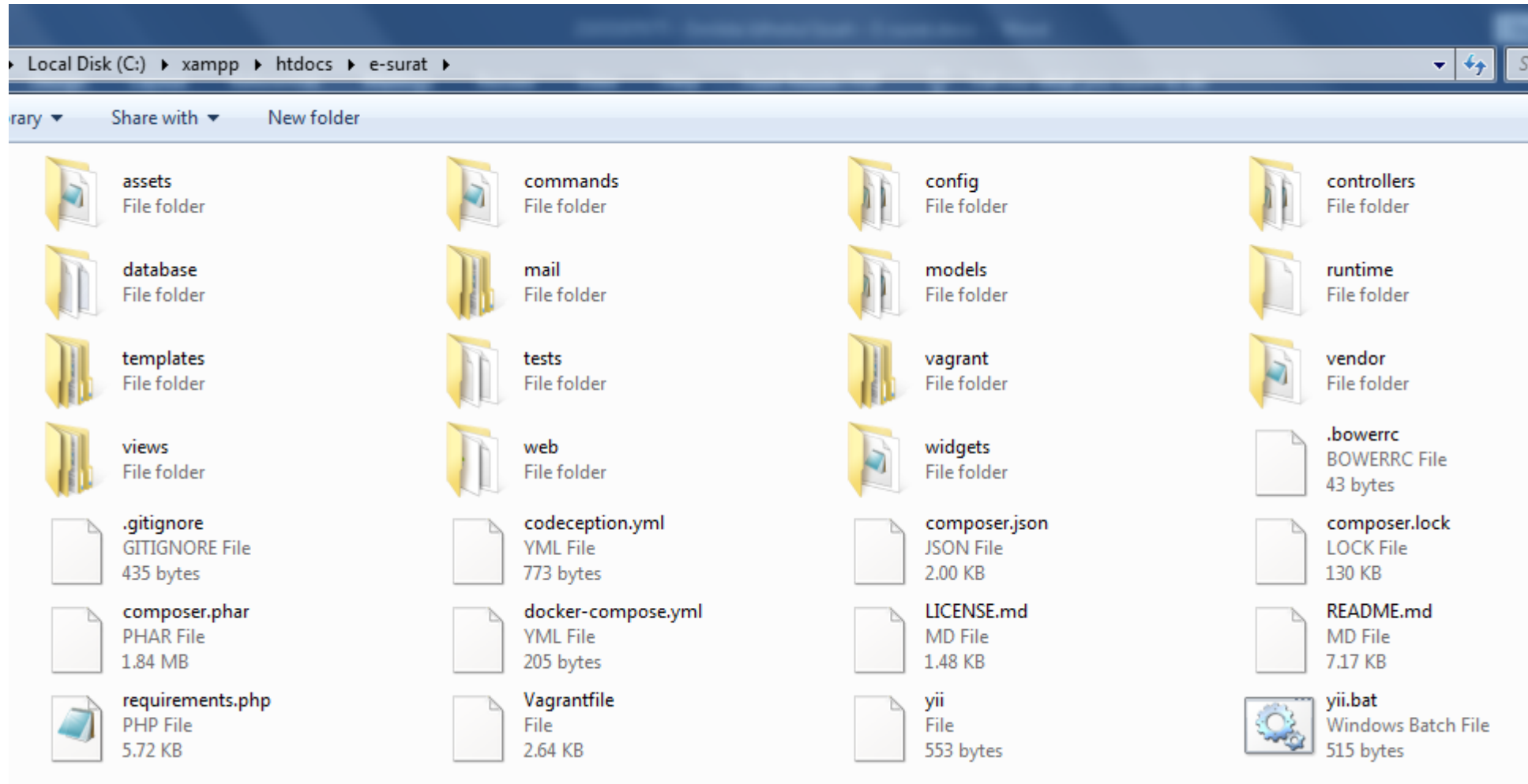# E-SURAT MENGGUNAKAN FRAMEWORK YII2 DENGAN TOOLS GII

DOSEN : JAUARI AKHMAD NUR HASIM, S.ST., M.Kom.

MATA KULIAH : REKAYASA PERANGKAT LUNAK
2103197075 – EMILDA IDHOTUL IZZAH
D3 IT A PJJ AK 2019

- Install yii2 basic dengan nama direktori 'e-surat', berikut tampilan isi dari folder tersebut.

- Membuat database dengan nama 'e-surat' pada tools adminer. Berikut tampilan database setelah dibuat dan sudah berisikan beberapa tabel dari import file esurat.sql.

