Daftar Isi

1 Kebutuhan Perangkat Lunak 4

1.1 Deskripsi Umum Sistem 4

1.2 Model Use Case 5

1.2.1 Definisi Actor 5

1.2.2 Definisi Use Case 5

1.2.3 Skenario Use Case 6

1.2.3.1 Skenario Use Case Memasukkan web account 6

1.2.3.2 Skenario Use Case Direct Login 6

1.2.3.3 Skenario Use Case Download Account 6

1.3 Glossary 7

2 User Experience Model 8

2.1 Use Case Memasukkan web account 8

2.1.1 Identifikasi Screen, Compartement Screen, dan Form 8

2.1.2 Storyboard Memasukkan web Account 8

2.2 Use Case Direct Login 9

2.2.1 Identifikasi Screen, Compartement Screen, dan Form 9

2.2.2 Storyboard Direct Login 9

2.3 Use Case Download Account 10

2.3.1 Identifikasi Screen, Compartement Screen, dan Form 10

2.3.2 Storyboard Download Account 10

2.4 Navigational Path 11

2.4.1 Navigational Path Use Case Memasukkan Web Account 11

2.4.2 Navigational Path Use Case Direct Login 11

2.4.3 Navigational Path Use Case Download Account 12

3 Model Analisis 13

3.1 Realisasi Use Case Tahap Analisis 13

3.1.1 Use Case Tambah Account 13

3.1.1.1 Identifikasi Kelas Analisis 13

3.1.1.2 Sequence Diagram 13

3.1.1.3 Diagram Kelas Analisis 13

3.1.2 Use Case Direct Login 14

3.1.2.1 Identifikasi Kelas Analisis 14

3.1.2.2 Sequence Diagram 14

3.1.2.3 Diagram Kelas Analisis 14

3.1.3 Use Case Download Account 15

3.1.3.1 Identifikasi Kelas Analisis 15

3.1.3.2 Sequence Diagram 15

3.1.3.3 Diagram Kelas Analisis 15

3.2 Diagram Kelas Keseluruhan 16

3.3 Pemetaan Model Analisis dan Model UX 16

4 Model Perancangan 17

4.1 Realisasi Use Case Tahap Perancangan 17

4.1.1 Use Case Memasukkan Web Account 17

4.1.1.1 Identifikasi Elemen WAE - Logical View 17

4.1.1.2 Identifikasi Kelas Perancangan 17

4.1.1.3 Sequence Diagram 17

4.1.1.4 Diagram Kelas Perancangan 18

4.1.1.5 Identifikasi Elemen WAE Component View 18

4.1.2 Use Case Direct Login 19

4.1.2.1 Identifikasi Elemen WAE - Logical View 19

4.1.2.2 Identifikasi Kelas Perancangan 19

4.1.2.3 Sequence Diagram 19

4.1.2.4 Diagram Kelas Perancangan 20

