

PRAKTIKUM 5



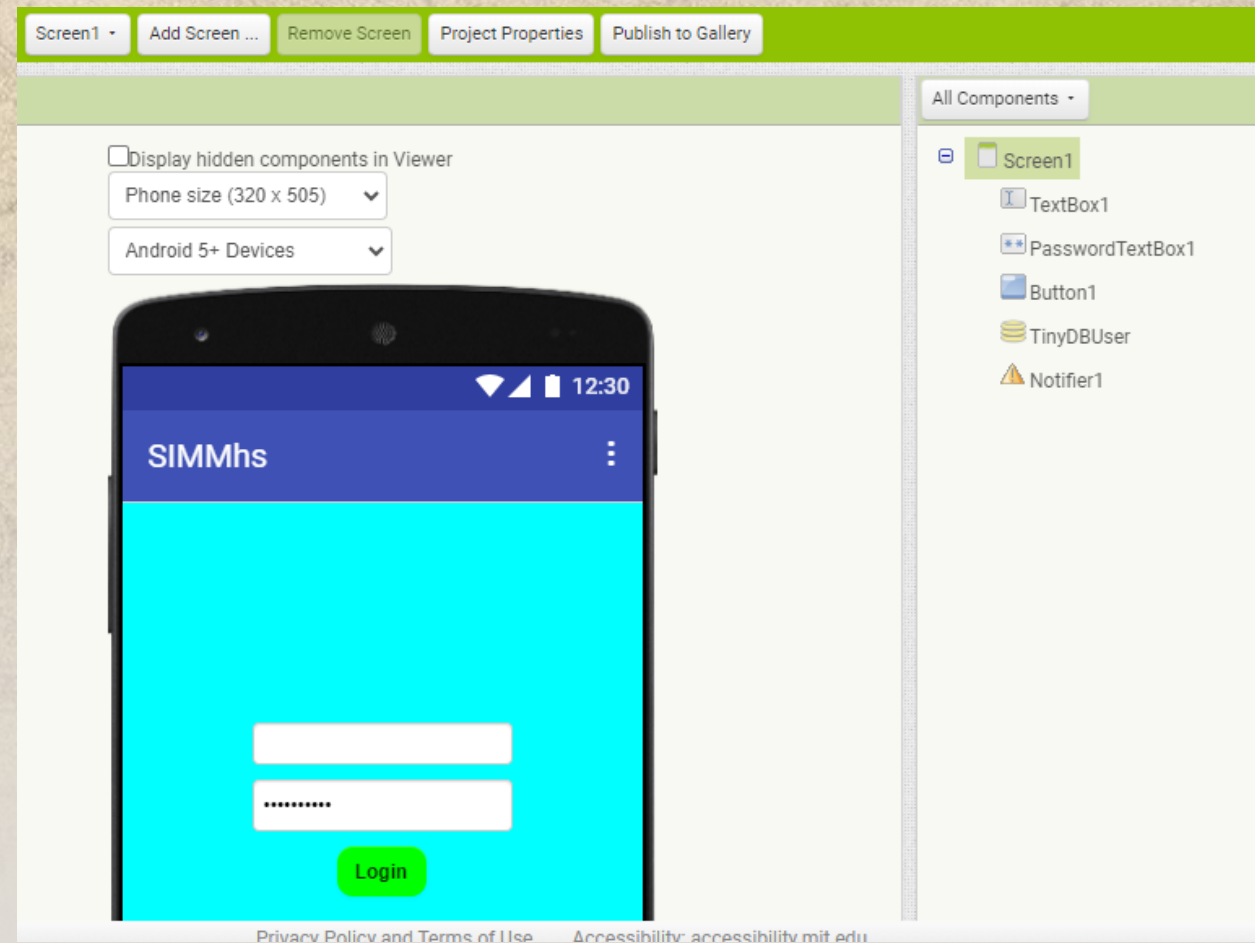
DESAIN SIM MHS

TUJUAN PRAKTIKUM

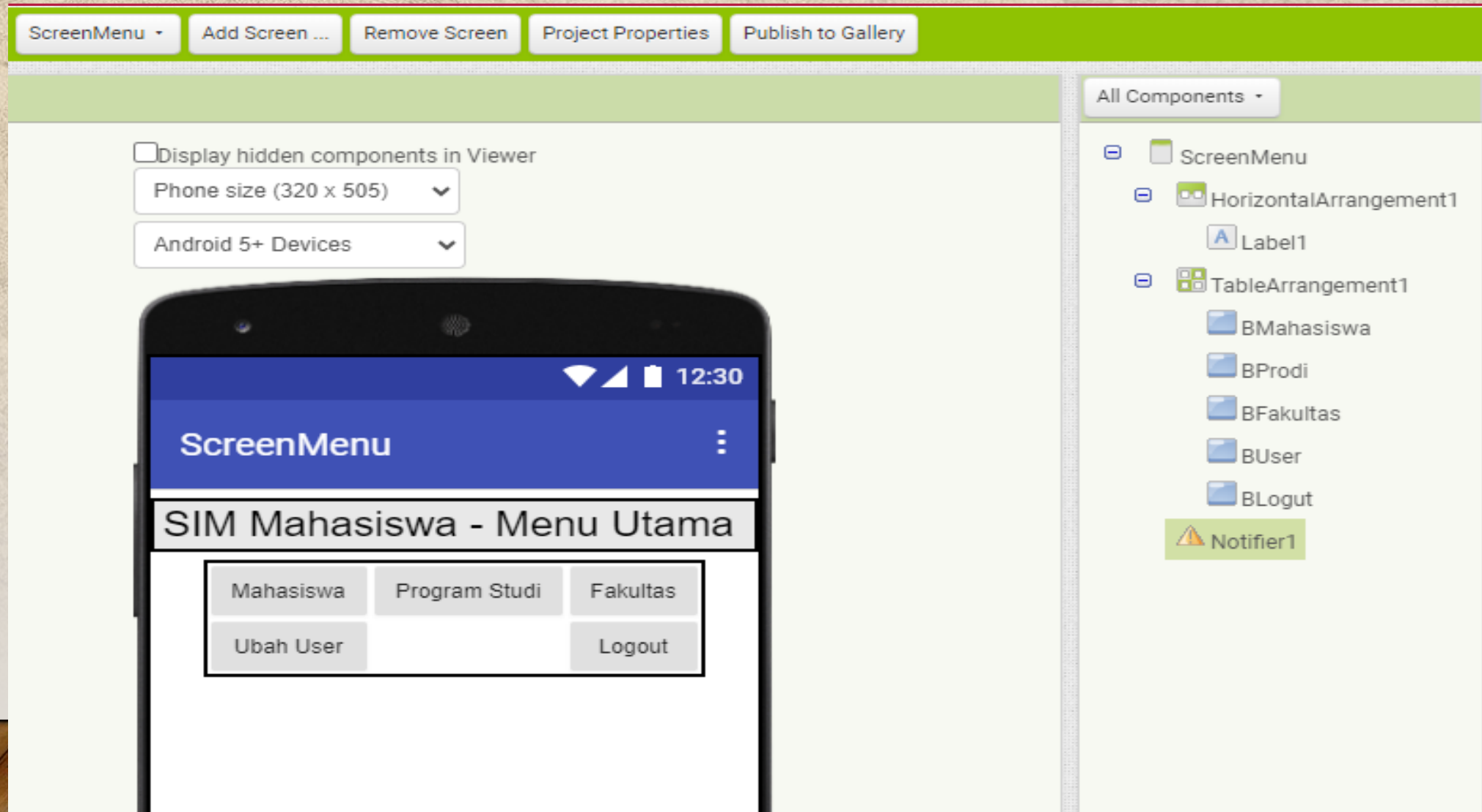
- Membuat Desain Apk Sistem Informasi Mahasiswa Sederhana
- Ada 5 Screen :
 - Screen I untuk login
 - ScreenMenu untuk menu utama
 - ScreenFakultas untuk pengelolaan tabel fakultas
 - ScreenProdi untuk pengelolaan tabel prodi
 - ScreenMahasiswa untuk pengelolaan tabel mahasiswa
 - ScreenUser untuk mengubah password user
- Untuk login menggunakan TinyDb dengan tag : User dan value : Password