- Untuk membuat agar direktori dapat diakses melalui IP Address, prosesnya antara lain :
  (a) Buka file web.php pada folder config,

  ```
  C:\xampp\htdocs\e-surat\config\web.php (e-surat)
  ```

  (b) Tambahkan IP yang digunakan,

  ```
  84          /* 2103197075 – Emilda Idhotul Izzah
  85            Add IP Address */
  86          'allowedIPs' ⇒ ['127.0.0.1', '::1', '192.168.*.*', '192.168.56.1'],
  ```

  (c) Jalankan web menggunakan IP yang telah di tambahkan sebelumnya. Selesai.

My Application   Home About Contact Login

Congratulations!

You have successfully created your Yii-powered application.

Get started with Yii

Heading

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Yii Documentation »

Heading

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Yii Forum »

Heading

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Yii Extensions »

- Untuk mengaktifkan Pretty URL, prosesnya antara lain :
 (a) Tambahkan kode berikut,

```
46            /* 2103197075 - Emilda Idhotul Izzah
47               Pretty URL */
48            'urlManager' => [
49                'enablePrettyUrl' => true,
50                'showScriptName' => false,
51                'rules' => [
52                ],
53            ],
```

  (b) Buat file .htaccess dalam folder web, dan isi kode yang dibutuhkan,

```
.htaccess                      ×       C:\xampp\htdocs\e-surat\web\.htaccess
1    Rewrit
2    RewriteCond %{REQUEST_FILENAME} !-d
3    RewriteCond %{REQUEST_FILENAME} !-f
4    RewriteRule . index.php [L]
```

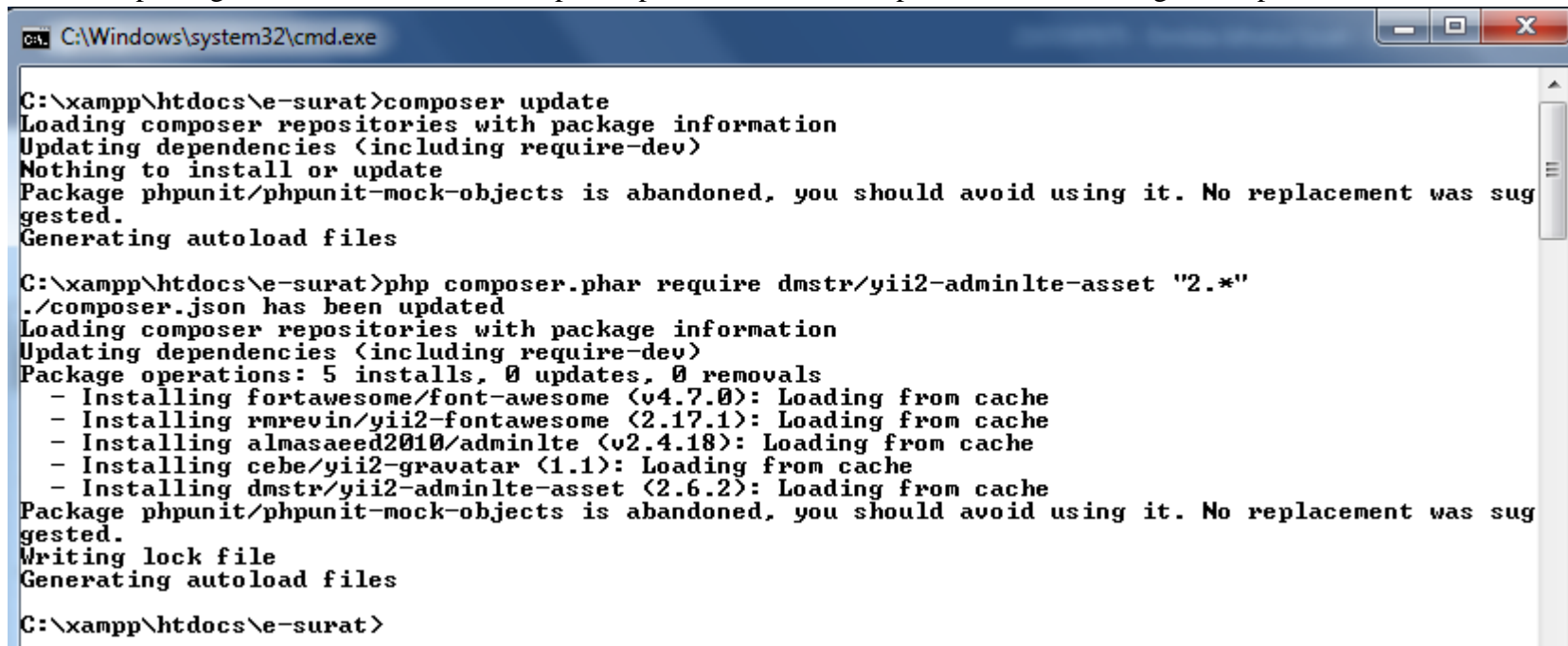 (c) Jalankan url berikut : http://192.168.56.1/e-surat/web/gii. Jika berhasil, maka akan menampilkan halaman seperti di bawah ini.
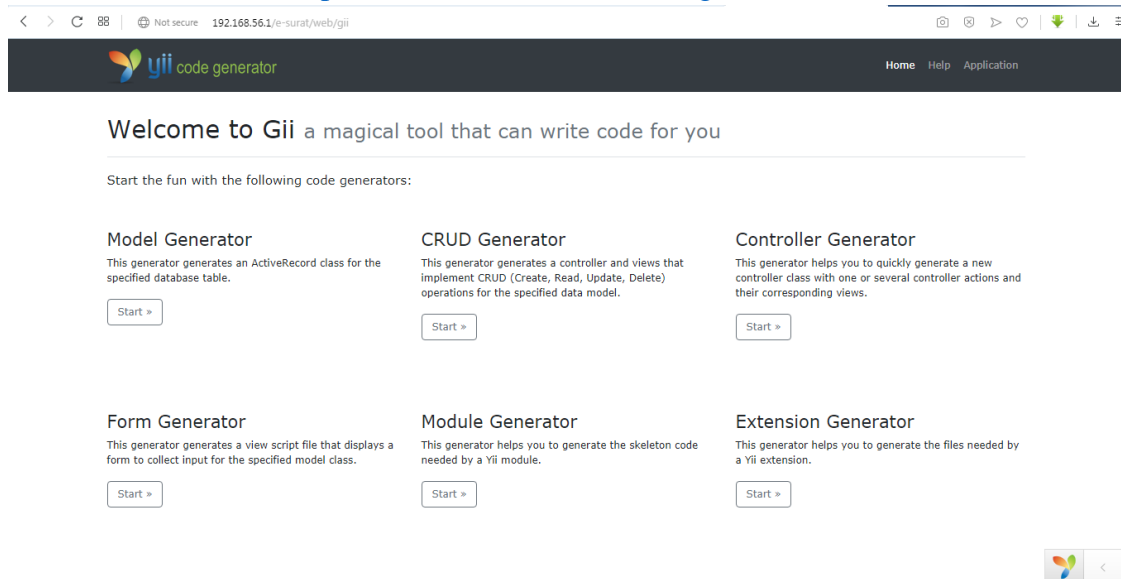
  (d) Selesai.