4.1.2.5 Identifikasi Elemen WAE Component View 20

4.1.3 Use Case Mendownload Account 21

4.1.3.1 Identifikasi Elemen WAE - Logical View 21

4.1.3.2 Identifikasi Kelas Perancangan 21

4.1.3.3 Sequence Diagram 21

4.1.3.4 Diagram Kelas Perancangan 22

4.1.3.5 Identifikasi Elemen WAE Component View 22

4.2 Perancangan Detil Elemen Logical View 23

4.2.1 Stereotyped Class AccountPage 23

4.2.2 Stereotyped Class AccountControl 23

4.2.3 Stereotyped Class FormAccount 24

4.2.4 Stereotyped Class AddAccountControl 24

4.2.5 Stereotyped Class WebAccount 24

4.3 Perancangan Detil Kelas 25

4.3.1 Kelas AccountPage 25

4.3.2 Kelas AccountControl 25

4.3.3 Kelas Account 26

4.3.4 Kelas Session 26

4.3.5 Kelas FormAccount 26

4.3.6 Kelas AddAccountControl 27

4.3.7 Kelas WebAccount 27

4.4 Perancangan Antarmuka 28

4.4.1 Halaman Utama 28

*4.4.2* Halaman Lupa *Password* 28

4.4.3 Halaman Pendaftaran *User Login* 29

4.4.4 Halaman *List Account* yang Dimiliki *User* 29

4.4.5 Halaman Penambahan *Account* 30

4.5 Perancangan Representasi Persistensi Kelas 31

4.5.1 Entitiy Relationship Diagram 31

4.5.2 Skema Basis Data 31

4.5.3 Traceability 31

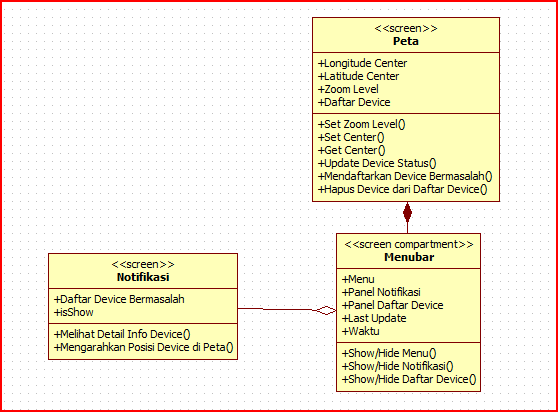
# 

# Kebutuhan Perangkat Lunak

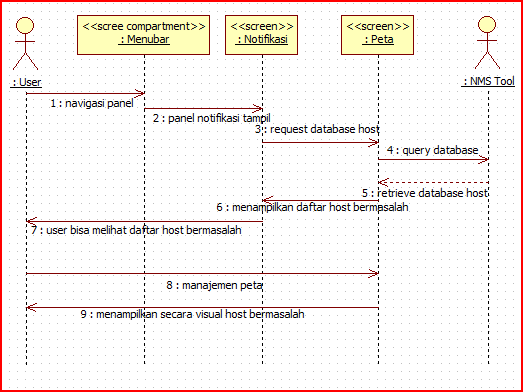
# User Experience Model

## Use Case Menampilkan Daftar Device Bermasalah

### Identifikasi Screen, Compartement Screen, dan Form

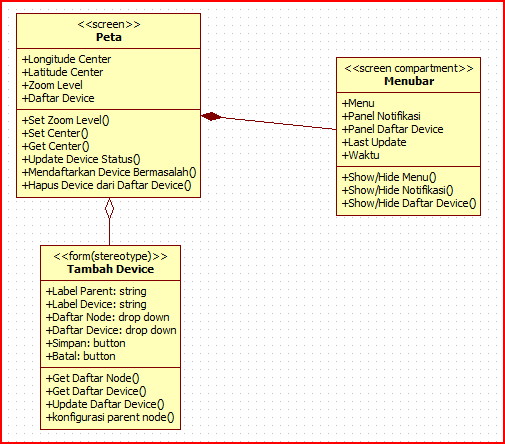


### Storyboard Menampilkan Daftar Device Bermasalah

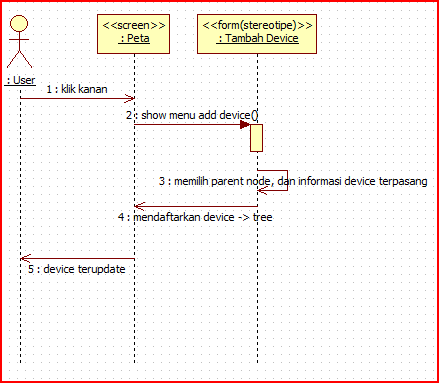


## Use Case Menambah Device

### Identifikasi Screen, Compartement Screen, dan Form

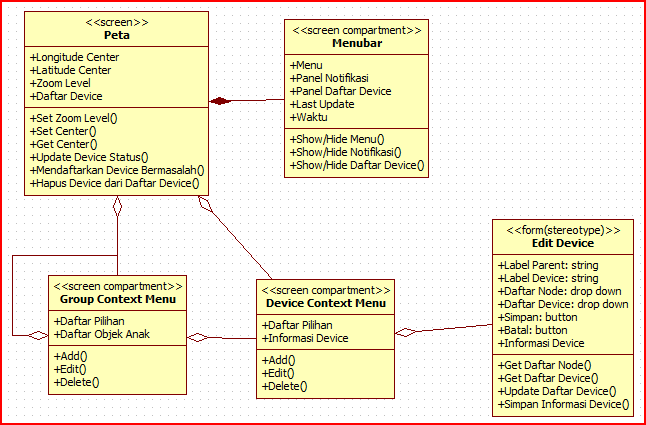


### Storyboard Menambah Device

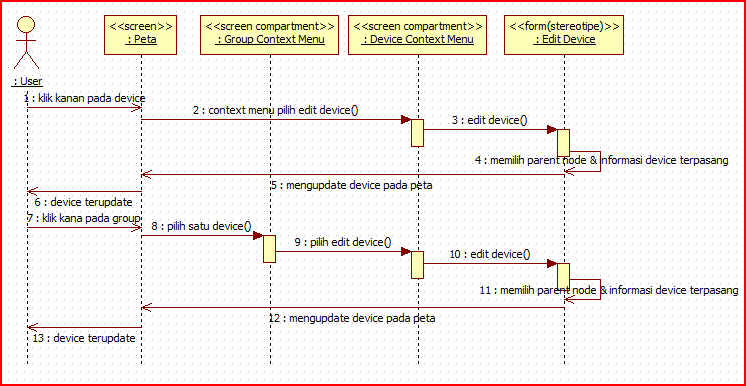


## Use Case Mengedit Device

### Identifikasi Screen, Compartement Screen, dan Form

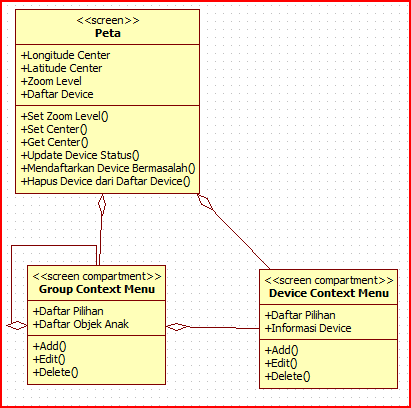


### Storyboard Mengedit Device

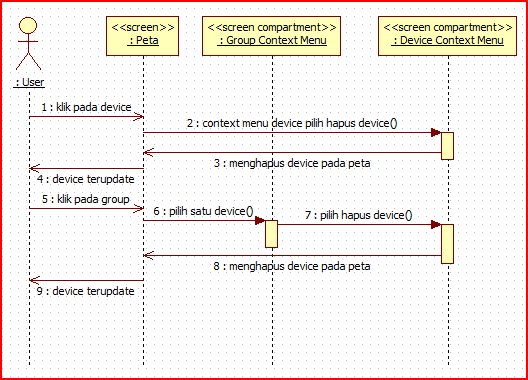


