

Dot

Step 1 : Menyusun masalah, daftar pertanyaan

Masalah

Di sebuah kota atau desa terdapat banyak penghasil pangan namun dengan jumlahnya yang banyak, ada beberapa kejanggaran yang terjadi seperti harga bahan pangan yang tidak stabil.

Actor/Pelaku

1. Pegawai Resmi
2. Kontributor Pangan

Pertanyaan dari Actor/Pelaku

Actor ke-1 : Pegawai Resmi

1. Apa yang harus dilakukan agar harga bahan pangan stabil ?
2. Dimana kami dapat menemukan tempat penghasil pangan?
3. Kapan saja harga bahan pangan tidak stabil ?
4. Siapa yang harus ikut serta dalam menstabilkan harga bahan pangan ?
5. Mengapa perlu dilakukan stabilisasi harga pada bahan pangan ?
6. Bagaimana cara agar harga bahan pangan stabil ?

Actor ke-2 : Kontributor Pangan

1. Apa yang dilakukan supaya harga bahan pangan kami stabil dengan kontributor pangan lainnya ?
2. Dimana saja kami dapat menemukan kontributor pangan lainnya ?
3. Kapan kami dapat mengatur harga bahan pangan agar stabil ?
4. Siapa yang dapat menstabilkan harga bahan pangan antar kontributor lainnya ?
5. Mengapa harga bahan pangan ada yang berbeda-beda ?
6. Bagaimana caranya agar kontributor pangan mengetahui harga standar untuk bahan pangan ?

Step 2 : Menyusun aset informasi

Daftar Informasi

1. Pegawai Resmi
2. Kontributor Pangan

Informasi ke-1 : Pegawai Resmi

1. Apa kartu identitas resminya

Informasi ke-2 : Kontributor Pangan

1. Berapa nomor induk kependudukan
2. Berapa nomor pokok wajib pajak
3. Di provinsi mana penghasil bahan pangan
4. Di kota atau kabupaten mana penghasil bahan pangan
5. Di kecamatan mana penghasil bahan pangan
6. Di kelurahan mana penghasil bahan pangan
7. Kapan panen bahan pangan
8. Apa saja bahan pangan yang dihasilkan
9. Berapa stok rata-rata hasil panen bahan pangan
10. Dalam satuan berat apa bahan pangan dijual
11. Berapa harga rata-rata bahan pangan yang dijual

Step 3 : Menyusun menu/aktivitas

User Role

1. Pegawai Resmi
2. Kontributor Pangan

Provisioning

1. Untuk bisa mengakses sistem informasi kontributor pangan, maka daftar sebagai kontributor pangan
2. Untuk bisa mengakses sistem informasi dot, maka login sebagai administrator

Menu/Activity - Pegawai Resmi

1. Memberikan Akses Registrasi
2. Memberikan Laporan

Menu/Activity - Kontributor Pangan

1. Mendata Hasil Pangan
2. Memberikan Laporan

Step 4 : Menyusun data user/aktivitas dummy

Dummy Data : Pegawai Resmi

Dummy ke-1

Role : Administrator
Username : admin
Email : admin@admin.com

Dummy Data : Kontributor Pangan

Dummy ke-1

NIK : 32-01-01-21-03-99-0008
NPWP : 03.026.562.0-805.000
Nama : Muhammad Azhar Rasyad
No HP: +6281290351971
Email : muhazharrasyad@gmail.com
Provinsi : Jawa Barat
Kota : Kabupaten Bogor
Kecamatan : Cibinong
Kelurahan : Pondok Rajeg
RT : 1
RW : 6
Kode Pos : 16914

Dummy ke-2

NIK : 23-10-10-12-30-99-8000
NPWP : 03.620.256.3-132.423
Nama : Muhammad Hasbi Sidiq
No HP: +6281234252345
Email : mhasbisidiq@gmail.com
Provinsi : Jawa Barat
Kota : Kabupaten Bandung
Kecamatan : Arjasari
Kelurahan : Ancolmekar
RT : 2
RW : 7
Kode Pos : 16915

Dummy Data : Distributor Pangan

Dummy ke-1

Kontributor Pangan : Muhammad Azhar Rasyad
Tanggal : 2018-08-04
Bahan Pangan : Beras
Stok Rata-Rata : 500
Satuan Berat Stok : Kilogram
Harga Rata-Rata : 2000

Dummy ke-2

Kontributor Pangan : Muhammad Azhar Rasyad
Tanggal : 2018-08-03
Bahan Pangan : Gula
Stok Rata-Rata : 100
Satuan Berat Stok : Kilogram
Harga Rata-Rata : 1000

Dummy ke-3

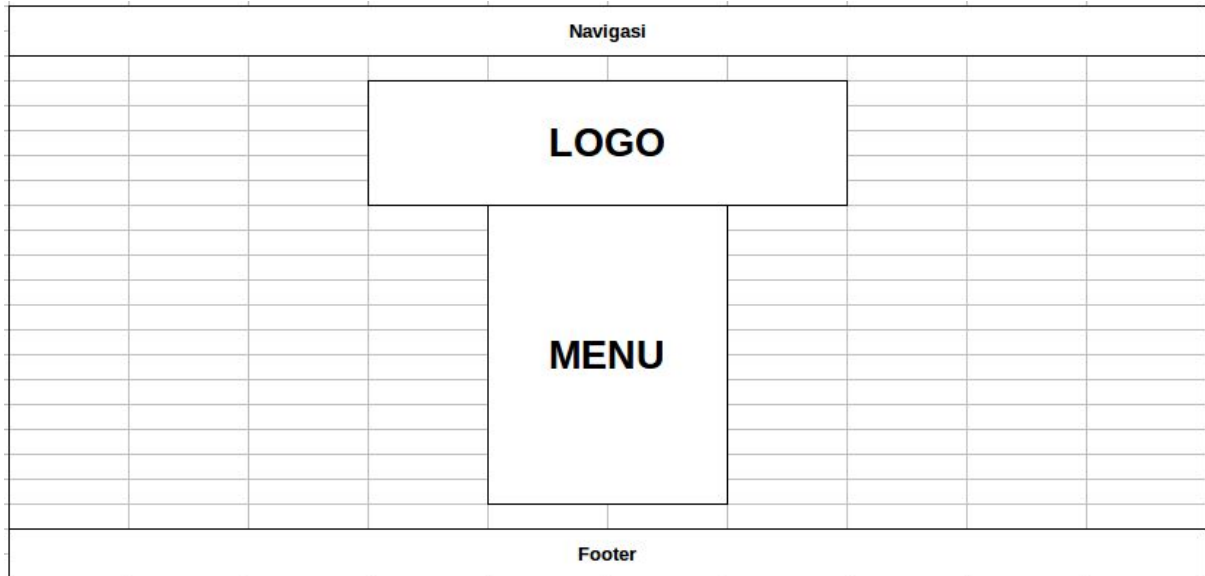
Kontributor Pangan : Muhammad Hasbi Sidiq
Tanggal : 2018-08-02
Bahan Pangan : Garam
Stok Rata-Rata : 200
Satuan Berat Stok : Kwintal
Harga Rata-Rata : 5000

Dummy ke-4

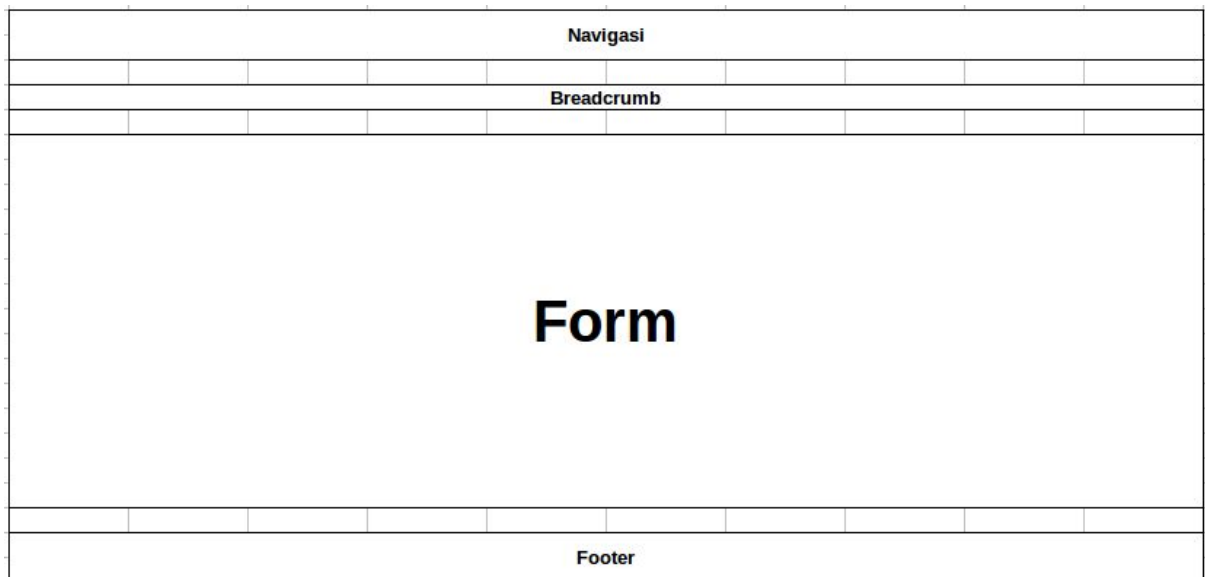
Kontributor Pangan : Muhammad Hasbi Sidiq
Tanggal : 2018-08-04
Bahan Pangan : Beras
Stok Rata-Rata : 100
Satuan Berat Stok : Ton
Harga Rata-Rata : 2000

Step 5 : Menyusun rancangan UX

Landing Page



Form Page



Step 6 : Menyusun database/table

Database : Dot

```
create database db_dot;
```

Table : Kecamatan

```
CREATE TABLE 'kecamatan' (  
  'id' char(7) NOT NULL,  
  'kota_id' char(4) NOT NULL,  
  'nama' varchar(255) NOT NULL  
);
```

Table : Kelurahan

```
CREATE TABLE 'kelurahan' (  
  'id' char(10) NOT NULL,  
  'kecamatan_id' char(7) NOT NULL,  
  'nama' varchar(255) NOT NULL  
);
```

Table : Kota

```
CREATE TABLE 'kota' (  
  'id' char(4) NOT NULL,  
  'provinsi_id' char(2) NOT NULL,  
  'nama' varchar(255) NOT NULL  
);
```

Table : Provinsi

```
CREATE TABLE 'provinsi' (  
  'id' char(2) NOT NULL,  
  'nama' varchar(255) NOT NULL  
);
```

Table : Kontributor Pangan

```
CREATE TABLE 'kontributor_pangan' (  
  'id' int(11) NOT NULL,
```

```
'nik' varchar(100) NOT NULL,  
'npwp' varchar(100) NOT NULL,  
'nama_lengkap' varchar(100) NOT NULL,  
'no_handphone' varchar(20) NOT NULL,  
'email' varchar(50) NOT NULL,  
'provinsi' char(2) NOT NULL,  
'kota' char(4) NOT NULL,  
'kecamatan' char(7) NOT NULL,  
'kelurahan' char(10) NOT NULL,  
'rt' int(3) NOT NULL,  
'rw' int(3) NOT NULL,  
'kode_pos' int(10) NOT NULL,  
'lat' varchar(100) NOT NULL,  
'lng' varchar(100) NOT NULL  
);
```

Table : Distribusi Pangan

```
CREATE TABLE 'distribusi_pangan' (  
  'id' int(11) NOT NULL,  
  'kontributor_pangan_id' int(11) NOT NULL,  
  'tanggal' date NOT NULL,  
  'bahan_pangan' varchar(30) NOT NULL,  
  'stok_rata2' float NOT NULL,  
  'satuan_stok' varchar(10) NOT NULL,  
  'harga_rata2' double NOT NULL  
);
```