- Implementasi custom gii, prosesnya adalah sebagai berikut :
    (a) Install template, gambar di bawah ini menampilkan proses instalisasi template AdminLTE dengan composer,
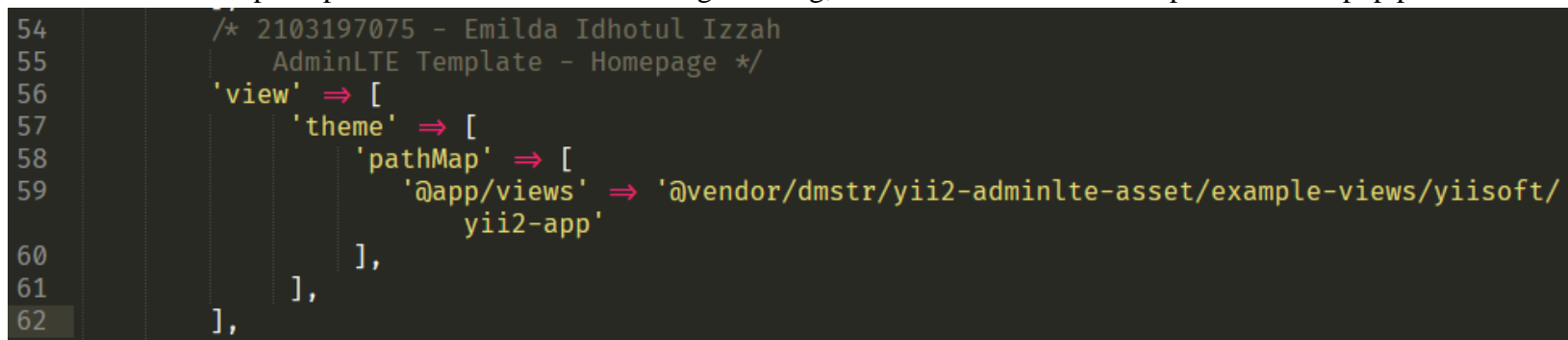
```
C:\Windows\system32\cmd.exe

C:\xampp\htdocs\e-surat>composer update
Loading composer repositories with package information
Updating dependencies (including require-dev)
Nothing to install or update
Package phpunit/phpunit-mock-objects is abandoned, you should avoid using it. No replacement was sug
gested.
Generating autoload files

C:\xampp\htdocs\e-surat>php composer.phar require dmstr/yii2-adminlte-asset "2.*"
./composer.json has been updated
Loading composer repositories with package information
Updating dependencies (including require-dev)
Package operations: 5 installs, 0 updates, 0 removals
  - Installing fortawesome/font-awesome (v4.7.0): Loading from cache
  - Installing rmrevin/yii2-fontawesome (2.17.1): Loading from cache
  - Installing almasaeed2010/adminlte (v2.4.18): Loading from cache
  - Installing cebe/yii2-gravatar (1.1): Loading from cache
  - Installing dmstr/yii2-adminlte-asset (2.6.2): Loading from cache
Package phpunit/phpunit-mock-objects is abandoned, you should avoid using it. No replacement was sug
gested.
Writing lock file
Generating autoload files

C:\xampp\htdocs\e-surat>
```

