Year +`</p>
69                             <a href="#" class="btn btn-primary" id="btn-details" data-id="" + data.imdbID
70                                 +`"
71                                 data-toggle="modal" data-target="#exampleModal">Show Details</a>
72                         </div></div></div>
73                     `);
74                 })
75             }else{
76                 $('#movie-list').append(`
77                     <div class="col-sm-12 text-center">
78                         <h1>`+ result.Error +`</h1>
79                     </div>
80                 `);
81             }
82         });
83
84         $('#search-text').val("");
85     }

```



```

1 ✓ $('#search-text').on('keyup', function (e) {
2 ✓   if (e.keyCode == 13) {
3     searchMovies();
4   }
5 })
6
7 $('#btn-search').on('click', function (e) {
8   searchMovies();
9 })
10
11 $('#movie-list').on('click', 'btn-details', function (e) {
12   $.ajax({
13     url: 'http://www.omdbapi.com',
14     type: 'GET',
15     dataType: 'json',
16     data: {
17       'apikey': '7c010d6d', //API Key
18       'i': $(this).data('id') //Parameter i untuk pencarian film berdasarkan id film / imdbID
19     },
20     success: function (result) {
21       if (result.Response == "True") {
22         $('#modal-body').html('');
23         $('#modal-body').append('
24           <div class="container-fluid">
25             <div class="row">
26               <div class="col-md-4">
27                 <img src="" + result.Poster + "" class="img-fluid">
28               </div>
29               <div class="col-md-8">
30                 <ul class="list-group">
31                   <li class="list-group-item"><h4> + result.Title + `</h4></li>
32                   <li class="list-group-item">Released : ` + result.Released + `</li>
33                   <li class="list-group-item">Genre : ` + result.Genre + `</li>
34                   <li class="list-group-item">Writer : ` + result.Writer + `</li>
35                   <li class="list-group-item">Actors : ` + result.Actors + `</li>
36                   <li class="list-group-item">Production : ` + result.Production + `</li>
37                   <li class="list-group-item">Plot : ` + result.Plot + `</li>
38                 </ul>
39               </div>
40             </div>
41           ');
42         $('#modal-body').append('
43         ');
44       }
45     });
46   });
47
48
49 function searchMovies() {
50   $.ajax({
51     url: 'http://www.omdbapi.com',
52     type: 'GET',
53     dataType: 'json',
54     data: {
55       'apikey': '7c010d6d', //API Key
56       's': $('#search-text').val() //Parameter s pencarian film berdasarkan judul
57     },
58     success: function (result) {
59       let movies = result.Search;
60       $('#movie-list').html('');
61       if (result.Response == "True") {
62         $.each(movies, function (i, data) {
63           $('#movie-list').append('<div class="col-md-4 mb-3">
64             <div class="card" style="width: 18rem;">
65               <img src="" + data.Poster + "" class="card-img-top" height="300px">
66               <div class="card-body"><h5 class="card-title"> + data.Title + `</h5>
67               <p class="card-text">Year : ` + data.Year + `</p>
68               <a href="#" class="btn btn-primary" id="btn-details" data-id="" + data.imdbID + ""
69                 data-toggle="modal" data-target="#exampleModal">Show Details</a>
70             </div></div></div>
71           ');
72         });
73       } else {
74         $('#movie-list').append('
75           <div class="col-sm-12 text-center">
76             <h1> + result.Error + `</h1>
77           </div>
78         ');
79       }
80     });
81   });
82   $('#search-text').val('');
83 }
84

```

6

Tambahkan script pada **footer.php** pada folder **template** seperti gambar dibawah ini:

```

application > views > template > footer.php
1 <script src="https://code.jquery.com/jquery-3.2.1.min.js"></script>
2 <script src="https://cdn.jsdelivr.net/npm/popper.js/1.14.3/umd/popper.min.js"></script>
3 <script src="base_url(); ?>assets/js/bootstrap.js"></script>
4 <script src="base_url(); ?>assets/js/script.js"></script>
5 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js"
  integrity="sha384-ChfqqxuZUCnJSK3+MXmPNIyE6ZbWh2IMqE241rYiqJxyMiZ6OW/JmZQ5stwEULTy"
  crossorigin="anonymous"></script>

```