Step 7 : Pengembangan template, kerangka aplikasi

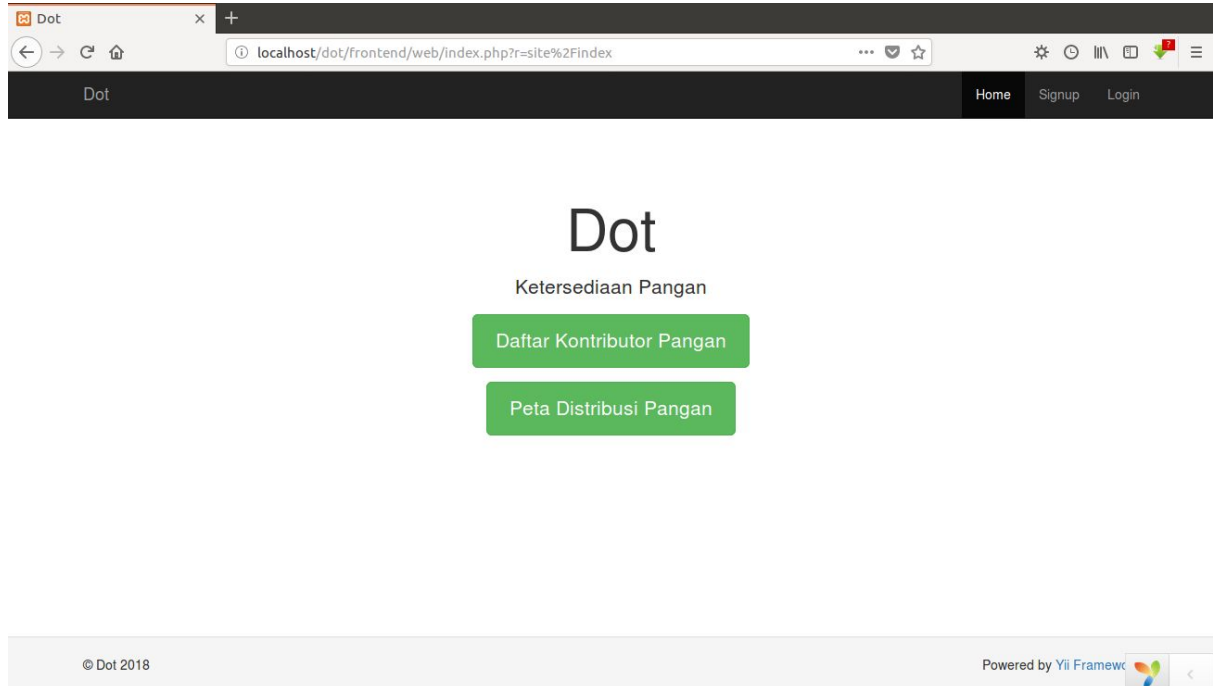
<https://github.com/mazharrasyad/Dot>

Step 8 : Implementasi MVC

<https://github.com/mazharrasyad/Dot>

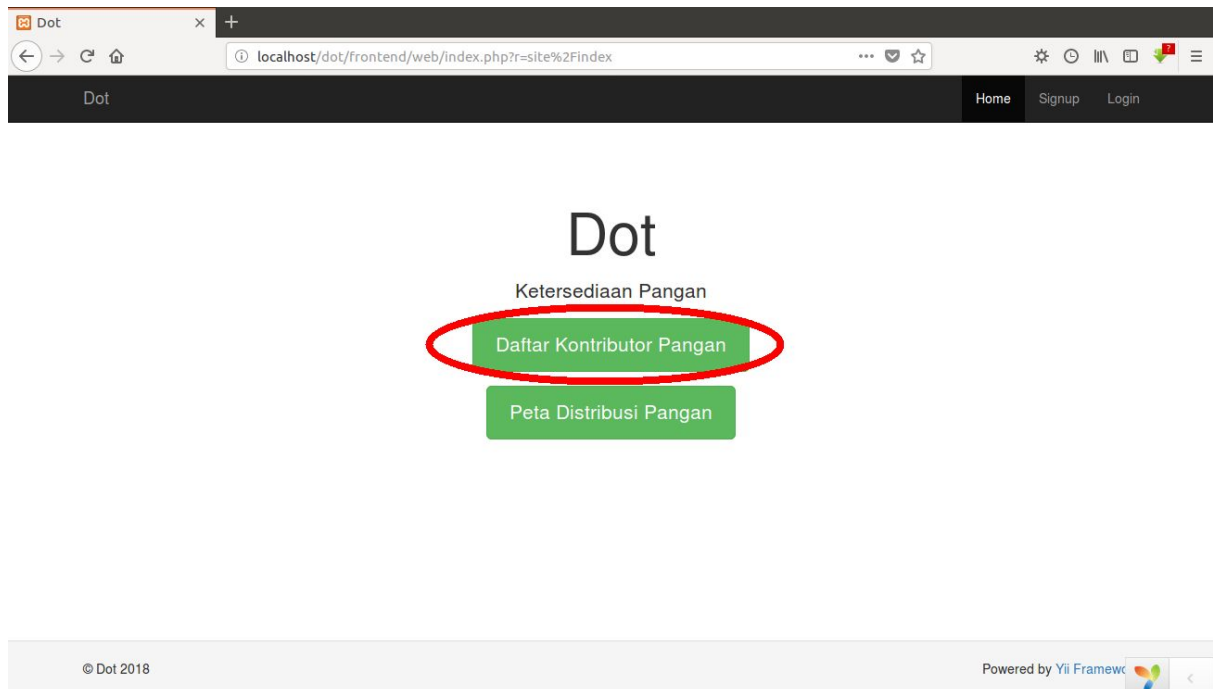
Step 9 : Software testing

Testing Landing Page (Frontend)

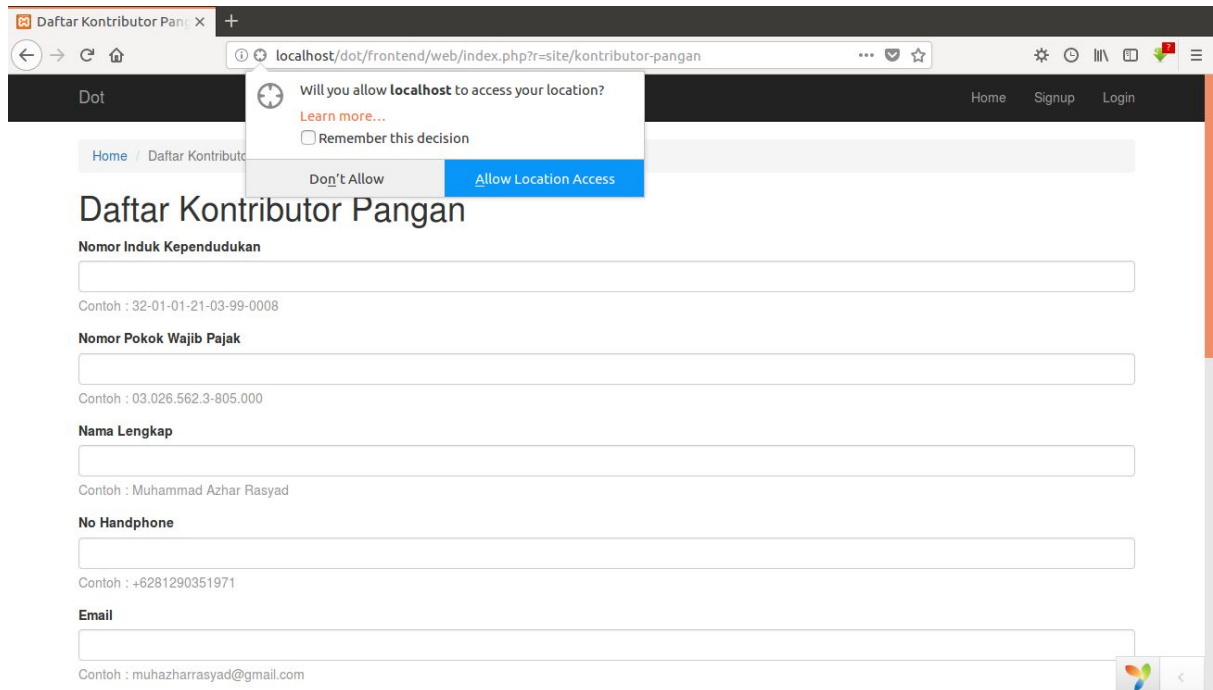


Testing Daftar Kontributor Pangan (Frontend)