(b) Untuk merubah tampilan pada halaman utama atau sebagai testing, ditambahkan kode berikut pada file web.php pada folder config,

```
54        /* 2103197075 - Emilda Idhotul Izzah
55           AdminLTE Template - Homepage */
56      'view' ⇒ [
57          'theme' ⇒ [
58              'pathMap' ⇒ [
59                  '@app/views' ⇒ '@vendor/dmstr/yii2-adminlte-asset/example-views/yiisoft/
                        yii2-app'
60              ],
61          ],
62      ],
```

(c) Ubah file-file yang dibutuhkan,
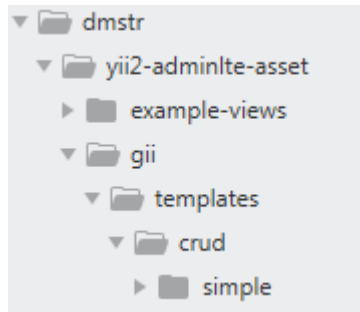
Berikut adalah kode untuk mengkustom warna pada template, terdapat pada file config > web.php

```
63            /* 2103197075 - Emilda Idhotul Izzah
64               AdminLTE Template - Change a skin */
65         'assetManager' => [
66             'bundles' => [
67                 'dmstr\web\AdminLteAsset' => [
68                     'skin' => 'skin-green',
69                 ],
70             ],
71         ],
```

Berikut adalah kode pada file views/layouts/main.php untuk mengkustom warna pada template.

```
40      <!-- 2103197075 - Emilda Idhotul Izzah
41           AdminLTE Template - Add a custom skin -->
42      <body class="<?= \dmstr\helpers\AdminLteHelper::skinClass() ?>">
```

(d) Menambahkan kode pada atribut generators, disini hanya menambahkan untuk crud karena pada admin lte hanya disediakan template untuk crud.

```
92          'generators' => [
93              /* 2103197075 - Emilda Idhotul Izzah - CRUD Template */
94              'crud' => [
95                  'class' => 'yii\gii\generators\crud\Generator',
96                  'templates' => [
97                      'simple' => 'C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/
                          templates/crud/simple'
98                  ],
99              ],
00          ],
```

```
▼ 📁 dmstr
  ▼ 📁 yii2-adminlte-asset
    ▶ 📁 example-views
    ▼ 📁 gii
      ▼ 📁 templates
        ▼ 📁 crud
          ▶ 📁 simple
```