```

1
2 <!-- Optional JavaScript -->
3 <!-- jQuery first, then Popper.js, then Bootstrap JS -->
4 <script src="https://code.jquery.com/jquery-3.4.1.js" integrity="sha256-WpOoh3qQqMqYKL9FccASB900KwACqPpFTUBLTYOVvVU=" crossorigin="anonymous"></script>
5 <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.3/umd/popper.min.js" integrity="sha384-ZMP7rVo3mIykV+2+9J3UJ46jBk0WLaUAdn689aCwoq"></script>
6 <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/js/bootstrap.min.js" integrity="sha384-ChfqqxuZUCnJSK3+MXmPNIyE6ZBWh2IMqE241rYiqJxyM"></script>
7 </body>
8 </html>

```

7

Tambahkan juga script pada **header.php** pada folder **template** seperti gambar dibawah ini:

```

application > views > template > header.php
1 <!doctype html>
2 <html lang="en">
3 <head>
4 <!-- Required meta tags -->
5 <meta charset="utf-8">
6 <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
7
8 <!-- Bootstrap CSS -->
9 <link rel="stylesheet" href="{%= base_url(); %}assets/css/bootstrap.css">
10 <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/
font-awesome.min.css">
11 <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.
css" integrity="sha384-MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO"
crossorigin="anonymous">
12
13 <!-- <title>Hello, world!</title> -->
14 <title>Movie Search</title>
15 </head>
16 <body>
17 <nav class="navbar navbar-expand-lg navbar-light bg-light">
18 <div class="container">
19 <a class="navbar-brand" href="#">CI</a>
20 <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNav"
aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle navigation">
21 <span class="navbar-toggler-icon"></span>
22 </button>
23 <div class="collapse navbar-collapse" id="navbarNav">
24 <ul class="navbar-nav">
25 <li class="nav-item active">
26 <a class="nav-link" href="#">Home <span class="sr-only">(current)</span></a>
27 </li>
28 <li class="nav-item">
29 <a class="nav-link" href="movie">Movie Search</a>
30 </li>
31 <li class="nav-item">
32 <a class="nav-link" href="#">About</a>
33 </li>
34 </ul>
35 </div>
36 </div>
37
38 </nav>

```

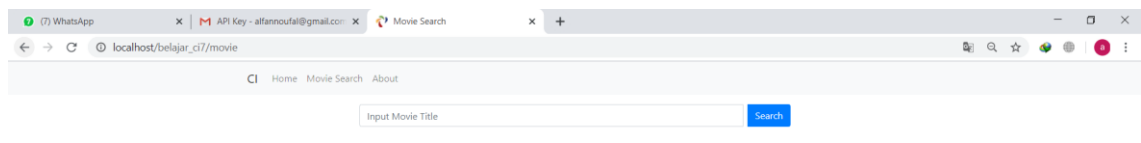
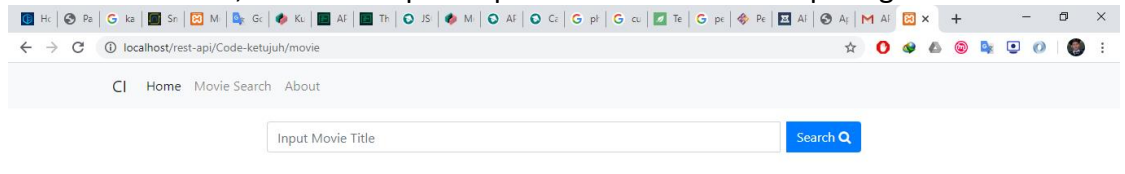
```