DESAIN SCREEN 1

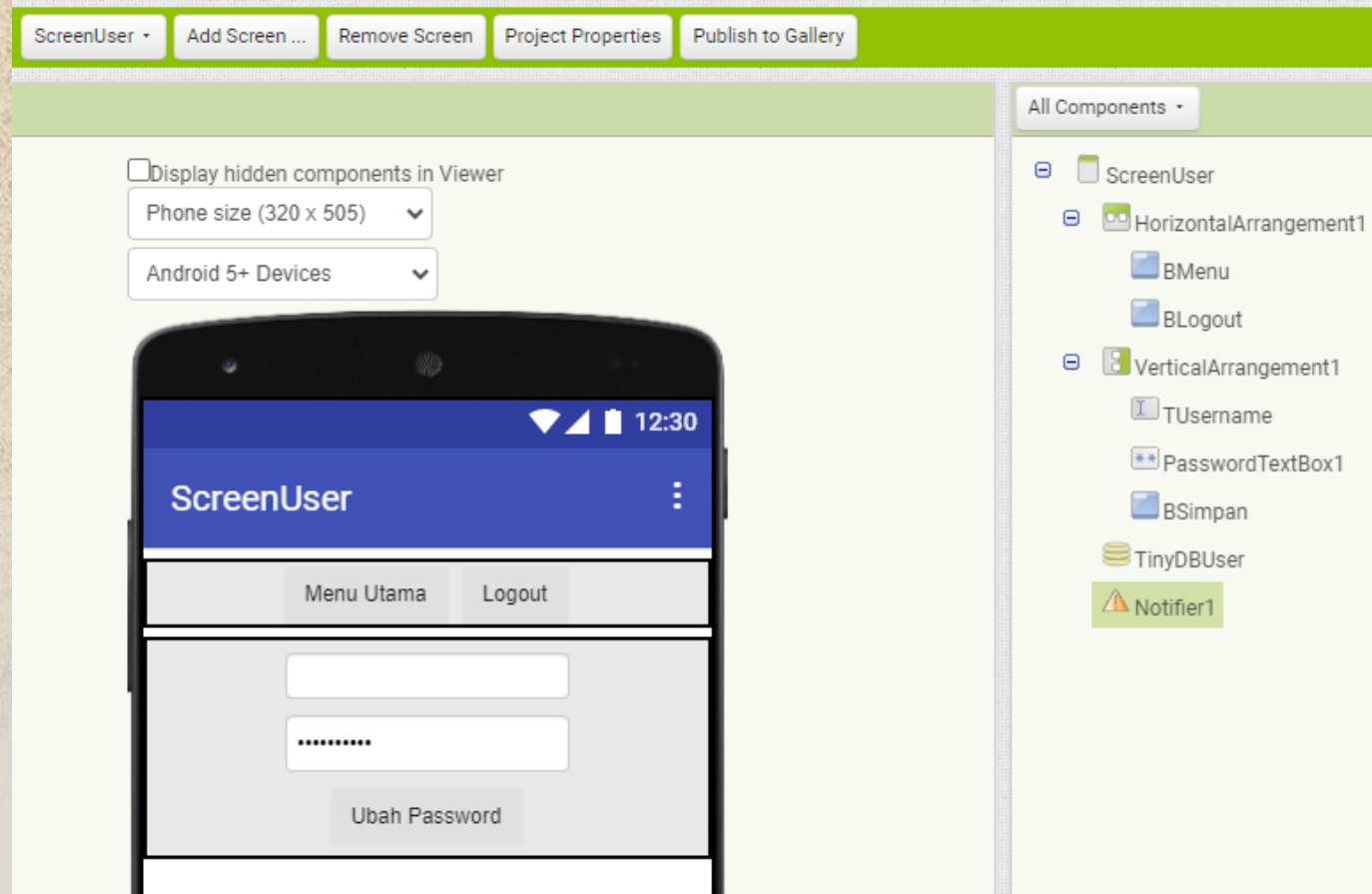
- Komponen pada Screen 1:
 - I TextBox
 - I PasswordTextBox
 - I Button
 - I TinyDBUser
 - I Notifier
- Tampilan boleh dimodifikasi sesuai keinginan anda.