## Use Case Menghapus Device

### Identifikasi Screen, Compartement Screen, dan Form



### Storyboard Menghapus Device



## Navigational Path

### Navigational Path Use Case Menampilkan daftar device bermasalah



### Navigational Path Use Case Menambah Device



### Navigational Path Use Case Mengedit Device



### Navigational Path Use Case Menghapus Device

# 

# Model Analisis

## Realisasi Use Case Tahap Analisis

### Use Case Menampilkan Daftar Use Case Bermasalah

#### Identifikasi Kelas Analisis

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas*** | ***Jenis Kelas***  ***(Interface, Control, Entity)*** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### Sequence Diagram

#### Diagram Kelas Analisis

### Use Case Menambah Device

#### Identifikasi Kelas Analisis

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas*** | ***Jenis Kelas***  ***(Interface, Control, Entity)*** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### Sequence Diagram

#### Diagram Kelas Analisis

### Use Case Mengedit Device

#### Identifikasi Kelas Analisis

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas*** | ***Jenis Kelas***  ***(Interface, Control, Entity)*** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### Sequence Diagram

#### Diagram Kelas Analisis

### Use Case Menghapus Device

#### Identifikasi Kelas Analisis

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas*** | ***Jenis Kelas***  ***(Interface, Control, Entity)*** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

#### Sequence Diagram

#### Diagram Kelas Analisis

## Diagram Menghapus Device

## Pemetaan Model Analisis dan Model UX

|  |  |
| --- | --- |
| **Kelas Boundary** | **Model UX** |
|  |  |

# Model Perancangan

## Realisasi Use Case Tahap Perancangan

### Use Case Menampilkan Daftar Device Bermasalah

#### Identifikasi Elemen WAE - Logical View

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Elemen Lojik WAE*** | ***Stereotype*** |
| *1* | *MapView* | *Client Page* |
| *2* | *MapController* | *Server Page* |
| *3* | *DeviceController* | *Server Page* |
| *4* | *NotificationController* | *Server Page* |