(e) Output program setelah proses di atas terpenuhi,
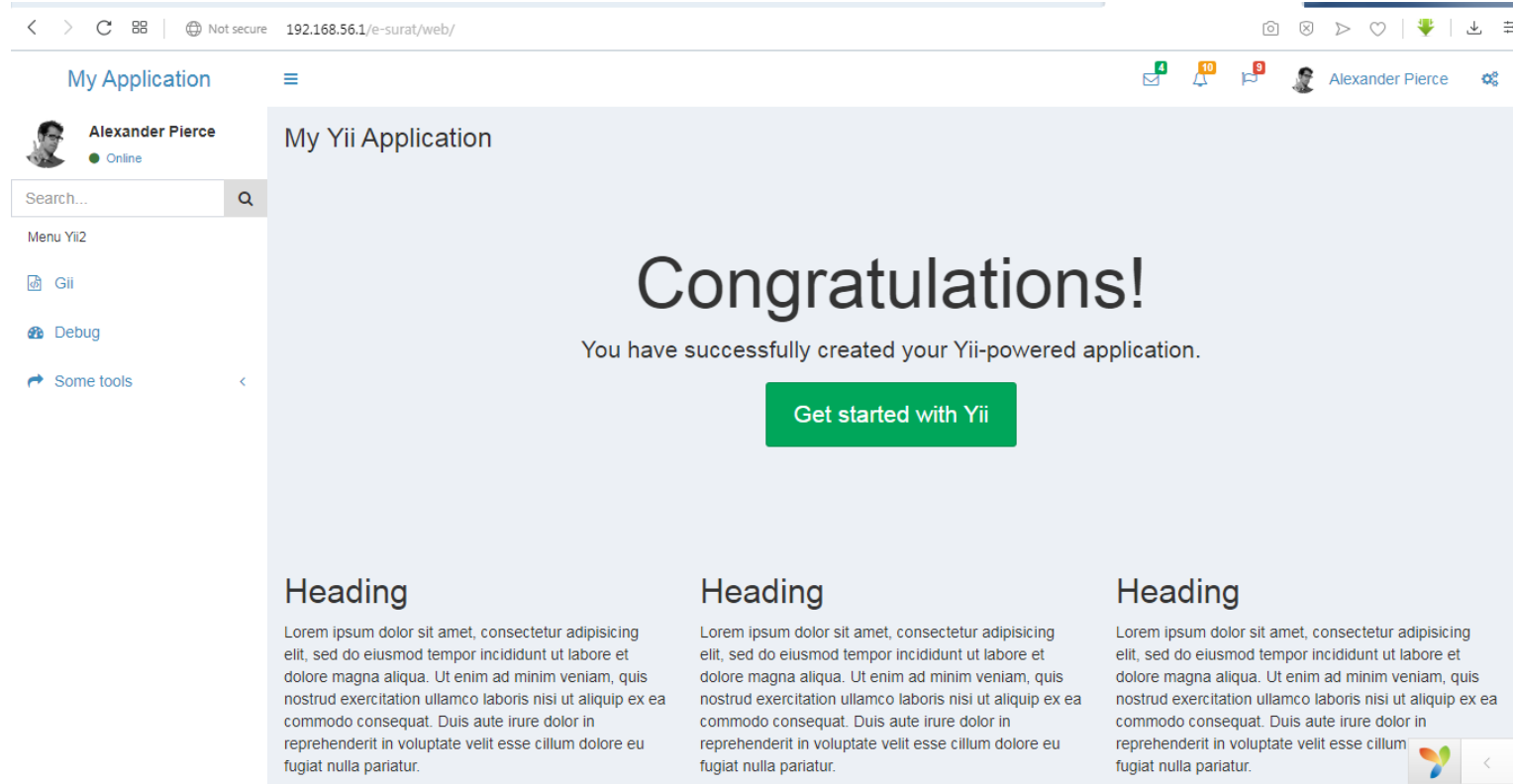
- Merancang model file pada folder e-surat.
  Untuk membuat model pada tools gii menggunakan Model Generator.

Model Generator

This generator generates an ActiveRecord class for the specified database table.

Start »

Berikut adalah implementasi model dari masing-masing tabel pada database e-surat.
    (a) Tabel : surat_masuk

Model Generator

This generator generates an ActiveRecord class for the specified database table.

Table Name

surat_masuk ▼

Model Class Name

SuratMasuk

Code Template

default (C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model\defau...

[Preview] [Generate]

Click on the above `Generate` button to generate the files selected below:

Type to filter	☑ Create ☑ Unchanged ☑ Overwrite	

Code File	Action	☑
models\SuratMasuk.php	create	☑

(b) Tabel : surat_keluar

Model Generator

This generator generates an ActiveRecord class for the specified database table.

Table Name

surat_keluar ▼

Model Class Name

SuratKeluar

Code Template

default (C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/defau...

Preview **Generate**

Click on the above `Generate` button to generate the files selected below:

| Type to filter | ☑ Create | ☑ Unchanged | ☑ Overwrite |

Code File	Action	☑
models\SuratKeluar.php	create	☑

(c) Tabel : users

Model Generator

This generator generates an ActiveRecord class for the specified database table.

Table Name

users

Model Class Name

Users

Code Template

default (C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/defau...