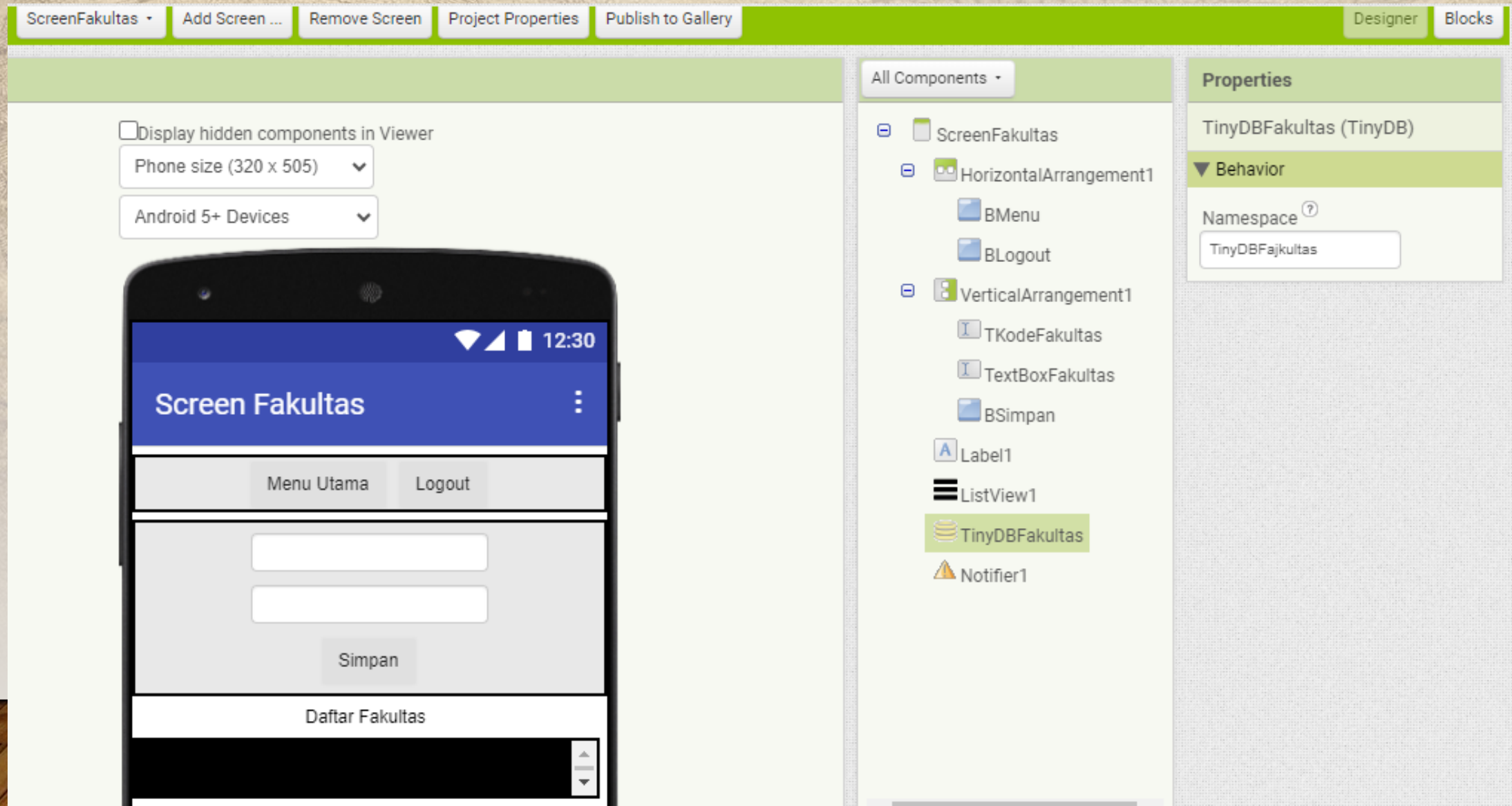
DESAIN SCREENMENU



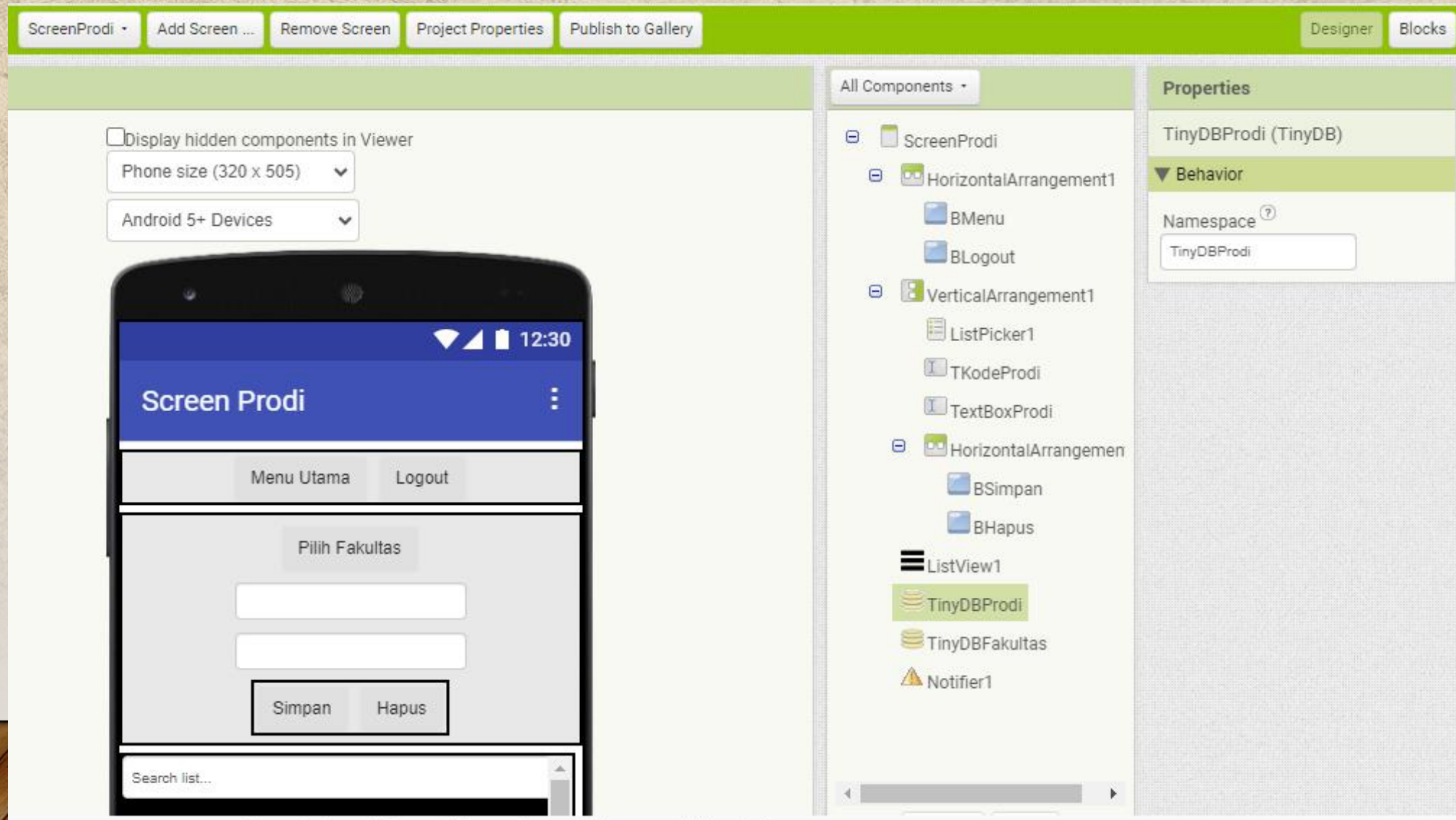
DESAIN SCREENUSER



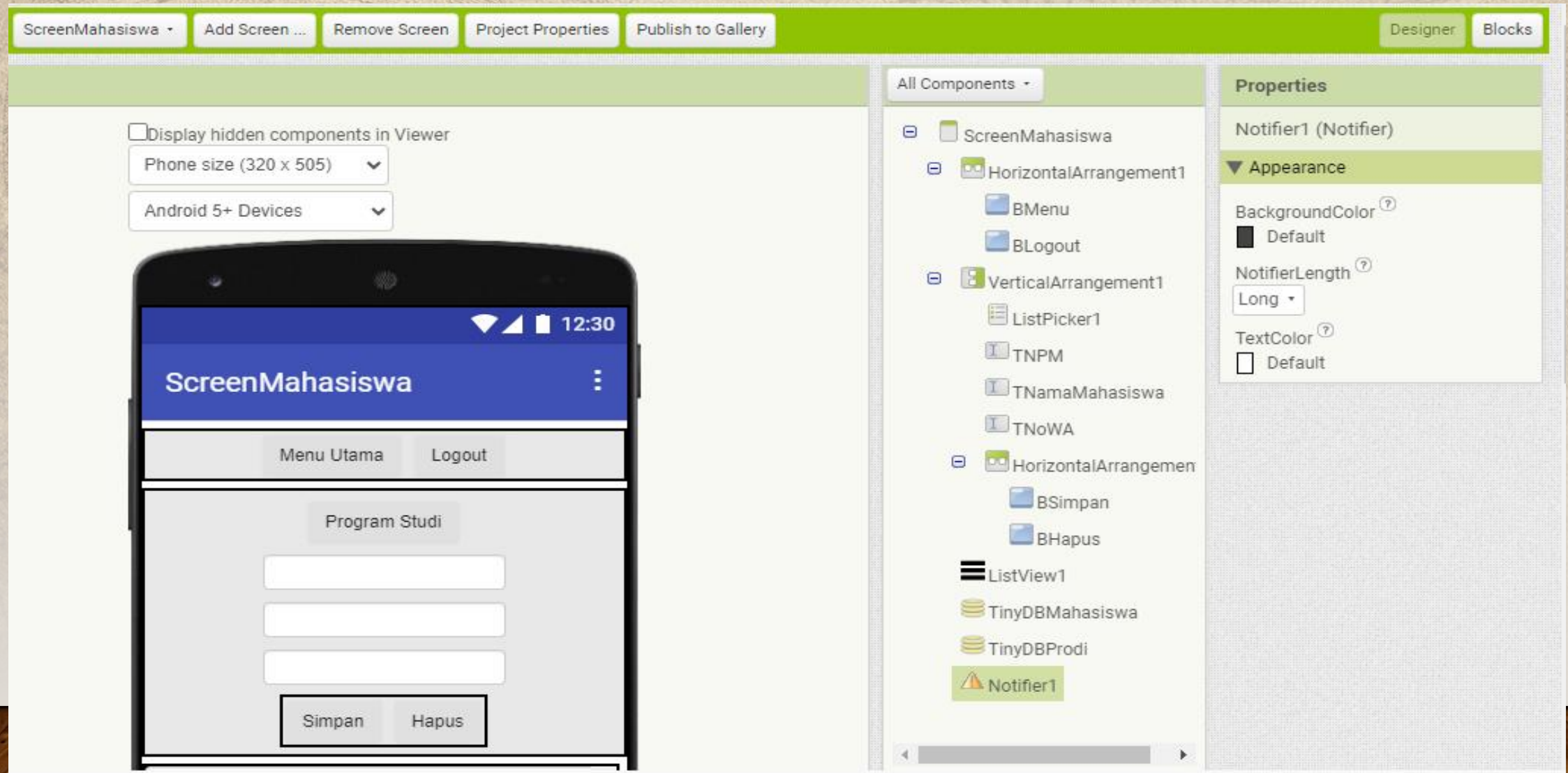
DESAIN SCREEN FAKULTAS



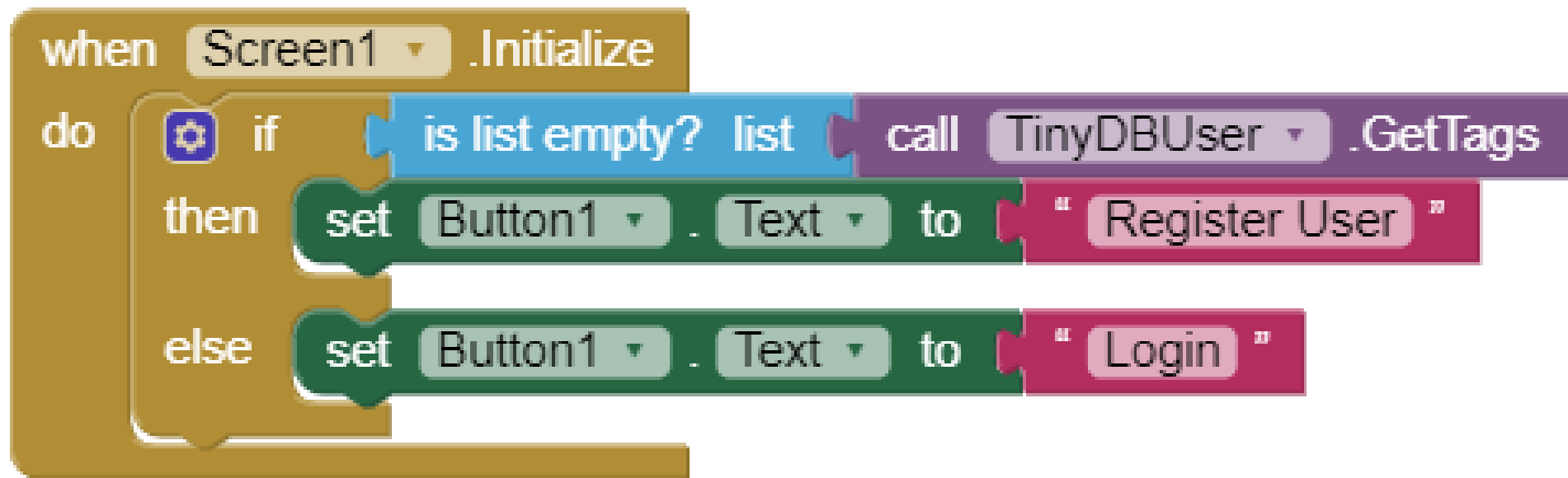
DESAIN SCREEN PRODI



DESAIN SCREEN MAHASISWA



KODE BLOCK SCREEN I



```
when Screen1.Initialize
do
  if is list empty? list
  then call TinyDBUser.GetTags
  set Button1.Text to "Register User"
  else set Button1.Text to "Login"
```

The image shows a Scratch code block for the 'when Screen1.Initialize' event. It contains an 'if' statement that checks if a list is empty. If the list is empty, it calls the 'TinyDBUser.GetTags' method and sets the text of 'Button1' to 'Register User'. If the list is not empty, it sets the text of 'Button1' to 'Login'.

when Button1 .Click

do

if Button1 . Text = " Register User "

then

call TinyDBUser .StoreValue
tag TextBox1 . Text
valueToStore PasswordTextBox1 . Text

call Notifier1 .ShowAlert
notice " User sudah terdaftar ! "

else

if not is empty TextBox1 . Text and not is empty PasswordTextBox1 . Text

then

if PasswordTextBox1 . Text = call TinyDBUser .GetValue
tag TextBox1 . Text
valueIfTagNotThere " "

then open another screen screenName ScreenMenu

else

call Notifier1 .ShowAlert
notice " Username dan Password tidak terdaftar ! "

else

call Notifier1 .ShowAlert
notice " Username dan Password tidak terdaftar ! "