#### Identifikasi Kelas Perancangan

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas Perancangan*** | ***Nama Kelas Analisis Terkait*** |
| *1* | *MapView* | *Map* |
| *2* | *MapController* | *Map* |
| *3* | *DeviceController* | *DeviceControl* |
| *4* | *NotificationController* | *DeviceControl* |
| *5* | *Device* | *-* |

#### Sequence Diagram



#### Diagram Kelas Perancangan

**

#### Identifikasi Elemen WAE Component View

|  |  |  |
| --- | --- | --- |
| ***Nama Komponen*** | ***Elemen Logical View*** | ***Jenis*** |
| *device.php* | *-* | *Entity Class* |
| *devicehandler.php* | *DeviceController* | *Dynamic Page* |
| *notification.php* | *NotificationController* | *Dynamic Page* |
| *maphandler.php* | *MapController* | *Dynamic Page* |
| *mapview.php* | *MapView* | *Static Page* |

### Use Case Menambah Device

#### Identifikasi Elemen WAE - Logical View

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Elemen Lojik WAE*** | ***Stereotype*** |
| *1* | *MapView* | *Client Page* |
| *2* | *MapController* | *Server Page* |
| *3* | *DeviceController* | *Server Page* |
| *4* | *GroupController* | *Server Page* |
| *5* | *AddDevice* | *HTML Form* |

#### Identifikasi Kelas Perancangan

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas Perancangan*** | ***Nama Kelas Analisis Terkait*** |
| *1* | *MapView* | *Map* |
| *2* | *MapController* | *Map* |
| *3* | *DeviceController* | *DeviceControl* |
| *4* | *GroupController* | *GroupControl* |
| *5* | *Device* | *-* |
| *6* | *Group* | *-* |

#### Sequence Diagram



#### Diagram Kelas Perancangan

**

#### Identifikasi Elemen WAE Component View

|  |  |  |
| --- | --- | --- |
| ***Nama Komponen*** | ***Elemen Logical View*** | ***Jenis*** |
| *device.php* | *-* | *Entity Class* |
| *devicehandler.php* | *DeviceController* | *Dynamic Page* |
| *notification.php* | *NotificationController* | *Dynamic Page* |
| *maphandler.php* | *MapController* | *Dynamic Page* |
| *mapview.php* | *MapView* | *Static Page* |

### Use Case Mengedit Device

#### Identifikasi Elemen WAE - Logical View

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Elemen Lojik WAE*** | ***Stereotype*** |
| *1* | *MapView* | *Client Page* |
| *2* | *MapController* | *Server Page* |
| *3* | *DeviceController* | *Server Page* |
| *4* | *GroupController* | *Server Page* |
| *5* | *EditDevice* | *HTML Form* |

#### Identifikasi Kelas Perancangan

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas Perancangan*** | ***Nama Kelas Analisis Terkait*** |
| *1* | *MapView* | *Map* |
| *2* | *MapController* | *Map* |
| *3* | *DeviceController* | *DeviceControl* |
| *4* | *GroupController* | *GroupControl* |
| *5* | *Device* | *-* |
| *6* | *Group* | *-* |

#### Sequence Diagram



#### Diagram Kelas Perancangan

**

#### Identifikasi Elemen WAE Component View

Ada gambarnya

|  |  |  |
| --- | --- | --- |
| ***Nama Komponen*** | ***Elemen Logical View*** | ***Jenis*** |
|  |  |  |
|  |  |  |

### Use Case Menghapus Device

#### Identifikasi Elemen WAE - Logical View

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Elemen Lojik WAE*** | ***Stereotype*** |
| *1* | *MapView* | *Client Page* |
| *2* | *MapController* | *Server Page* |
| *3* | *DeviceController* | *Server Page* |
| *4* | *GroupController* | *Server Page* |

#### Identifikasi Kelas Perancangan

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas Perancangan*** | ***Nama Kelas Analisis Terkait*** |
| *1* | *MapView* | *Map* |
| *2* | *MapController* | *Map* |
| *3* | *DeviceController* | *DeviceControl* |
| *4* | *GroupController* | *GroupControl* |
| *5* | *Device* | *-* |
| *6* | *Group* | *-* |

#### Sequence Diagram



#### Diagram Kelas Perancangan

**

#### Identifikasi Elemen WAE Component View

|  |  |  |
| --- | --- | --- |
| ***Nama Komponen*** | ***Elemen Logical View*** | ***Jenis*** |
|  |  |  |
|  |  |  |