1. Link ke Form Daftar Kontributor Pangan



2. Form Daftar Kontributor Pangan



Daftar Kontributor Pangan

Nomor Induk Kependudukan

Contoh : 32-01-01-21-03-99-0008

Nomor Pokok Wajib Pajak

Contoh : 03.026.562.3-805.000

Nama Lengkap

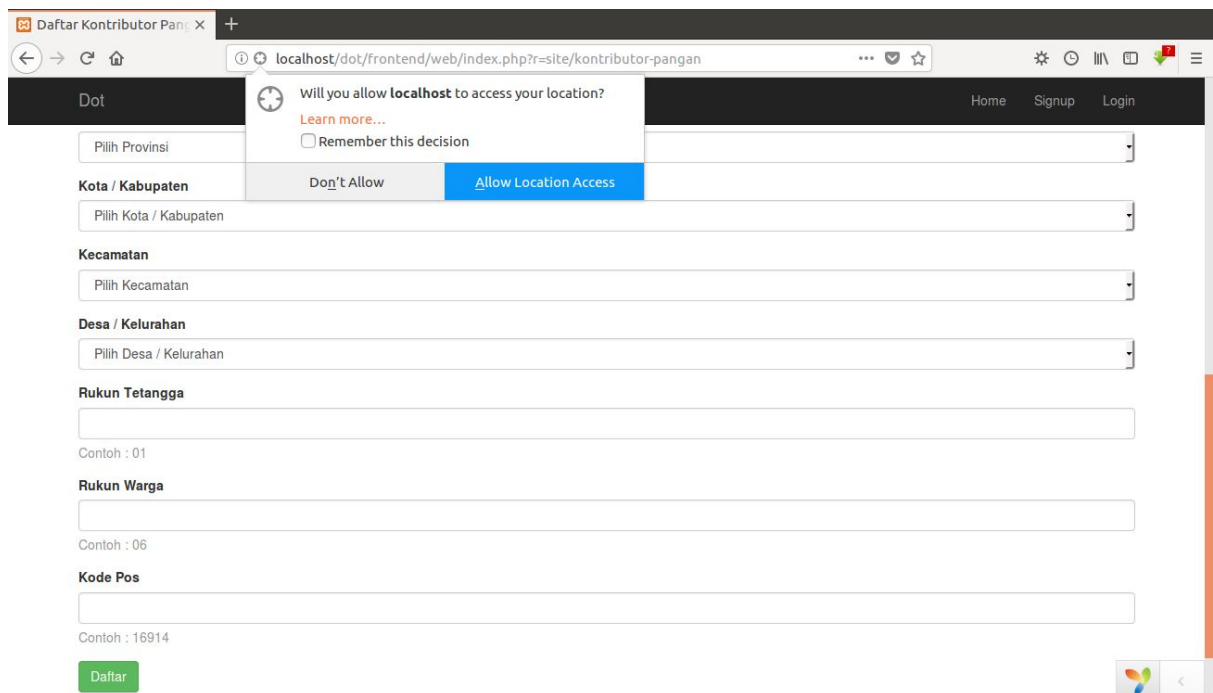
Contoh : Muhammad Azhar Rasyad

No Handphone

Contoh : +6281290351971

Email

Contoh : muhazharrasyad@gmail.com



Daftar Kontributor Pangan

Pilih Provinsi

Kota / Kabupaten

Pilih Kota / Kabupaten

Kecamatan

Pilih Kecamatan

Desa / Kelurahan

Pilih Desa / Kelurahan

Rukun Tetangga

Contoh : 01

Rukun Warga

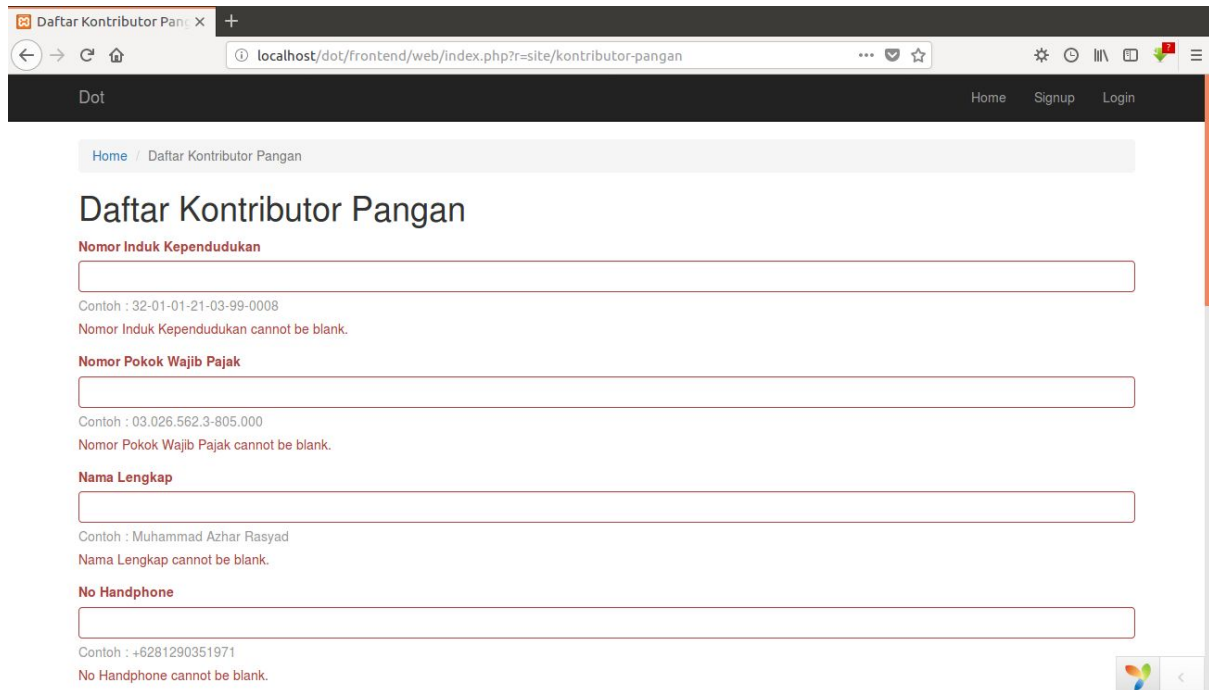
Contoh : 06

Kode Pos

Contoh : 16914

Daftar

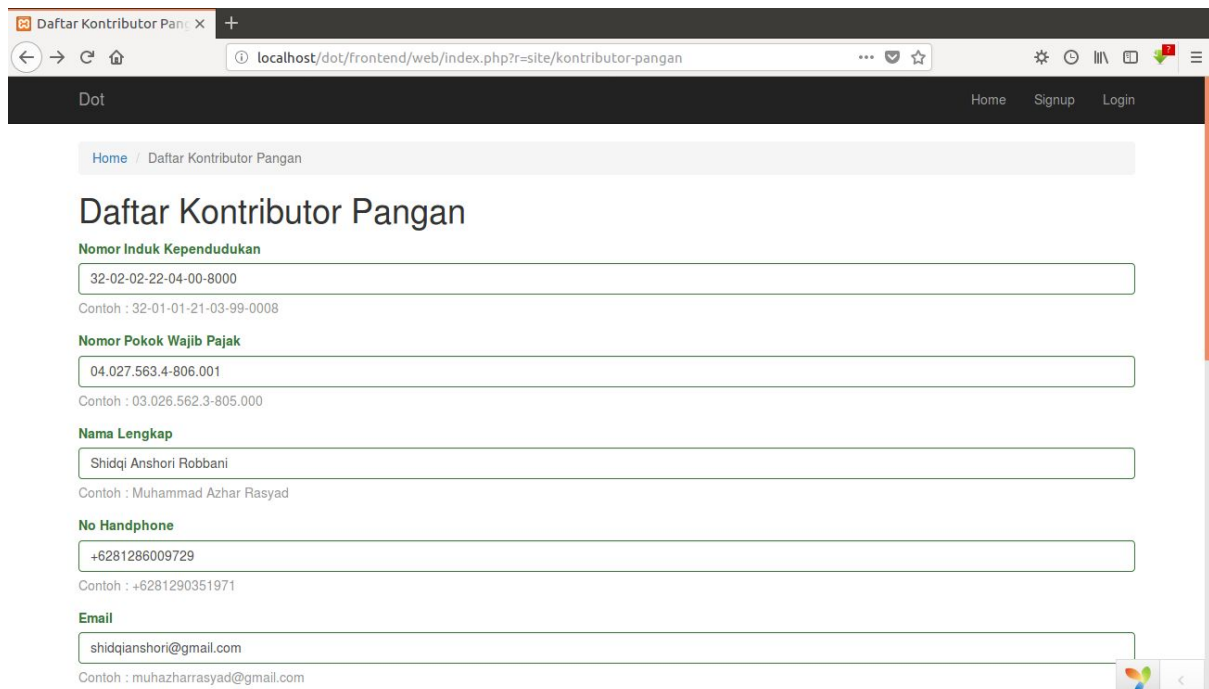
3. Validasi Form Daftar Kontributor Pangan



The screenshot shows a web browser window with the URL `localhost/dot/frontend/web/index.php?r=site/kontributor-pangan`. The page title is "Daftar Kontributor Pangan". The form contains four input fields, each with a label, a placeholder example, and a red validation message:

- Nomor Induk Kependudukan**: Placeholder "Contoh : 32-01-01-21-03-99-0008". Message: "Nomor Induk Kependudukan cannot be blank."
- Nomor Pokok Wajib Pajak**: Placeholder "Contoh : 03.026.562.3-805.000". Message: "Nomor Pokok Wajib Pajak cannot be blank."
- Nama Lengkap**: Placeholder "Contoh : Muhammad Azhar Rasyad". Message: "Nama Lengkap cannot be blank."
- No Handphone**: Placeholder "Contoh : +6281290351971". Message: "No Handphone cannot be blank."

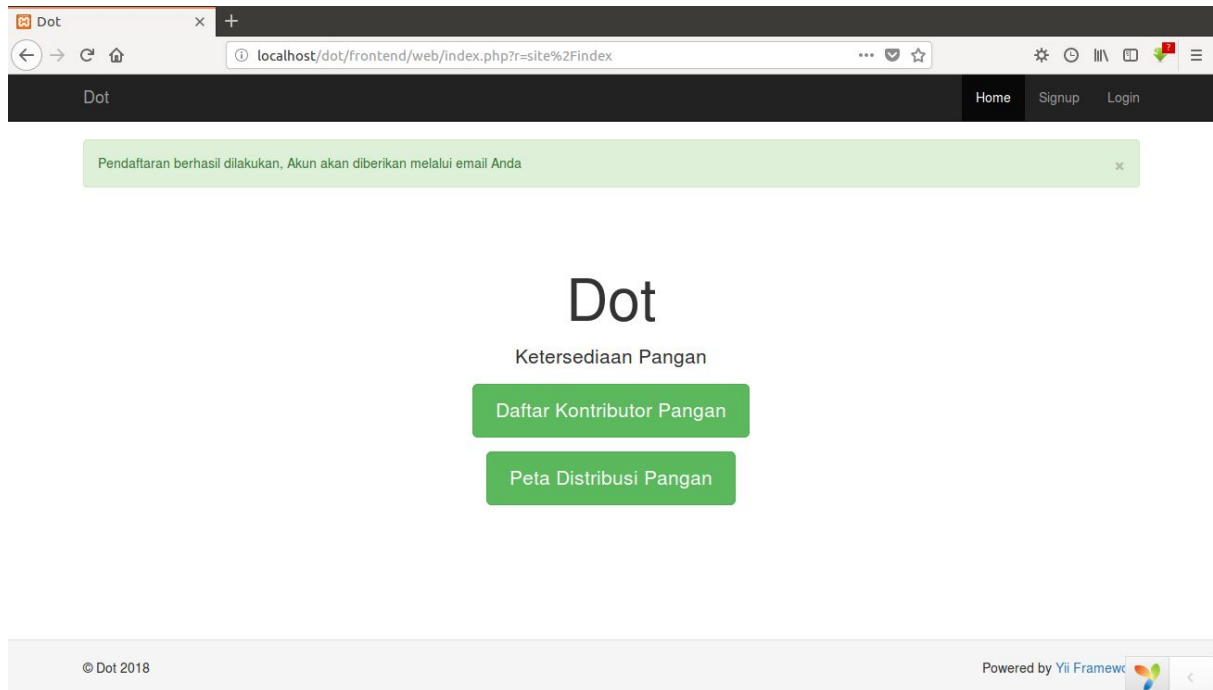
4. Sample Input



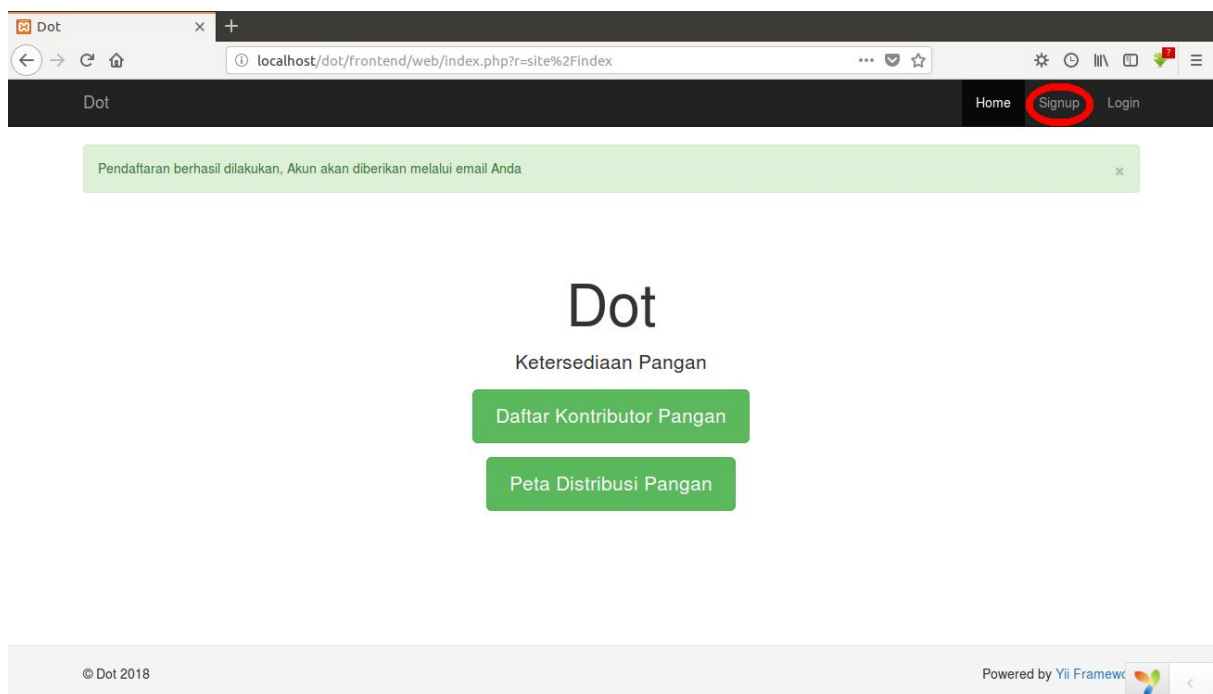
The screenshot shows the same web browser window, but now the form fields are populated with sample data, and the validation messages are gone:

- Nomor Induk Kependudukan**: "32-02-02-22-04-00-8000". Example: "Contoh : 32-01-01-21-03-99-0008".
- Nomor Pokok Wajib Pajak**: "04.027.563.4-806.001". Example: "Contoh : 03.026.562.3-805.000".
- Nama Lengkap**: "Shidqi Anshori Robbani". Example: "Contoh : Muhammad Azhar Rasyad".
- No Handphone**: "+6281286009729". Example: "Contoh : +6281290351971".
- Email**: "shidqianshori@gmail.com". Example: "Contoh : muhazharrasyad@gmail.com".