Preview   **Generate**

Click on the above `Generate` button to generate the files selected below:

| Type to filter | ☑ Create ☑ Unchanged ☑ Overwrite |

Code File	Action	☑
models\Users.php	create	☑

(d) Tabel : sifat

The code has been generated successfully.

```
Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\Sifat.php
done!
```

(e) Tabel : kategori_surat

The code has been generated successfully.

```
Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\KategoriSurat.php
done!
```

(f) Tabel : jabatan

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\Jabatan.php
done!
```

(g) Tabel : jabatan_users

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\JabatanUsers.php
done!
```

(h) Tabel : instansi

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\Instansi.php
done!
```

(i) Tabel : golongan

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\Golongan.php
done!
```

(j) Tabel : disposisi_surat_masuk

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\DisposisiSuratMasuk.php
done!
```

(k) Tabel : disposisi_rules_node

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\DisposisiRulesNode.php
done!
```

(l) Tabel : disposisi_rules_edge

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\DisposisiRulesEdge.php
done!
```

(m) Tabel : approval_surat_keluar

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\ApprovalSuratKeluar.php
done!
```

(n) Tabel : approval_rules_node

```
The code has been generated successfully.

Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\AppovalRulesNode.php
done!
```

(o) Tabel : approval_rules_edge

The code has been generated successfully.

```
Generating code using template "C:\xampp\htdocs\e-surat\vendor\yiisoft\yii2-gii\src\generators\model/default"...
generated models\ApprovalRulesEdge.php
done!
```

Direktori @app/models

AppovalRulesNode.php	ApprovalRulesEdge.php	ApprovalSuratKeluar.php	ContactForm.php	DisposisiRulesEdge.php
DisposisiRulesNode.php	DisposisiSuratMasuk.php	Golongan.php	Instansi.php	Jabatan.php
JabatanUsers.php	KategoriSurat.php	LoginForm.php	Sifat.php	SuratKeluar.php
SuratMasuk.php	User.php	Users.php		

Model generator tidak menghasilkan view.

- Merancang CRUD file pada folder e-surat.

Untuk membuat crud pada tools gii menggunakan CRUD Generator.

CRUD Generator

This generator generates a controller and views that
implement CRUD (Create, Read, Update, Delete)
operations for the specified data model.

Start »

Berikut adalah implementasi CRUD dari masing-masing tabel pada database e-surat. Hasil dari generate CRUD menggunakan CRUD generator akan mengasilkan beberapa file yang terdapat pada folder @app/controllers, @app/models, dan @app/views.

(a) Model : SuratMasuk

CRUD Generator

This generator generates a controller and views that implement CRUD (Create, Read, Update, Delete) operations for the specified data model.

Model Class

app\models\SuratMasuk

Search Model Class

app\models\SuratMasukSearch

Controller Class

app\controllers\SuratMasukController

Proses dari gambar diatas akan menghasilkan search model class dan controller class dari model class SuratMasuk.

Code Template

simple (C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/cr...

Preview **Generate**

Click on the above Generate button to generate the files selected below:

Type to filter

✔ Create   ✔ Unchanged   ✔ Overwrite

Code File	Action	✔
controllers\SuratMasukController.php	create	✔
models\SuratMasukSearch.php	create	✔
views\surat-masuk_form.php	create	✔
views\surat-masuk_search.php	create	✔
views\surat-masuk\create.php	create	✔
views\surat-masuk\index.php	create	✔
views\surat-masuk\update.php	create	✔
views\surat-masuk\view.php	create	✔

Proses dari gambar ini mengasilkan beberapa file yang berhasil di generate dari proses sebelumnya. Dan menghasilkan view dari code template dengan nama 'simple'.

Gambar diatas adalah tampilan Surat Masuk dari crud generator setelah di generate.

(b) Model : SuratKeluar

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\SuratKeluarController.php
generated models\SuratKeluarSearch.php
generated views\surat-keluar\_form.php
generated views\surat-keluar\_search.php
generated views\surat-keluar\create.php
generated views\surat-keluar\index.php
generated views\surat-keluar\update.php
generated views\surat-keluar\view.php
done!
```

Gambar diatas adalah tanda alarm setelah proses generate.

(c) Model: sifat

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\SifatController.php
generated models\SifatSearch.php
generated views\sifat\_form.php
generated views\sifat\_search.php
generated views\sifat\create.php
generated views\sifat\index.php
generated views\sifat\update.php
generated views\sifat\view.php
done!
```

(d) Model : kategori_surat

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\KatSuratController.php
generated models\KatSuratSearch.php
generated views\kat-surat\_form.php
generated views\kat-surat\_search.php
generated views\kat-surat\create.php
generated views\kat-surat\index.php
generated views\kat-surat\update.php
generated views\kat-surat\view.php
done!
```

(e) Model : jabatan

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\JabatanController.php
generated models\JabatanSearch.php
generated views\jabatan\_form.php
generated views\jabatan\_search.php
generated views\jabatan\create.php
generated views\jabatan\index.php
generated views\jabatan\update.php
generated views\jabatan\view.php
done!
```