## Perancangan Detil Elemen Logical View

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Elemen Lojik WAE*** | ***Stereotype*** |
| *1* | *AccountPage* | *Client Page* |
| *2* | *AccountControl* | *Server Page* |

### Stereotyped Class AccountPage

*Nama Kelas : AccountPage*

*Jenis : Client Page*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *showForm()* | *Public* | *Menampilkan halaman list web account* |
| *showAccount(listOfAccount)* | *Public* | *Menampilkan daftar account yang tersimpan.* |
| *chooseWeb()* | *Public* | *Memilih salah satu web untuk dilakukan login dari daftar web yang ditampilkan.* |
| *show()* | *Public* | *Menampilkan halaman list web account* |
| *showAccountListUpdate()* | *Public* | *Menampilkan halaman list account yang sudah terupdate dengan data account yang dimasukkan.* |
| *chooseDownload()* | *Public* | *Mengeklik tombol download dan menjalankan proses download dari web ke komputer user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Stereotyped Class AccountControl

*Nama Kelas : AccountControl*

*Jenis : Server Page*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *getAccount()* | *public* | *Mengambil data account userLogin aktif yang tersimoan dalam database.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Stereotyped Class FormAccount

*Nama Kelas : FormAccount*

*Jenis : HTML Form*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *showForm()* | *Public* | *Menampilkan form untuk memasukkan data account yang ingin ditambahkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Stereotyped Class AddAccountControl

*Nama Kelas : AddAccountControl*

*Jenis : Server Page*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *submitNewAccount(Account)* | *Public* | *Men-submit data account baru yang dimasukkan user untuk disimpan.* |
| *encryptPassword()* | *Public* | *Mengenkripsi password untuk login ke suatu account yang dimasukkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Stereotyped Class WebAccount

*Nama Kelas : WebAccount*

*Jenis :*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *submitNewAccount(Account)* | *Public* | *Men-submit data account baru yang dimasukkan user untuk disimpan.* |
| *encryptPassword()* | *Public* | *Mengenkripsi password untuk login ke suatu account yang dimasukkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

## Perancangan Detil Kelas

Bagian ini diisi dengan daftar kelas perancangan dalam tabel berikut:

|  |  |  |
| --- | --- | --- |
| ***No*** | ***Nama Kelas Perancangan*** | ***Nama Kelas Analisis Terkait*** |
| *1* | *AccountPage* | *WebListPage* |
| *2* | *AccountControl* | *DirectLoginControl* |
| *3* | *Account* | *WebAccount* |
| *4* | *Session* | *-* |

### Kelas AccountPage

*Nama Kelas : AccountPage*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *showForm()* | *Public* | *Menampilkan halaman list web account* |
| *showAccount(listOfAccount)* | *Public* | *Menampilkan daftar account yang tersimpan.* |
| *chooseWeb()* | *Public* | *Memilih salah satu web untuk dilakukan login dari daftar web yang ditampilkan.* |
| *show()* | *Public* | *Menampilkan halaman list web account* |
| *showAccountListUpdate()* | *Public* | *Menampilkan halaman list account yang sudah terupdate dengan data account yang dimasukkan.* |
| *chooseDownload()* | *Public* | *Mengeklik tombol download dan menjalankan proses download dari web ke komputer user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Kelas AccountControl

*Nama Kelas: AccountControl*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *getAccount()* | *public* | *Mengambil data account userLogin aktif yang tersimpan dalam database.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Kelas Account

*Nama Kelas: Account*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *getAccountList(userLogin)* | *public* | *Mendapatkan daftar account yang disimpan oleh user berdasarkan userLogin-nya.* |
| *setWebName(WebName)* | *public* | *Mengeset WebName sebagai elemen dari entitas account yang baru* |
| *setWebAddress(WebAddress)* | *public* | *Mengeset WebAddress sebagai elemen dari entitas account yang baru* |
| *setPassword(Password)* | *public* | *Mengeset Password sebagai elemen dari entitas account yang baru* |
| *setUserName(UserName)* | *public* | *Mengeset UserName sebagai elemen dari entitas account yang baru* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *Web* | *private* | *string* |
| *username* | *private* | *string* |
| *password* | *private* | *string* |
| *Script* | *private* | *string* |

### Kelas Session

*Nama Kelas: Session*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *getUserLogin()* | *public* | *Mendapatkan userLogin yang sedang aktif.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *userLogin* | *private* | *string* |