5. Berhasil Input



6. Link ke Form Daftar User



7. Form Daftar User

Signup

Please fill out the following fields to signup:

Username

Username cannot be blank.

Email

Password

Signup

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8. Validasi Form Daftar User

Signup

Please fill out the following fields to signup:

Username

Username cannot be blank.

Email

Email cannot be blank.

Password

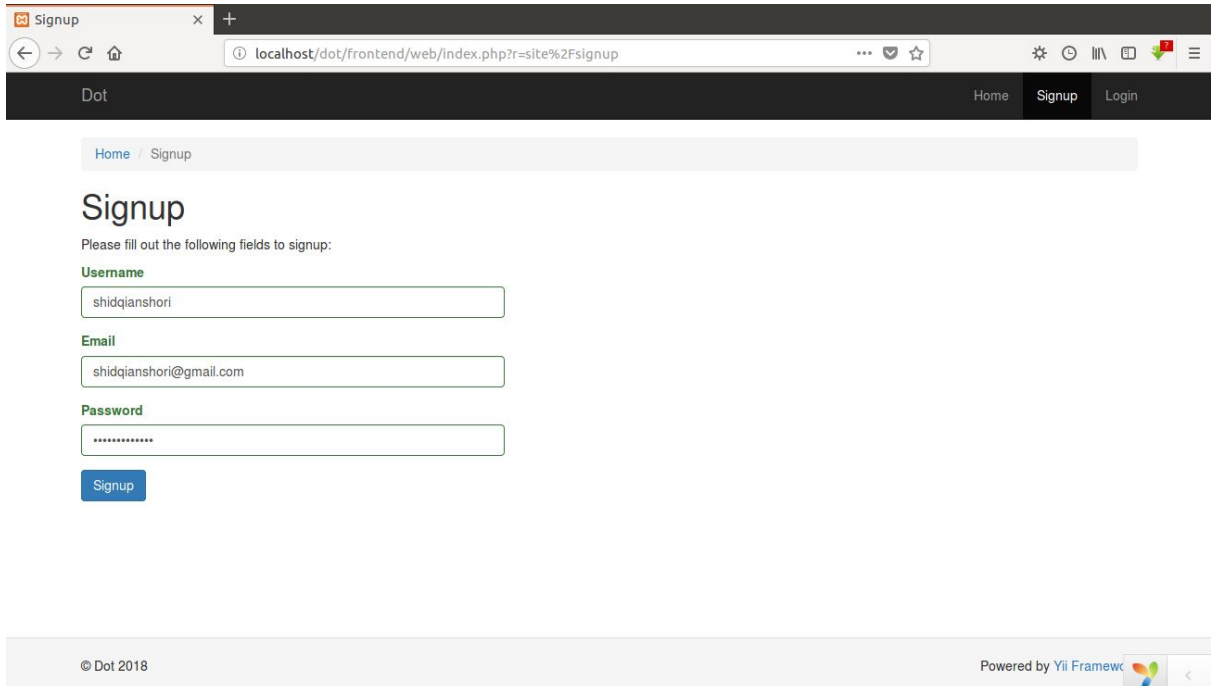
Password cannot be blank.

Signup

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9. Sample Input



The screenshot shows a web browser window with the address bar displaying `localhost/dot/frontend/web/index.php?r=site%2Fsignup`. The page has a dark header with 'Dot' on the left and 'Home', 'Signup', and 'Login' on the right. Below the header is a breadcrumb 'Home / Signup'. The main content area is titled 'Signup' and contains the instruction 'Please fill out the following fields to signup:'. There are three input fields: 'Username' with the value 'shidqianshori', 'Email' with the value 'shidqianshori@gmail.com', and 'Password' with masked characters '*****'. A blue 'Signup' button is at the bottom of the form. The footer shows '© Dot 2018' and 'Powered by Yii Framework'.

Signup

Please fill out the following fields to signup:

Username

shidqianshori

Email

shidqianshori@gmail.com

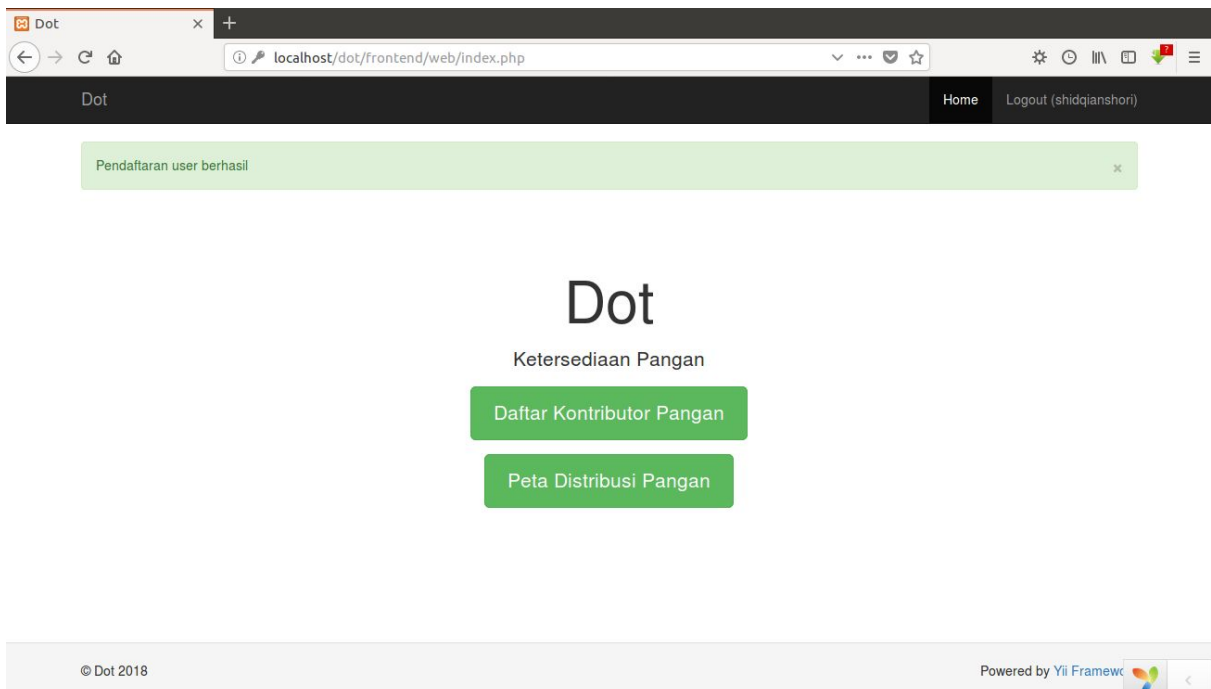
Password

Signup

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10. Berhasil Input



The screenshot shows the 'Dot' homepage. The browser address bar is `localhost/dot/frontend/web/index.php`. The header has 'Dot' on the left and 'Home' and 'Logout (shidqianshori)' on the right. A green success message 'Pendaftaran user berhasil' is displayed at the top. The main content area features the 'Dot' logo, the text 'Ketersediaan Pangan', and two green buttons: 'Daftar Kontributor Pangan' and 'Peta Distribusi Pangan'. The footer is identical to the previous screenshot.

Dot

Ketersediaan Pangan

Daftar Kontributor Pangan

Peta Distribusi Pangan

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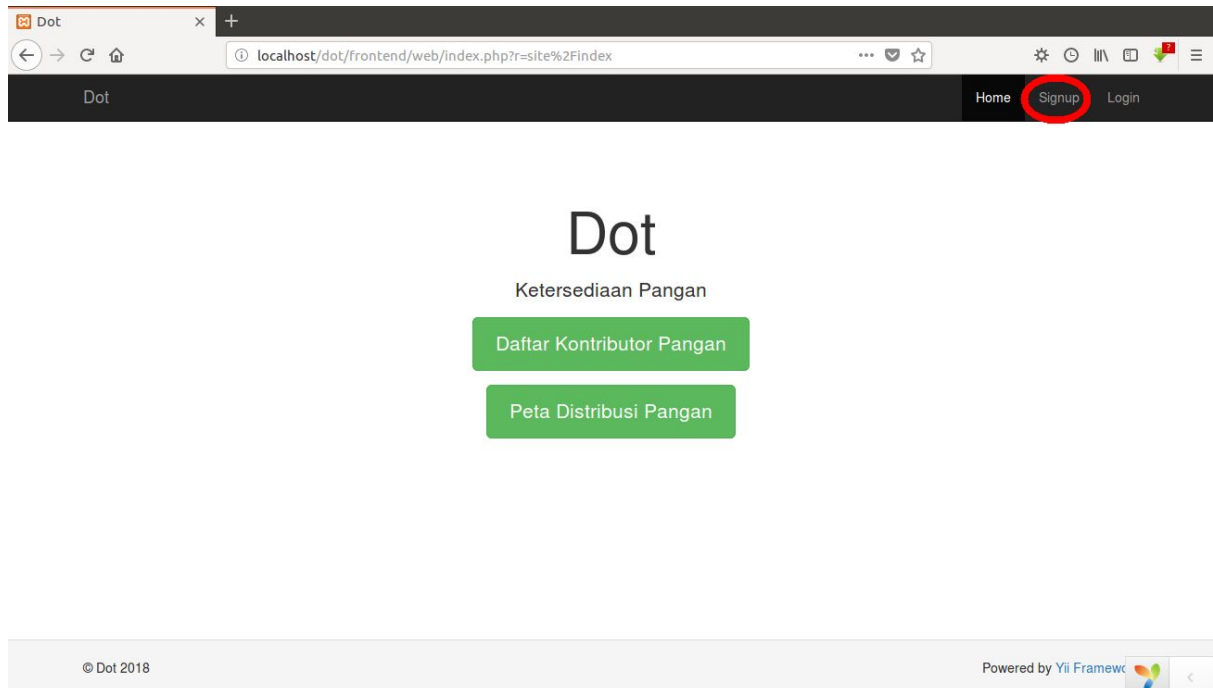
Powered by Yii Framework

11. Menunggu Konfirmasi Admin

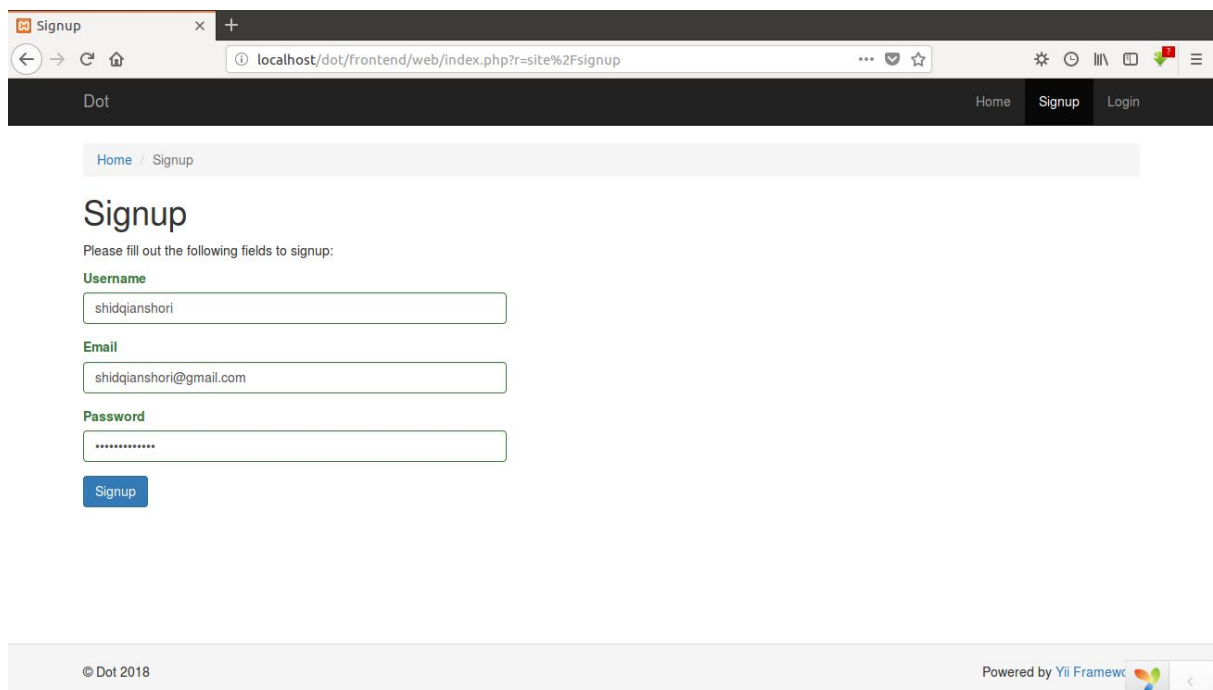
Setelah mendaftar maka langkah selanjutnya adalah menunggu konfirmasi dari admin untuk memeriksa keaslian data tersebut yang akan diberitahukan melalui email.