application > views > template > header.php
1  <!doctype html>
2  <html lang="en">
3
4  <head>
5      <!-- Required meta tags -->
6      <meta charset="utf-8">
7      <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
8      <!-- Bootstrap CSS -->
9      <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css" integrity="sha384-MCw98/SFnGE8fJT3GXwEOng"
10      </link>
11      <style>
12          .badge {
13              margin-left: 3px;
14          }
15      </style>
16      <title><?= "Movie Search" ?></title>
17  </head>
18  <body>
19      <nav class="navbar navbar-expand-lg navbar-light bg-light">
20          <div class="container">
21              <a class="navbar-brand" href="#">CI</a>
22              <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNavAltMarkup" aria-controls="navbarNavAltMarkup"
23                  <span class="navbar-toggler-icon"></span>
24              </button>
25              <div class="collapse navbar-collapse" id="navbarNavAltMarkup">
26                  <div class="navbar-nav">
27                      <a class="nav-item nav-link" href="#">Home <span class="sr-only">(current)</span></a>
28                      <a class="nav-item nav-link" href="movie">Movie Search</a>
29                      <a class="nav-item nav-link" href="#">About</a>
30                  </div>
31              </div>
32          </div>
33      </nav>

```

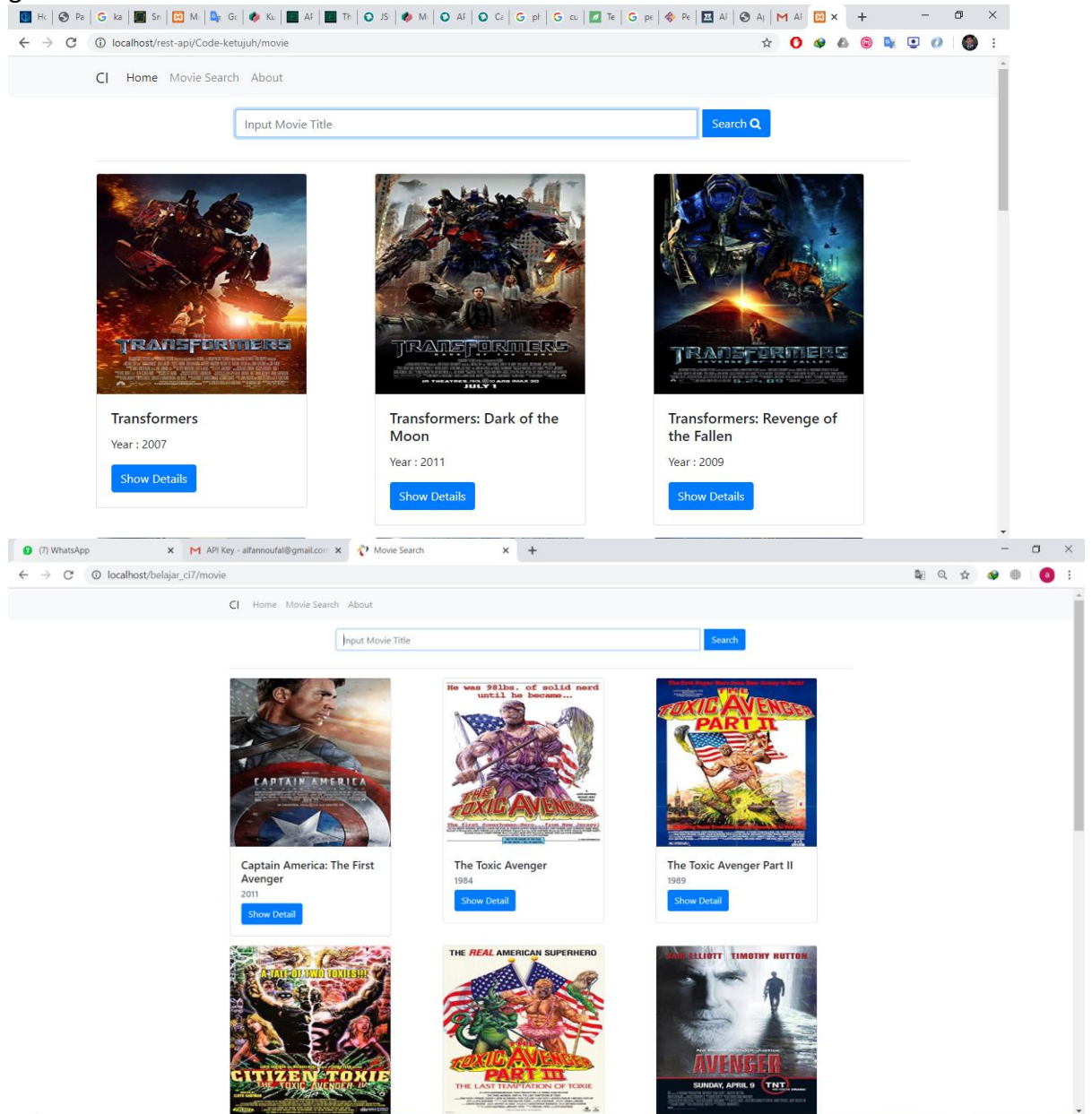
8

Jika sudah selesai, hasil akhir aplikasi pencarian film adalah seperti gambar dibawah ini:



9

Lakukan pencarian informasi film dengan mengetikan keyword berupa judul film seperti gambar dibawah ini:



-- Selamat Mengerjakan --