### Kelas FormAccount

*Nama Kelas: FormAccount*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *showForm()* | *Public* | *Menampilkan form untuk memasukkan data account yang ingin ditambahkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Kelas AddAccountControl

*Nama Kelas : AddAccountControl*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *submitNewAccount(Account)* | *Public* | *Men-submit data account baru yang dimasukkan user untuk disimpan.* |
| *encryptPassword()* | *Public* | *Mengenkripsi password untuk login ke suatu account yang dimasukkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

### Kelas WebAccount

*Nama Kelas : WebAccount*

*Jenis :*

|  |  |  |
| --- | --- | --- |
| ***Nama Operasi*** | ***Visibility***  ***(private, public)*** | ***Keterangan*** |
| *submitNewAccount(Account)* | *Public* | *Men-submit data account baru yang dimasukkan user untuk disimpan.* |
| *encryptPassword()* | *Public* | *Mengenkripsi password untuk login ke suatu account yang dimasukkan user.* |
| ***Nama Atribut*** | ***Visibility***  ***(private, public)*** | ***Tipe*** |
| *-* | *-* | *-* |

## Perancangan Antarmuka

### Halaman Utama



Halaman utama berisi *form login* bagi user yang telah terdaftar dan *link* menuju halaman pendaftaran *user login*, menangani kasus jika *user* lupa *password* (*use case* Terima Password).

### Halaman Lupa *Password*



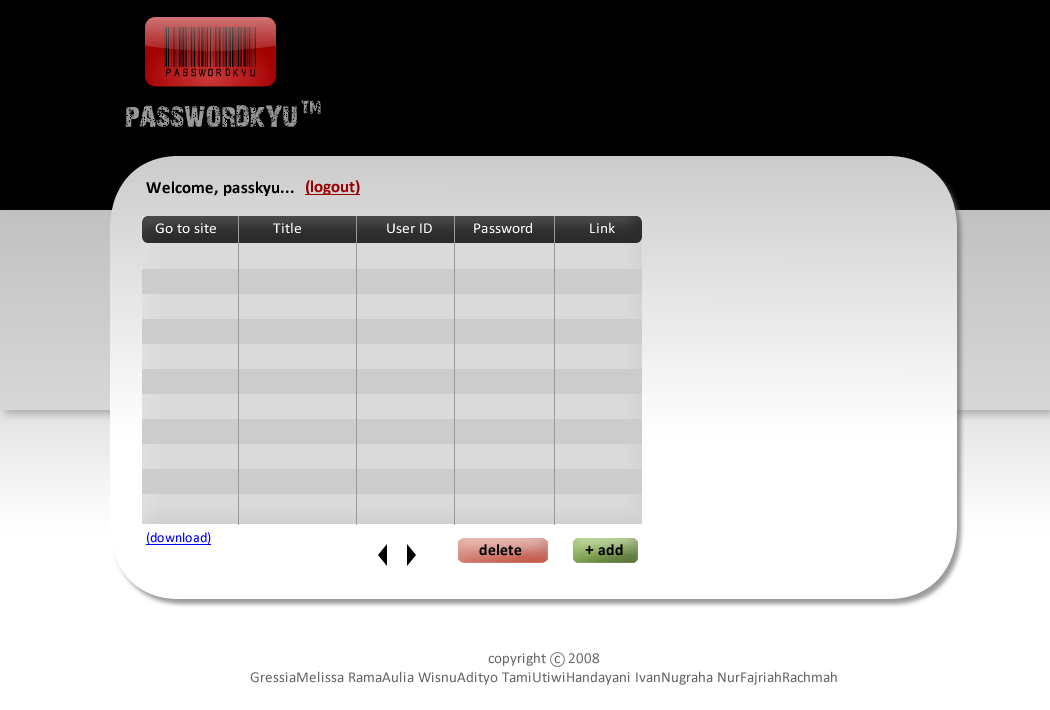
Halaman yang ter-*direct* jika pengguna menekan “*forgot your password?*” pada halaman utama (pada *form login*). *Use case* yang terdapat pada halaman ini adalah *use case* Terima Password.