Testing Mendata Distribusi Pangan Oleh Kontributor Pangan (Frontend)

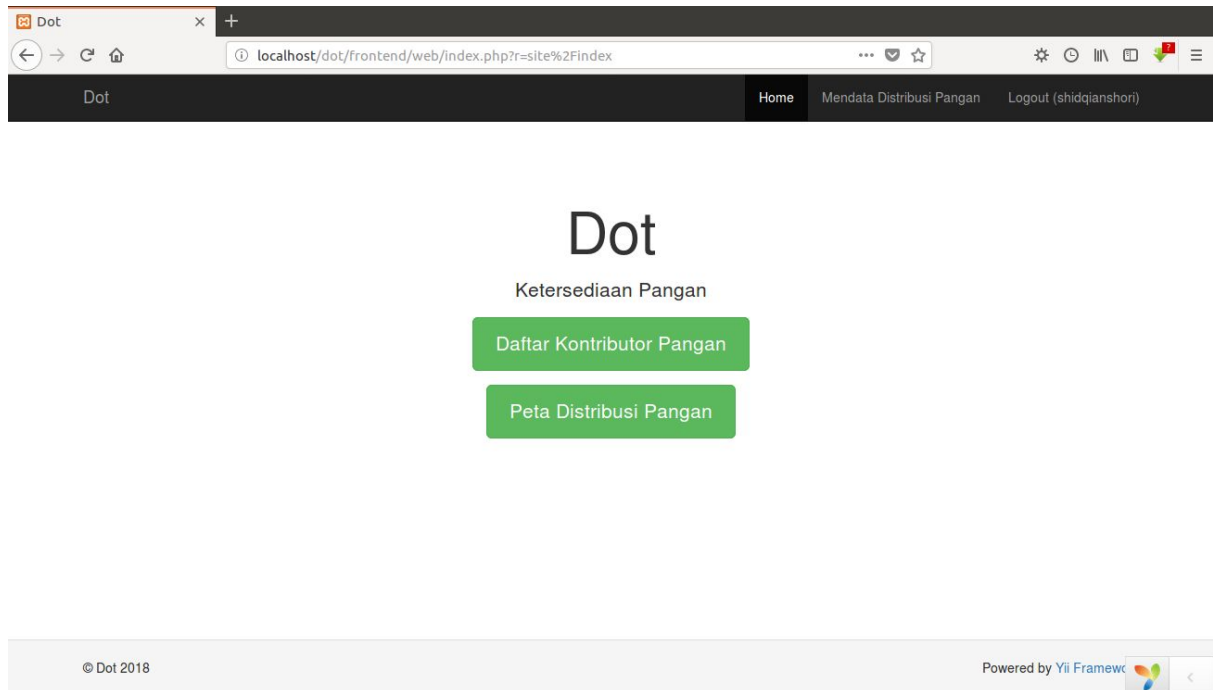
1. Link ke Form Data Distribusi Pangan



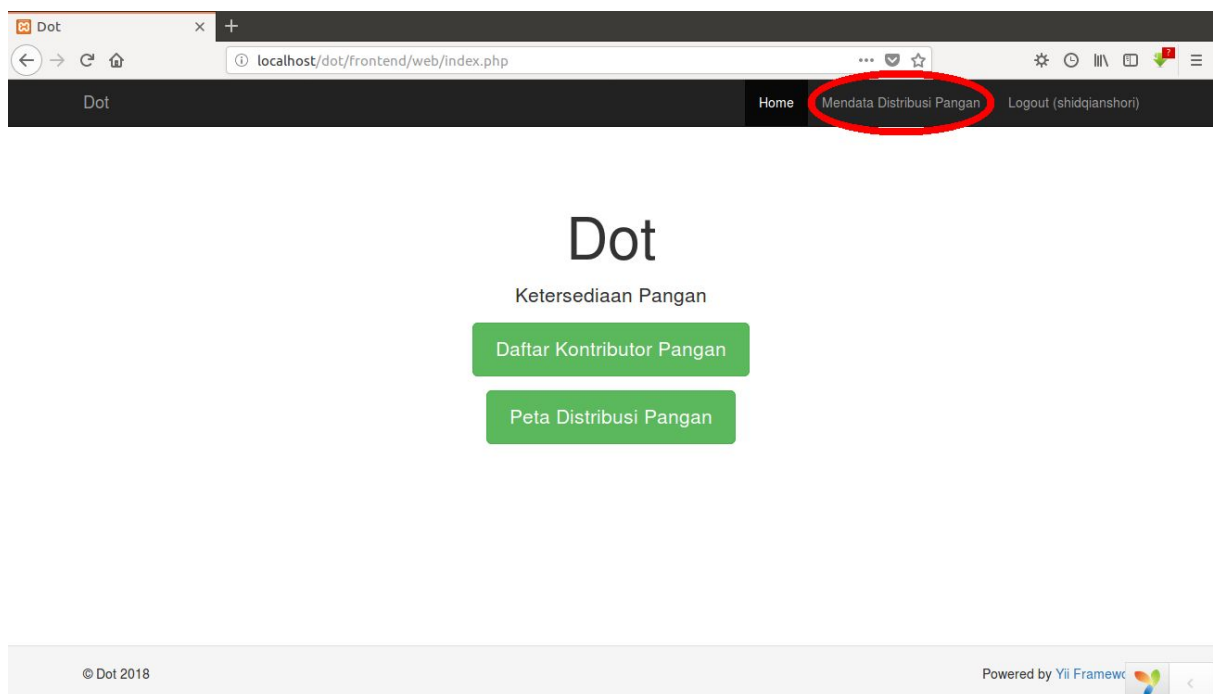
2. Sample Form Login



3. Form Data Distribusi Pangan



4. Link ke Form Data Distribusi Pangan



5. Form Data Distribusi Pangan

Mendata Distribusi Pangan

Tanggal Mendata

mm / dd / yyyy

Contoh : 31 / 12 / 2018

Bahan Pangan

Contoh : Beras

Stok Rata-Rata Bahan Pangan

Contoh : 50

Satuan Stok Bahan Pangan

☐ Ton ☐ Kwintal ☒ Kilogram ☐ Gram ☐ Ons ☐ Liter

Contoh : Kilogram

Harga Rata-Rata Bahan Pangan Per Kilogram (KG)

Contoh : 10000

6. Validasi Form Data Distribusi Pangan

Mendata Distribusi Pangan

Tanggal Mendata

mm / dd / yyyy

Contoh : 31 / 12 / 2018

Tanggal cannot be blank.

Bahan Pangan

Contoh : Beras

Bahan Pangan cannot be blank.

Stok Rata-Rata Bahan Pangan

Contoh : 50

Stok Rata2 cannot be blank.

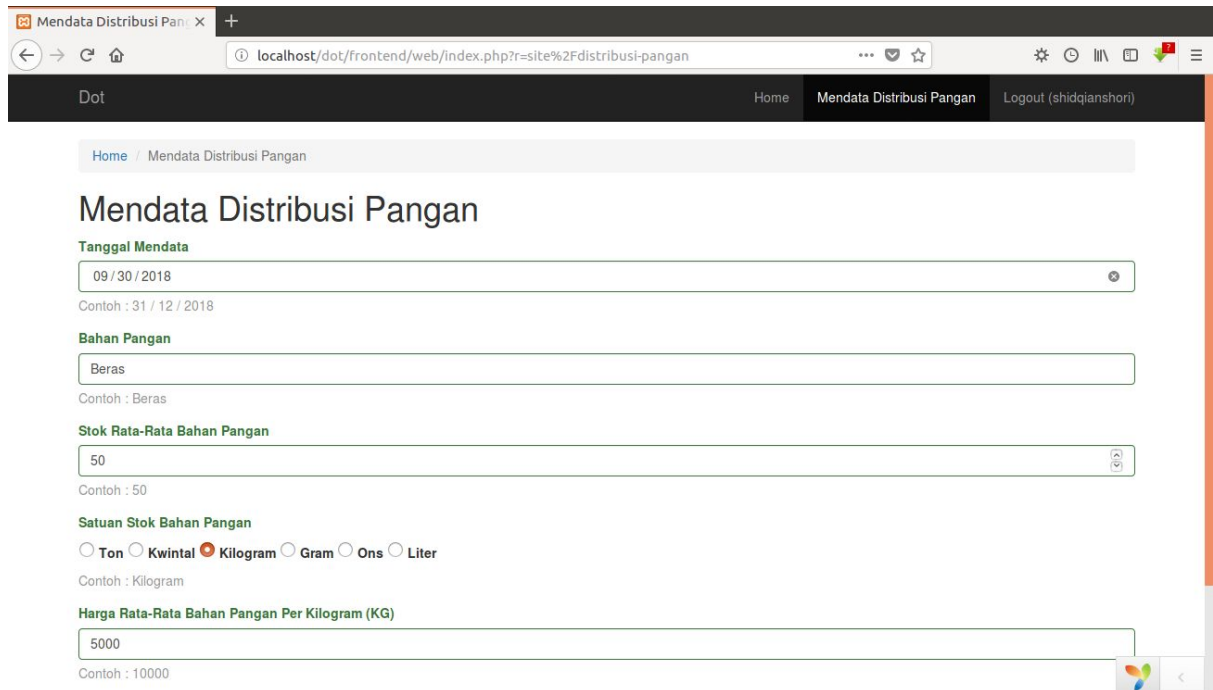
Satuan Stok Bahan Pangan

☐ Ton ☐ Kwintal ☒ Kilogram ☐ Gram ☐ Ons ☐ Liter

Contoh : Kilogram

Satuan Stok cannot be blank.