KODE BLOCK SCREEN USER

```
when ScreenUser .Initialize  
do call TUsername .RequestFocus
```

```
when BLogout .Click  
do open another screen screenName Screen1
```

```
when BMenu .Click  
do open another screen screenName ScreenMenu
```

```
when TUsername .TextChanged  
do set PasswordTextBox1 .Text to call TinyDBUser .GetValue  
tag TUsername .Text  
valueIfTagNotThere ""
```

```
when BSimpan .Click  
do call Notifier1 .ShowChooseDialog  
message "Apakah anda yakin akan mengubah passwordnya ?"  
title "Ubah Password Pengguna"  
button1Text "Ya"  
button2Text "Tidak"  
cancelable false
```


when Notifier1 .AfterChoosing

choice

do

if

get choice

=

" Ya "

then

call TinyDBUser .StoreValue

tag

TUsername . Text

valueToStore

PasswordTextBox1 . Text

call Notifier1 .ShowMessageDialog

message

" Password sudah diubah ! "

title

" Ubah Password Pengguna "

buttonText

" Ok "

else

call Notifier1 .ShowMessageDialog

message

" Password tidak diubah ! "

title

" Ubah Password Pengguna "

buttonText

" Ok "

KODE BLOCK SCREEN FAKULTAS

when ScreenFakultas .Initialize

do set ListView1 . Elements to call TinyDBFakultas .GetTags

when BMenu .Click

do open another screen screenName ScreenMenu

when BLogout .Click

do open another screen screenName Screen1

when ListView1 .AfterPicking

do set TKodeFakultas . Text to ListView1 . Selection

set TextBoxFakultas . Text to call TinyDBFakultas .GetValue
tag ListView1 . Selection
valueIfTagNotThere " "

when BSimpan .Click

do

call TinyDBFakultas .StoreValue

tag

TKodeFakultas .Text

valueToStore

TextBoxFakultas .Text

set ListView1 .Elements to

User tapped and released the button.

call ListView1 .CreateElement

mainText

TKodeFakultas .Text

detailText

TextBoxFakultas .Text

imageName

" "

set ListView1 .Elements to

call TinyDBFakultas .GetTags

set TKodeFakultas .Text to

" "

set TextBoxFakultas .Text to

" "

call Notifier1 .ShowTextDialog

message

" Rekord fakultas sudah tersimpan ! "

title

" Simpan Rekord Fakultas "

cancelable

false


```
when BHapus .Click
do
  call Notifier1 .ShowChooseDialog
    message " "
    title " "
    button1Text "Ya"
    button2Text " "
    cancelable false
```

```
when Notifier1 .AfterChoosing
  choice
  do
    if
      get choice = "Ya"
    then
      call TinyDBFakultas .ClearTag
        tag TKodeFakultas .Text
      set ListView1 .Elements to call TinyDBFakultas .GetTags
      set TKodeFakultas .Text to " "
      set TextBoxFakultas .Text to " "
      call Notifier1 .ShowTextDialog
        message "Rekord fakultas sudah dihapus !"
        title "Hapus Rekord Fakultas"
        cancelable false
    else
      call Notifier1 .ShowTextDialog
        message "Rekord fakultas tidak jadi dihapus !"
        title "Hapus Rekord Fakultas"
        cancelable false
```


KODE BLOCK SCREEN PRODI

when ScreenProdi ▾ .Initialize

do set ListPickerFakultas ▾ .Elements ▾ to call TinyDBFakultas ▾ .GetTags
set ListView1 ▾ .Elements ▾ to call TinyDBProdi ▾ .GetTags

when BMenu ▾ .Click

do open another screen screenName ScreenMenu ▾

when BLogout ▾ .Click

do open another screen screenName Screen1 ▾

when ListPickerFakultas ▾ .AfterPicking

do set ListPickerFakultas ▾ .Text ▾ to call TinyDBFakultas ▾ .GetValue
tag ListPickerFakultas ▾ .Selection ▾
valueIfTagNotThere " " ▾
set ListPickerFakultas ▾ .Title ▾ to ListPickerFakultas ▾ .Selection ▾
set TKodeProdi ▾ .Text ▾ to ListPickerFakultas ▾ .Selection ▾
call TKodeProdi ▾ .MoveCursorToEnd