### Halaman Pendaftaran *User Login*

### daftar

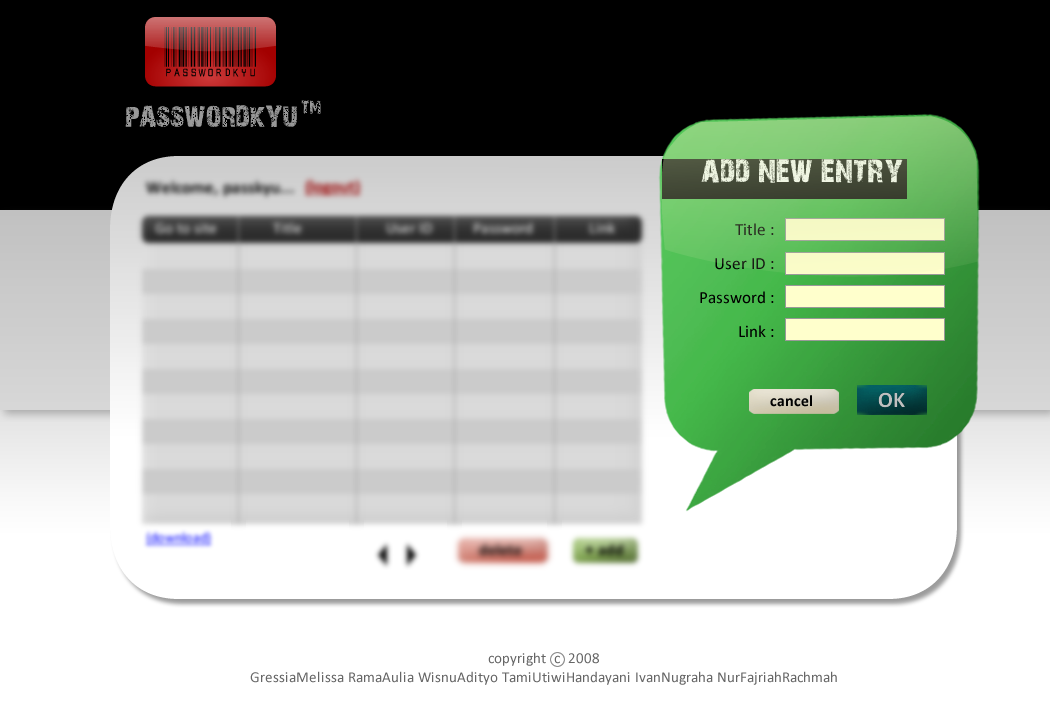
Halaman pendaftaran *user login* yang berisi *use case* Daftar.

### Halaman *List Account* yang Dimiliki *User*



Halaman setelah *login* *user* berhasil, berisi *list* *account* yang dimiliki oleh *user.* Terdapat tombol *Add* untuk menambah *account* pada *list* yang tersedia, serta tombol *delete* untuk menghapus *account* yang tidak diinginkan. *Use case* yang ditangani antara lain Download Account dan Direct Login.

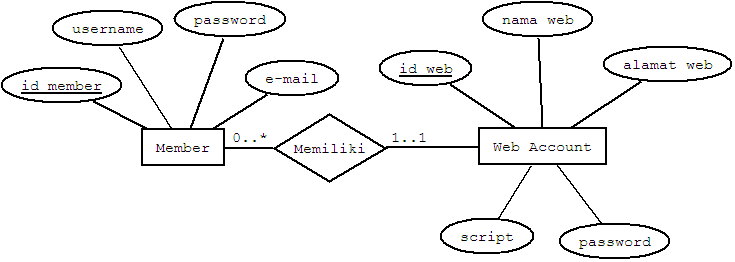
### Halaman Penambahan *Account*



Ketika tombol *Add* diklik, akan muncul *form* untuk menambahkan *account* pada *list account*, sementara halaman *List Account* akan memudar (*blur*). *Use case* yang ditangani yaitu *use case* Memasukkan Account.

## Perancangan Representasi Persistensi Kelas

### Entitiy Relationship Diagram



Entitiy Relationship Diagram di atas menggambarkan relasi antara dua entitas yaitu member dan web account. Member dapat memiliki banyak web account yang disimpan. Sedangkan Web Account harus dimiliki Member.

### Skema Basis Data



Skema basis data di atas dihasilkan dari ERD yang telah dibuat. Web Account memiliki foreign key id\_member karena berhubungan many to one dengan entitas member.

### Traceability

Berikut traceability tabel dengan entity :

|  |  |
| --- | --- |
| **Nama Entity** | **Nama Tabel Implementasi** |
| Member | Member |
| Web Account | Web Account |