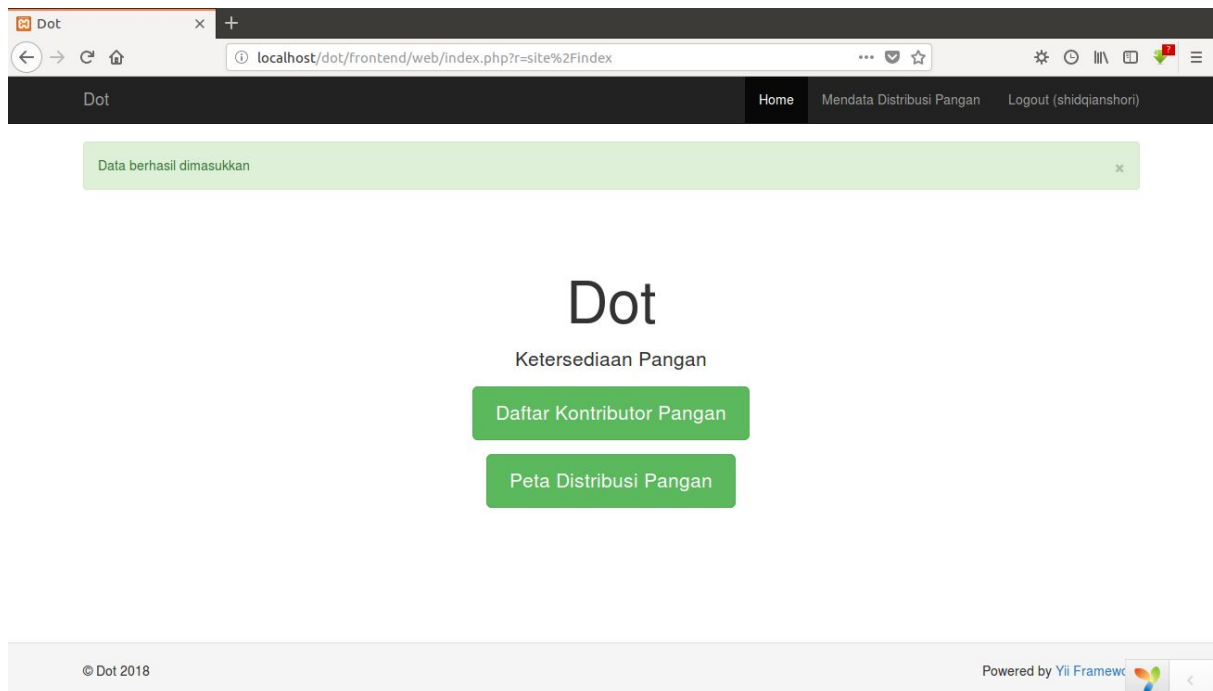
7. Sample Input



The screenshot shows a web browser window with the address bar displaying `localhost/dot/frontend/web/index.php?r=site%2Fdistribusi-pangan`. The page title is "Mendata Distribusi Pangan". The form contains the following fields and options:

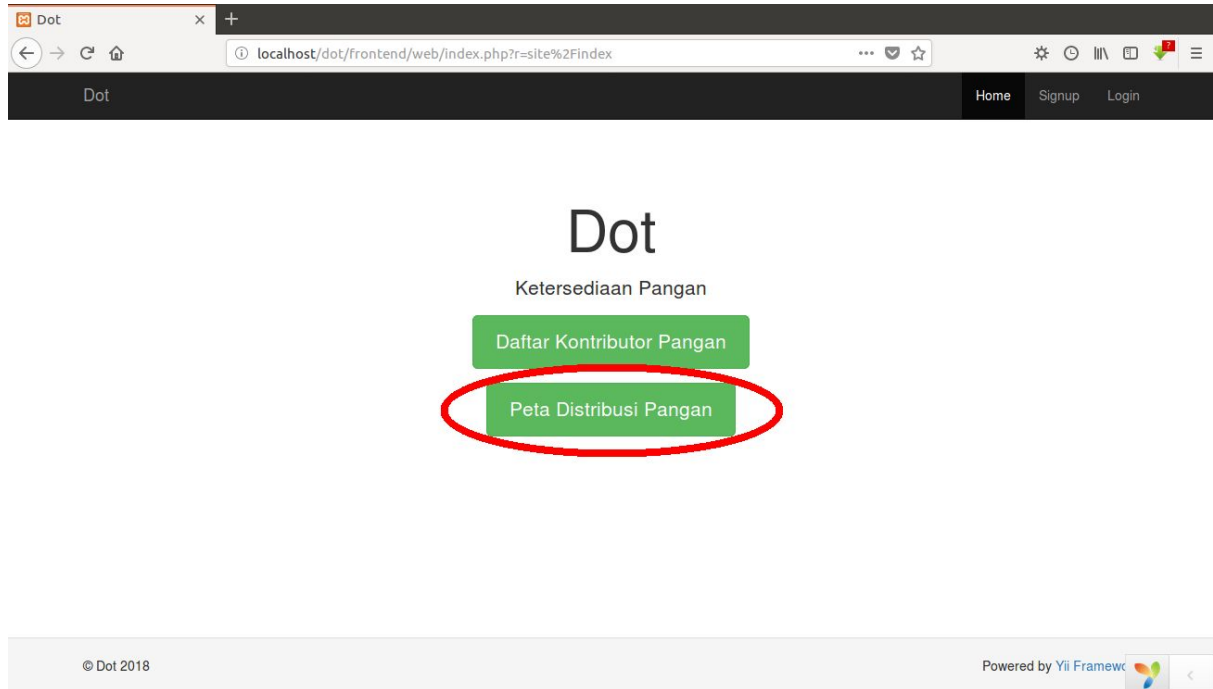
- Tanggal Mendata:** A text input field with the value "09/30/2018". Below it, a hint text reads "Contoh : 31 / 12 / 2018".
- Bahan Pangan:** A text input field with the value "Beras". Below it, a hint text reads "Contoh : Beras".
- Stok Rata-Rata Bahan Pangan:** A text input field with the value "50". Below it, a hint text reads "Contoh : 50".
- Satuan Stok Bahan Pangan:** A group of radio buttons with labels: "Ton", "Kwintal", "Kilogram" (which is selected), "Gram", "Ons", and "Liter". Below it, a hint text reads "Contoh : Kilogram".
- Harga Rata-Rata Bahan Pangan Per Kilogram (KG):** A text input field with the value "5000". Below it, a hint text reads "Contoh : 10000".

8. Berhasil Input

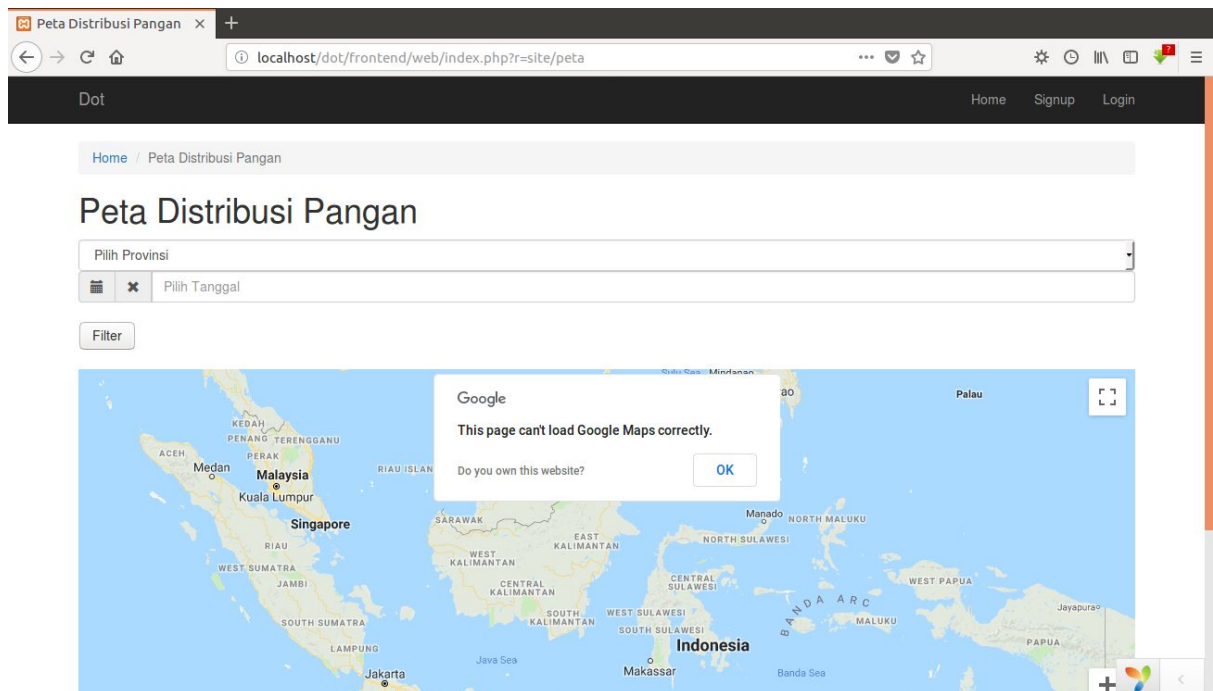


Testing Peta Distribusi Pangan (Frontend)