(f) Model : jabatan_users

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\JabatanUsersController.php
generated models\JabatanUsersSearch.php
generated views\jabatan-users\_form.php
generated views\jabatan-users\_search.php
generated views\jabatan-users\create.php
generated views\jabatan-users\index.php
generated views\jabatan-users\update.php
generated views\jabatan-users\view.php
done!
```

(g) Model : instansi

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\InstansiController.php
generated models\InstansiSearch.php
generated views\instansi\_form.php
generated views\instansi\_search.php
generated views\instansi\create.php
generated views\instansi\index.php
generated views\instansi\update.php
generated views\instansi\view.php
done!
```

(h) Model : golongan

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\GolonganController.php
generated models\GolonganSearch.php
generated views\golongan\_form.php
generated views\golongan\_search.php
generated views\golongan\create.php
generated views\golongan\index.php
generated views\golongan\update.php
generated views\golongan\view.php
done!
```

(i) Model : disposisi_surat_masuk

```
The code has been generated successfully.

Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\DisposisiSuratMasukController.php
generated models\DisposisiSuratMasukSearch.php
generated views\disposisi-surat-masuk\_form.php
generated views\disposisi-surat-masuk\_search.php
generated views\disposisi-surat-masuk\create.php
generated views\disposisi-surat-masuk\index.php
generated views\disposisi-surat-masuk\update.php
generated views\disposisi-surat-masuk\view.php
done!
```

(j) Model : disposisi_rules_node

The code has been generated successfully.

```
Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\DisposisiRulesNodeController.php
generated models\DisposisiRulesNodeSearch.php
generated views\disposisi-rules-node\_form.php
generated views\disposisi-rules-node\_search.php
generated views\disposisi-rules-node\create.php
generated views\disposisi-rules-node\index.php
generated views\disposisi-rules-node\update.php
generated views\disposisi-rules-node\view.php
done!
```

(k) Model : disposisi_rules_edge

The code has been generated successfully.

```
Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\DisposisiRulesEdgeController.php
generated models\DisposisiRulesEdgeSearch.php
generated views\disposisi-rules-edge\_form.php
generated views\disposisi-rules-edge\_search.php
generated views\disposisi-rules-edge\create.php
generated views\disposisi-rules-edge\index.php
generated views\disposisi-rules-edge\update.php
generated views\disposisi-rules-edge\view.php
done!
```

(l) Model : approval_surat_keluar

The code has been generated successfully.

```
Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\ApprovalSuratKeluarController.php
generated models\ApprovalSuratKeluarSearch.php
generated views\approval-surat-keluar\_form.php
generated views\approval-surat-keluar\_search.php
generated views\approval-surat-keluar\create.php
generated views\approval-surat-keluar\index.php
generated views\approval-surat-keluar\update.php
generated views\approval-surat-keluar\view.php
done!
```

(m) Model : approval_rules_node

The code has been generated successfully.