when BSimpan .Click

do

call TinyDBProdi .StoreValue

tag TKodeProdi . Text

valueToStore make a dictionary

key " KodeProdi " value TKodeProdi . Text

key " KodeFakultas " value ListPickerFakultas . Title

key " NamaProdi " value TextBoxProdi . Text

set ListView1 . Elements to call TinyDBProdi .GetTags

set TKodeProdi . Text to " "

set TextBoxProdi . Text to " "

call Notifier1 .ShowTextDialog

message " Rekord fakultas sudah tersimpan ! "

title " Simpan Rekord Fakultas "

cancelable false

when **ListView1** .AfterPicking

do set **TKodeProdi** . Text to **ListView1** . Selection

set **TextBoxProdi** . Text to

get value for key "NamaProdi"

in dictionary

call **TinyDBProdi** .GetValue

tag

ListView1 . Selection

valueIfTagNotThere

" "

or if not found

"not found"

set **ListPickerFakultas** . Text to

call **TinyDBFakultas** .GetValue

tag

get value for key "KodeFakultas"

in dictionary

call **TinyDBProdi** .GetValue

tag

ListView1 . Selection

valueIfTagNotThere

" "

or if not found

"not found"

valueIfTagNotThere

" "

when BHapus .Click

do

call Notifier1 .ShowChooseDialog

message " Apakah yakin akan menghapus rekord prodi ini ? "

title " Hapus Rekord Prodi "

button1Text " Ya "

button2Text " Tidak "

cancelable true

when Notifier1 .AfterChoosing

choice

do

if get choice = " Ya "

then

call TinyDBProdi .ClearTag

tag TKodeProdi . Text

call Notifier1 .ShowTextDialog

message " Rekord prodi sudah dihapus ! "

title " Hapus Rekord Prodi "

cancelable false

else

call Notifier1 .ShowTextDialog

message " Rekord prodi tidak jadi dihapus ! "

title " Hapus Rekord Prodi "

cancelable false

KODE BLOCK SCREEN MAHASISWA

when ScreenMahasiswa .Initialize

do set ListPicker1 . Elements to call TinyDBProdi .GetTags
set ListView1 . Elements to call TinyDBMahasiswa .GetTags

when BMenu .Click

do open another screen screenName ScreenMenu

when BLogout .Click

do open another screen screenName Screen1

when ListPicker1 .AfterPicking

do set ListPicker1 . Title to get value for key " KodeProdi " in dictionary call TinyDBProdi .GetValue tag ListPicker1 . Selection
valueIfTagNotThere " " or if not found " not found "

set ListPicker1 . Text to get value for key " NamaProdi " in dictionary call TinyDBProdi .GetValue tag ListPicker1 . Selection
valueIfTagNotThere " " or if not found " not found "

when BSimpan .Click

do

call TinyDBMahasiswa .StoreValue

tag

TNPM . Text

valueToStore

make a dictionary

key

" KodeProdi "

value

ListPicker1 . Title

key

" NPM "

value

TNPM . Text

key

" Nama "

value

TNamaMahasiswa . Text

key

" NoWA "

value

TNoWA . Text

set ListView1 . Elements to

call TinyDBMahasiswa .GetTags

set TNPM . Text to

" "

set TNamaMahasiswa . Text to

" "

set TNoWA . Text to

" "

call Notifier1 .ShowTextDialog

message

" Rekord mahasiswa sudah tersimpan ! "

title

" Simpan Rekord Mahasiswa "

cancelable

false

when BHapus .Click

do

call Notifier1 .ShowChooseDialog

message

" Apakah anda yakin akan menghapus rekord mahasisw... "

title

" Hapus Rekord Mahasiswa "

button1Text

" Ya "

button2Text

" Tidak "

cancelable

false

when Notifier1 .AfterChoosing

choice

do

if

get choice

=

" Ya "

then

call TinyDBMahasiswa .ClearTag

tag

TNPM

Text

call Notifier1 .ShowTextDialog

message

" Rekord sudah dihapus "

title

" Hapus Rekord Mahasiswa "

cancelable

false

set ListView1 .Elements to

call

TinyDBMahasiswa .GetTags

else

call Notifier1 .ShowTextDialog

message

" Rekord tidak jadi dihapus "

title

" Hapus Rekord Mahasiswa "

cancelable

false

when ListView1 .AfterPicking

do

set TNPM . Text to ListView1 . Selection

set TNamaMahasiswa . Text to

get value for key " Nama "

in dictionary

call TinyDBMahasiswa .GetValue

tag ListView1 . Selection

valueIfTagNotThere " "

or if not found

" not found "

set TNoWA . Text to

get value for key " NoWA "

in dictionary

call TinyDBMahasiswa .GetValue

tag ListView1 . Selection

valueIfTagNotThere " "

or if not found

" not found "