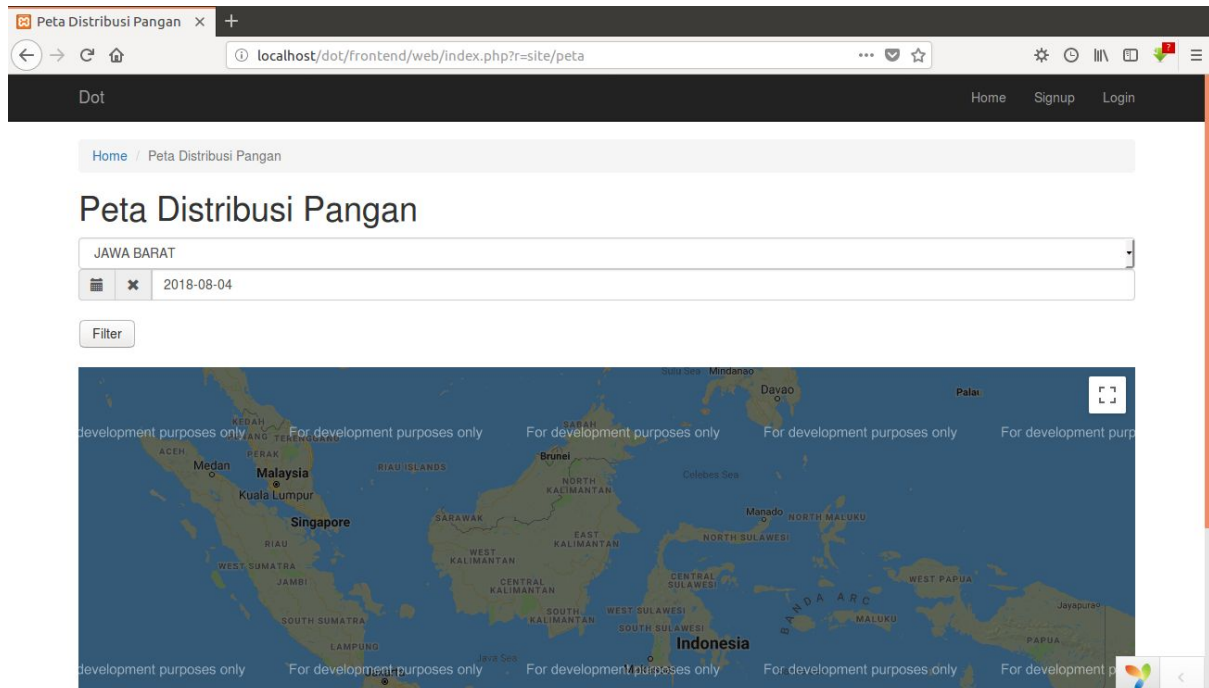
1. Link ke Form Peta Distribusi Pangan



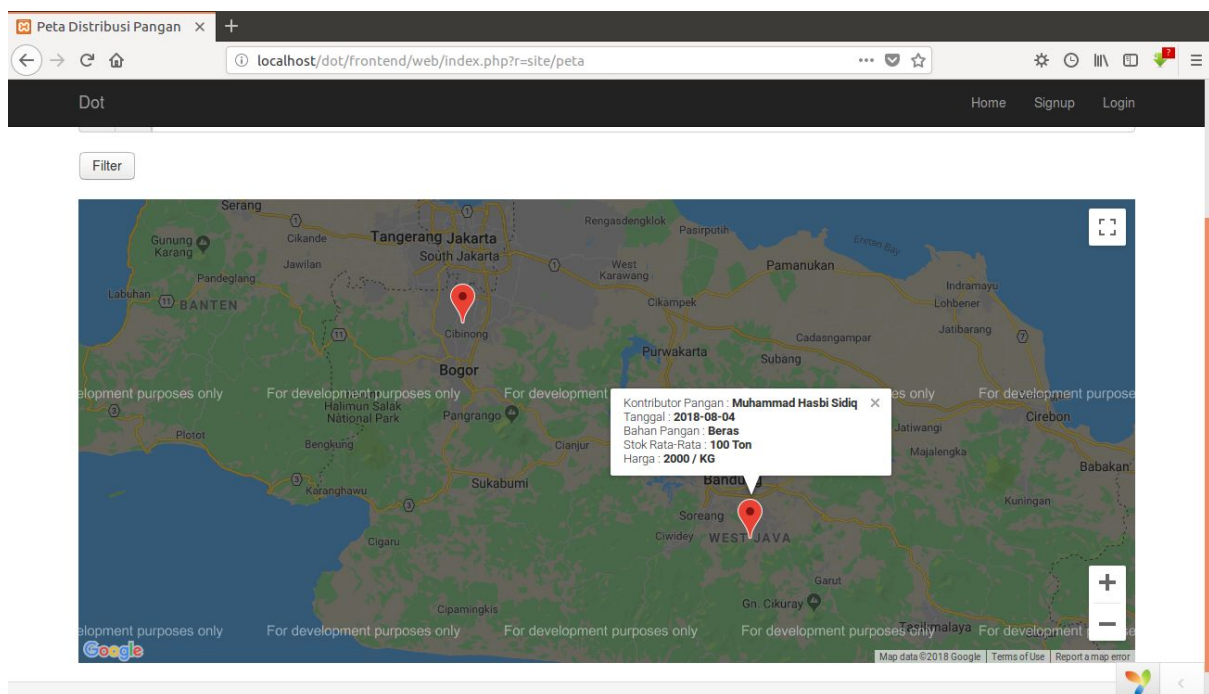
2. Form Peta Distribusi Pangan



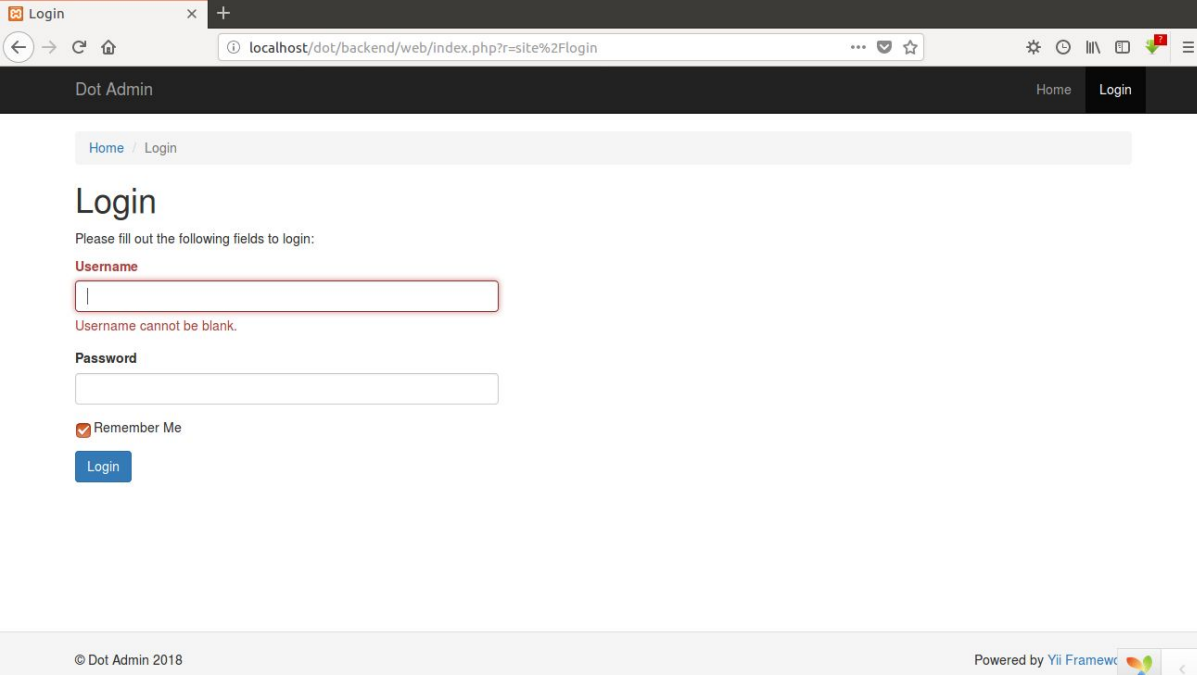
3. Sample Filter



4. Berhasil Filter



Testing Landing Page (Backend)



A screenshot of a web browser showing the login page of a system named 'Dot Admin'. The browser's address bar shows the URL 'localhost/dot/backend/web/index.php?r=site%2Flogin'. The page has a dark header with 'Dot Admin' on the left and 'Home' and 'Login' links on the right. Below the header is a breadcrumb trail 'Home / Login'. The main content area is titled 'Login' and contains a message: 'Please fill out the following fields to login:'. There are two input fields: 'Username' and 'Password'. The 'Username' field has a red border and a red error message below it: 'Username cannot be blank.'. There is a 'Remember Me' checkbox which is checked, and a blue 'Login' button. The footer contains the copyright notice '© Dot Admin 2018' and a note 'Powered by Yii Framework' with the Yii logo.

Dot Admin

Home Login

Home / Login

Login

Please fill out the following fields to login:

Username

Username cannot be blank.

Password

☒ Remember Me

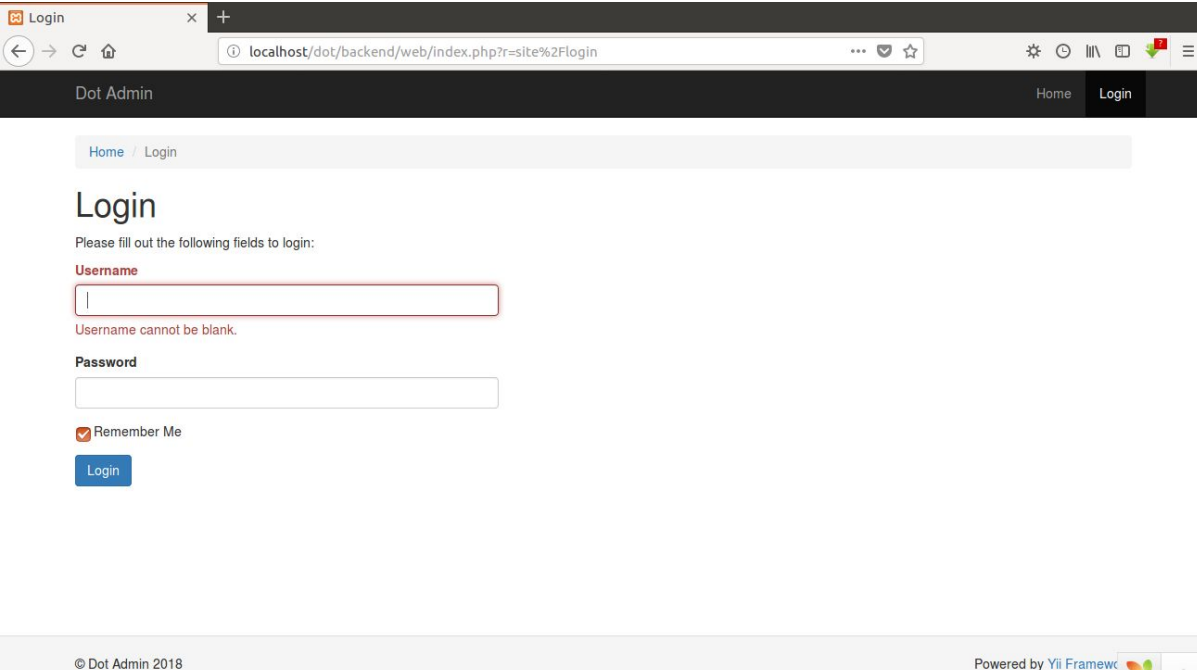
Login

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Testing Administrator (Backend)

1. Form Login



A screenshot of a web browser showing the login page of a system named 'Dot Admin'. The browser's address bar shows the URL 'localhost/dot/backend/web/index.php?r=site%2Flogin'. The page has a dark header with 'Dot Admin' on the left and 'Home' and 'Login' links on the right. Below the header is a breadcrumb trail 'Home / Login'. The main content area is titled 'Login' and contains a message: 'Please fill out the following fields to login:'. There are two input fields: 'Username' and 'Password'. The 'Username' field has a red border and a red error message below it: 'Username cannot be blank.'. There is a 'Remember Me' checkbox which is checked, and a blue 'Login' button. The footer contains the copyright notice '© Dot Admin 2018' and a note 'Powered by Yii Framework' with the Yii logo.

Dot Admin

Home Login

Home / Login

Login

Please fill out the following fields to login:

Username

Username cannot be blank.

Password

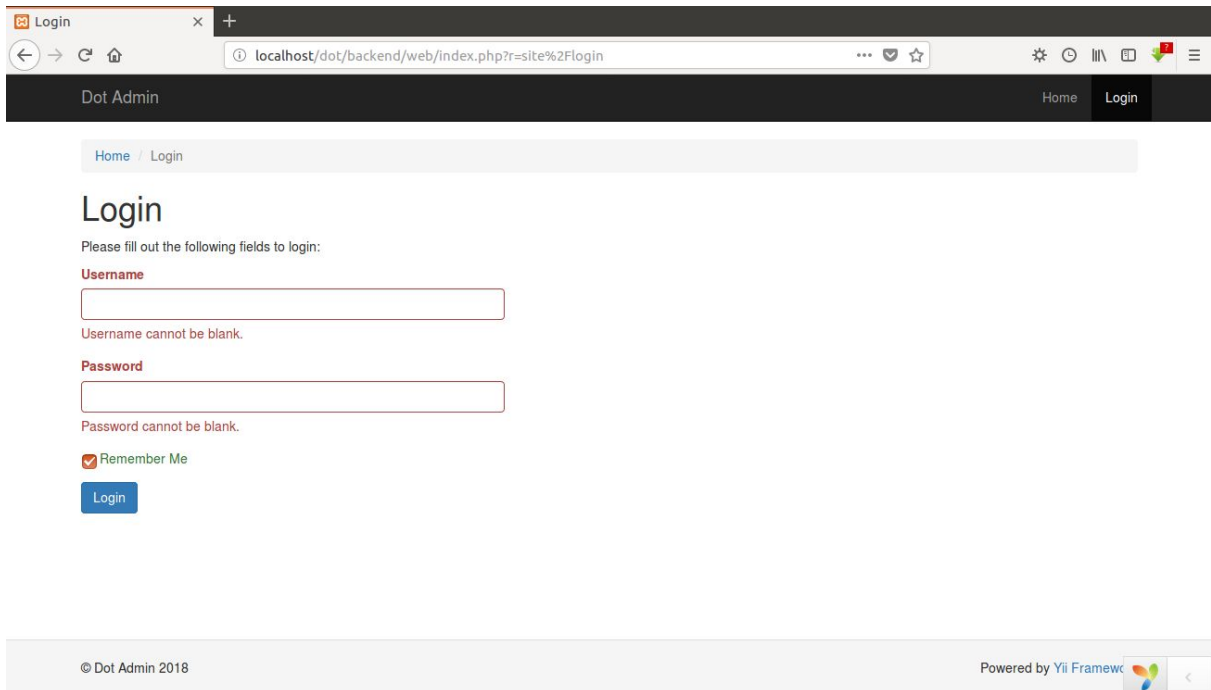
☒ Remember Me

Login

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2. Validasi Form Login



The screenshot shows a web browser window with the address bar displaying `localhost/dot/backend/web/index.php?r=site%2Flogin`. The page title is "Login". The navigation bar includes "Dot Admin" and links for "Home" and "Login". The breadcrumb trail is "Home / Login". The main heading is "Login". Below it, a message says "Please fill out the following fields to login:". The form has two input fields: "Username" and "Password". Both fields have red borders and red error messages below them: "Username cannot be blank." and "Password cannot be blank." respectively. There is a checked checkbox labeled "Remember Me" and a blue "Login" button. The footer contains "© Dot Admin 2018" and "Powered by Yii Framework" with a logo.