```
Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\ApprovalRulesNodeController.php
generated models\ApprovalRulesNodeSearch.php
generated views\approval-rules-node\_form.php
generated views\approval-rules-node\_search.php
generated views\approval-rules-node\create.php
generated views\approval-rules-node\index.php
generated views\approval-rules-node\update.php
generated views\approval-rules-node\view.php
done!
```
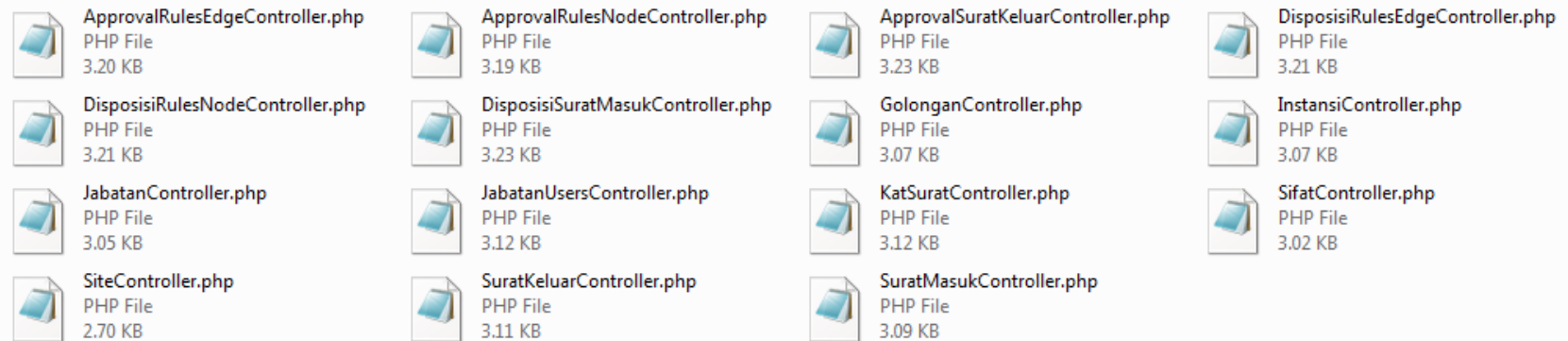
(n) Model : approval_rules_edge
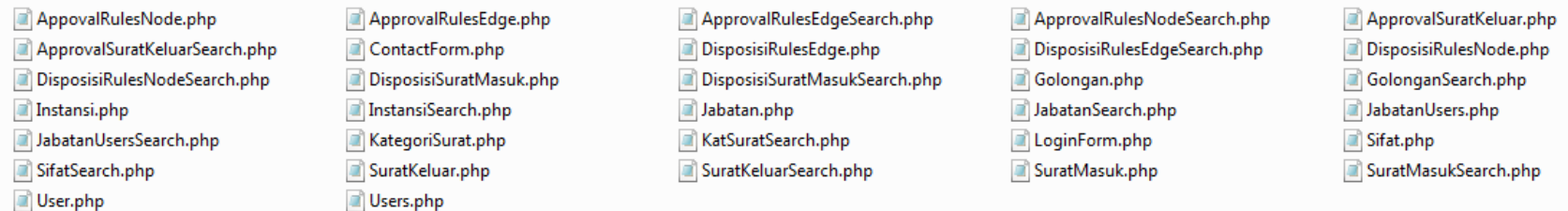
The code has been generated successfully.

```
Generating code using template "C:/xampp/htdocs/e-surat/vendor/dmstr/yii2-adminlte-asset/gii/templates/crud/simple"...
generated controllers\ApprovalRulesEdgeController.php
generated models\ApprovalRulesEdgeSearch.php
generated views\approval-rules-edge\_form.php
generated views\approval-rules-edge\_search.php
generated views\approval-rules-edge\create.php
generated views\approval-rules-edge\index.php
generated views\approval-rules-edge\update.php
generated views\approval-rules-edge\view.php
done!
```

Hasil dari CRUD Generator :

@app/controllers

ApprovalRulesEdgeController.php PHP File 3.20 KB	ApprovalRulesNodeController.php PHP File 3.19 KB	ApprovalSuratKeluarController.php PHP File 3.23 KB	DisposisiRulesEdgeController.php PHP File 3.21 KB
DisposisiRulesNodeController.php PHP File 3.21 KB	DisposisiSuratMasukController.php PHP File 3.23 KB	GolonganController.php PHP File 3.07 KB	InstansiController.php PHP File 3.07 KB
JabatanController.php PHP File 3.05 KB	JabatanUsersController.php PHP File 3.12 KB	KatSuratController.php PHP File 3.12 KB	SifatController.php PHP File 3.02 KB
SiteController.php PHP File 2.70 KB	SuratKeluarController.php PHP File 3.11 KB	SuratMasukController.php PHP File 3.09 KB	

@app/models

AppovalRulesNode.php	ApprovalRulesEdge.php	ApprovalRulesEdgeSearch.php	ApprovalRulesNodeSearch.php	ApprovalSuratKeluar.php
ApprovalSuratKeluarSearch.php	ContactForm.php	DisposisiRulesEdge.php	DisposisiRulesEdgeSearch.php	DisposisiRulesNode.php
DisposisiRulesNodeSearch.php	DisposisiSuratMasuk.php	DisposisiSuratMasukSearch.php	Golongan.php	GolonganSearch.php
Instansi.php	InstansiSearch.php	Jabatan.php	JabatanSearch.php	JabatanUsers.php
JabatanUsersSearch.php	KategoriSurat.php	KatSuratSearch.php	LoginForm.php	Sifat.php
SifatSearch.php	SuratKeluar.php	SuratKeluarSearch.php	SuratMasuk.php	SuratMasukSearch.php
User.php	Users.php			

@app/views

approval-rules-edge File folder	approval-rules-node File folder	approval-surat-keluar File folder	disposisi-rules-edge File folder
disposisi-rules-node File folder	disposisi-surat-masuk File folder	golongan File folder	instansi File folder
jabatan File folder	jabatan-users File folder	kat-surat File folder	layouts File folder
sifat File folder	site File folder	surat-keluar File folder	surat-masuk File folder

- Hasil Akhir
  (a) Halaman Login

(b) Halaman Admin

(c) Halaman About