Login

Please fill out the following fields to login:

Username

Username cannot be blank.

Password

Password cannot be blank.

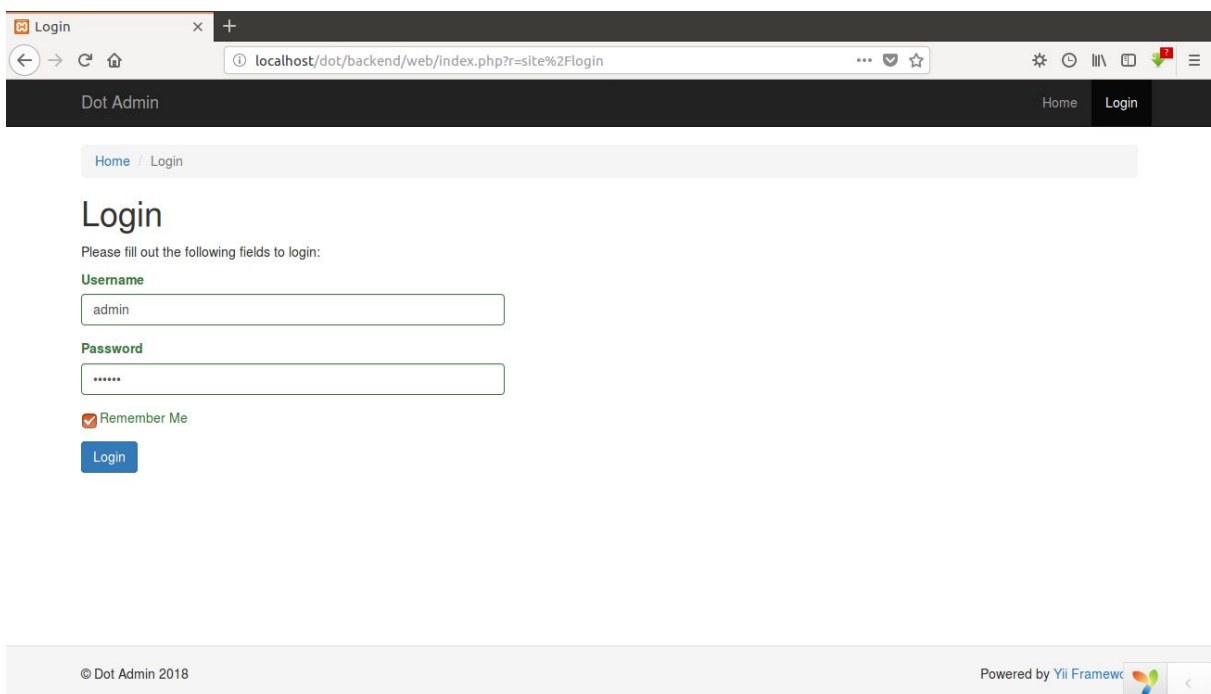
☒ Remember Me

Login

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3. Sample Form Login



The screenshot shows the same web browser window as before, but the login form is now filled with sample data. The "Username" field contains the text "admin" and the "Password" field contains six asterisks "*****". The "Remember Me" checkbox is still checked, and the "Login" button is still present. The rest of the page, including the navigation bar, breadcrumb trail, and footer, remains the same.

Login

Please fill out the following fields to login:

Username

Password

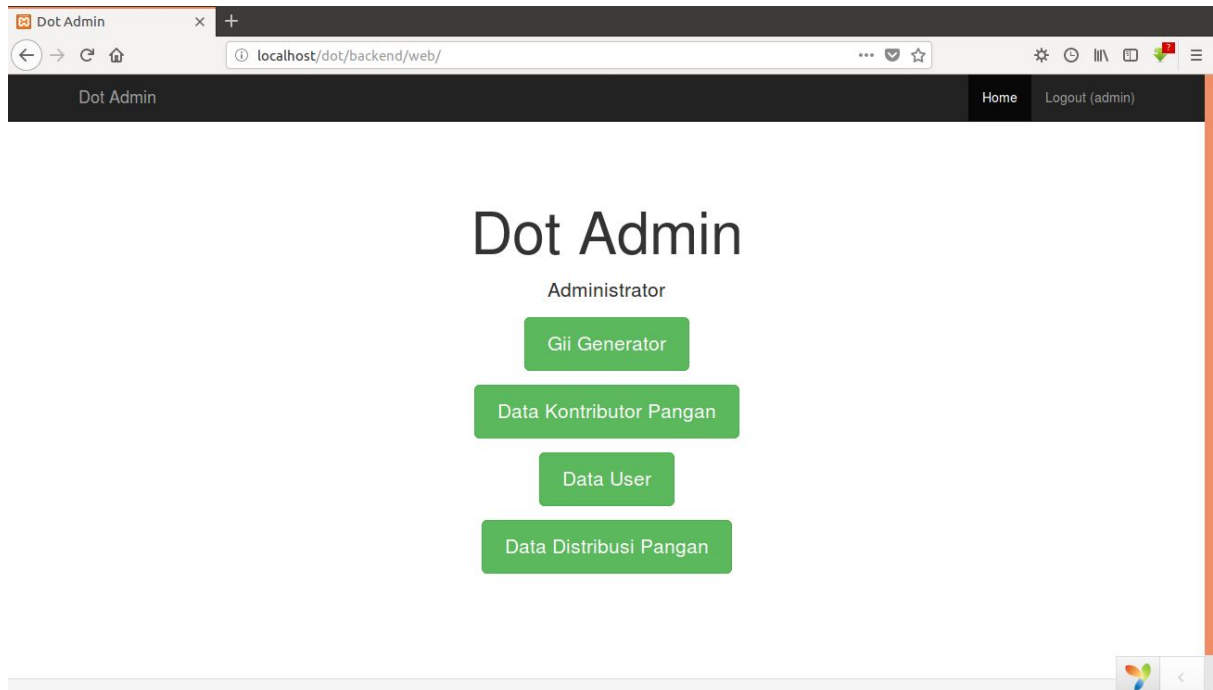
☒ Remember Me

Login

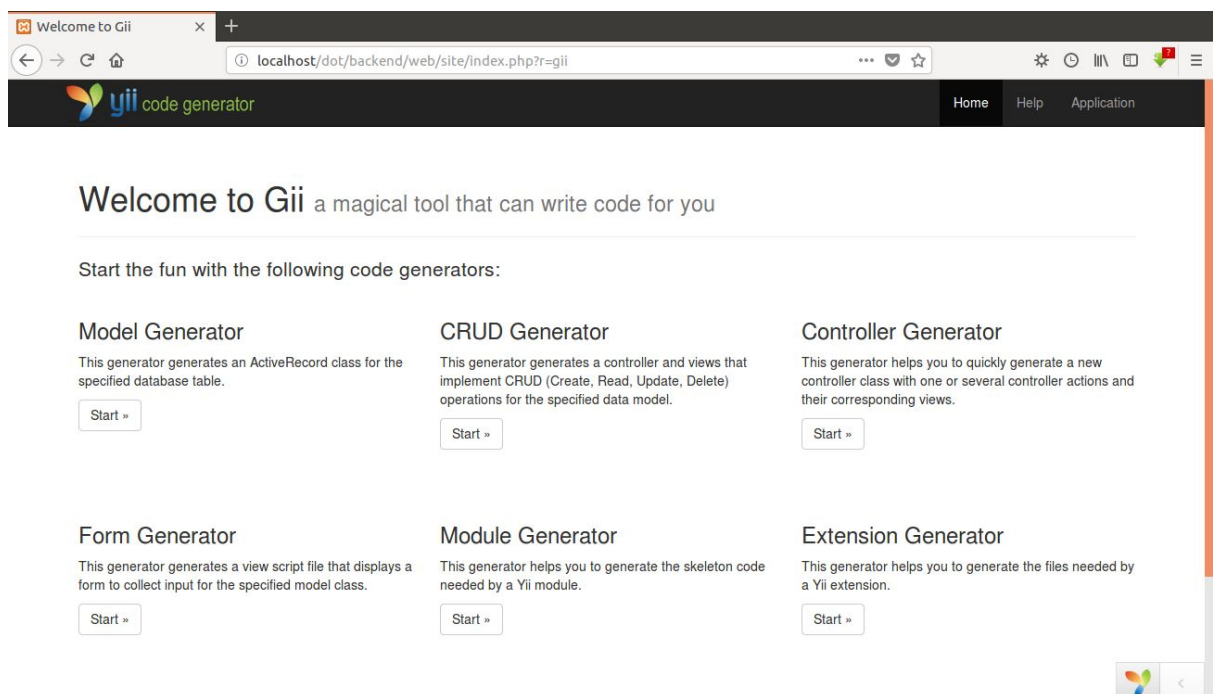
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4. Form Administrator



5. Form Gii Generator



6. Form Kontributor Pangan

Dot Admin [Home](#) [Logout \(admin\)](#)

[Home](#) / [Data Kontributor Pangan](#)

Data Kontributor Pangan

Showing 1-3 of 3 items

#	Nomor Induk Kependudukan	Nama Lengkap	No Handphone	Email	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
1	32-01-01-21-03-99-0008	Muhammad Azhar Rasyad	+6281290351971	muhazharasyad@gmail.com	👁
2	23-10-10-12-30-99-8000	Muhammad Haibzi Sidiq	+6281234252345	mhasbisidiq@gmail.com	👁
3	14-78-12-64-62-68-4726	Naufal Alif Fadhullah	+6281261738123	nafl@gmail.com	👁

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7. Form User

Dot Admin [Home](#) [Logout \(admin\)](#)

[Home](#) / [Data User](#)

Data User

Showing 1-4 of 4 items

#	Role	Username	Hint Password	Email	
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
1	Administrator	admin	123456	admin@admin.com	👁
2	Kontributor	mazharasyad	rahasia	mazharasyad@gmail.com	👁
3	Kontributor	mhasbisidiq	gaktau	mhasbisidiq@gmail.com	👁
4	Kontributor	naflif	password	naflif@gmail.com	👁

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8. Form Distributor Pangan

Data Distribusi Pangan

localhost/dot/backend/web/index/php?r=distribusi-pangan

Dot AdminHomeLogout (admin)

Home / Data Distribusi Pangan

Data Distribusi Pangan

Showing 1-10 of 10 items.

#	Nama Kontributor Pangan	Tanggal	Bahan Pangan	Stok Rata-Rata	Harga Rata-Rata	
1	Muhammad Azhar Rasyad	2018-08-04	Beras	500 Kilogram	2000 / KG	
2		2018-08-03	Gula	100 Kilogram	1000 / KG	
3		2018-08-02	Garam	200 Kwintal	5000 / KG	
4	Muhammad Hasbi Sidiq	2018-08-04	Beras	100 Ton	2000 / KG	
5		2018-07-29	Ketan	10 Kwintal	500 / KG	
6		2018-08-02	Garam	100 Ton	1000 / KG	
7	Naufal Afif Fadhlillah	2018-08-04	Beras	1000 Ton	5500 / KG	
8		2018-07-31	Minyak	100 Liter	6000 / KG	
9		2018-07-30	Singkong	10000 Ons	1500 / KG	
10	Muhammad Azhar Rasyad	2018-07-29	Kelapa	100 Kilogram	5500 / KG	

Step 10 : Release early Release often

<https://github.com/mazharrasyad/Dot>