

ACT



Mata Praktikum : GOLANG INTERMEDIET
Kelas : 3IA20
Praktikum ke- : 5
Tanggal : 4 November 2022
Materi : (Data Binding)
NPM : 50420900
Nama : Muhammad Reza Hidayat
Ketua Asisten :
Nama Asisten :
Paraf Asisten :
Jumlah Lembar :



LABORATORIUM TEKNIK INFORMATIKA
UNIVERSITAS GUNADARMA

2022

A. LISTING PROGRAM

Database Command

```
undefined - pert5.sql

--Membuat database reza_50420900_pert5
CREATE DATABASE reza_50420900_pert5;

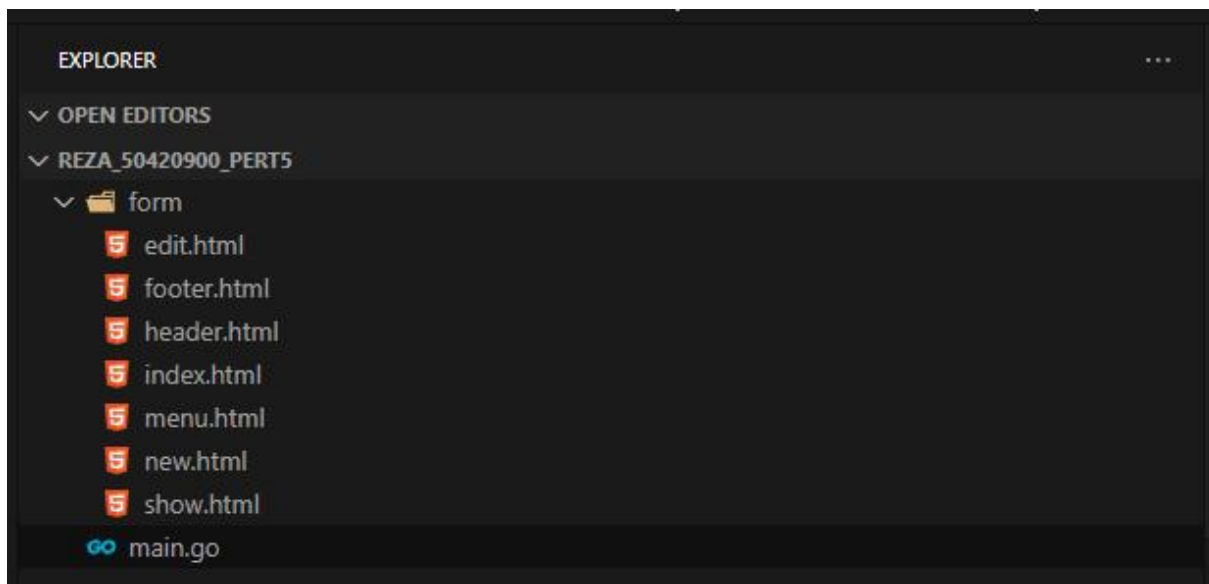
--menggunakan database reza_50420900_pert5
use reza_50420900_pert5;

--membuat tabel employee
CREATE TABLE employee (
  id int(6) AUTO_INCREMENT primary key,
  name varchar(30),
  city varchar(30));

--menampilkan tabel employee
select * from employee;

--menampilkan database employee
desc employee;
```

Struktur Folder



edit.html

```
reza_50420900_pert5 - edit.html

1  {{ define "Edit" }} {{ template "Header" }} {{ template "Menu" }}
2  <h2>Edit Name and City</h2>
3  <form method="POST" action="update">
4      <input type="hidden" name="uid" value="{{ .Id }}" />
5      <label> Name </label>
6      ><input type="text" name="name" value="{{ .Name }}" /><br />
7      <label> City </label>
8      ><input type="text" name="city" value="{{ .City }}" /><br />
9      <input type="submit" value="Save user" />
10 </form>
11 {{ template "Footer" }} {{ end }}
12
```

footer.html

```
reza_50420900_pert5 - footer.html

1  {{ define "Footer" }}
2  </body>
3
4  </html>
5  {{ end }}
6
7
```

header.html

```
reza_50420900_pert5 - header.html

1  {{ define "Header" }}
2  <!DOCTYPE html>
3  <html lang="en-US">
4      <head>
5          <title>Golang Mysql Curd Example</title>
6          <meta charset="UTF-8" />
7      </head>
8
9      <body>
10         <h1>Golang Mysql Curd Example</h1>
11         {{ end }}
12     </body>
13 </html>
```

index.html

```
reza_50420900_pert5 - index.html

1  {{ define "Index" }} {{ template "Header" }} {{ template "Menu" }}
2  <h2>Registered</h2>
3  <table border="1">
4    <thead>
5      <tr>
6        <td>ID</td>
7        <td>Name</td>
8        <td>City</td>
9        <td>View</td>
10       <td>Edit</td>
11       <td>Delete</td>
12     </tr>
13   </thead>
14   <tbody>
15     {{ range . }}
16     <tr>
17       <td>{{ .Id }}</td>
18       <td>{{ .Name }}</td>
19       <td>{{ .City }}</td>
20       <td><a href="/show?id={{ .Id }}">View</a></td>
21       <td><a href="/edit?id={{ .Id }}">Edit</a></td>
22       <td><a href="/delete?id={{ .Id }}">Delete</a></td>
23     </tr>
24   </tbody>
25   {{ end }}
26 </table>
27 {{ template "Footer" }} {{ end }}
```

menu.html

```
reza_50420900_pert5 - menu.html

1  {{ define "Show" }}
2  {{ template "Header" }}
3  {{ template "Menu" }}
4  <h2> Register {{ .Id }} </h2>
5  <p>Name: {{ .Name }}</p>
6  <p>City: {{ .City }}</p><br /> <a href="/edit?id={{ .Id }}">Edit</a></p>
7  {{ template "Footer" }}
8  {{ end }}
```

new.html

```
reza_50420900_pert5 - new.html

1 {{ define "New" }} {{ template "Header" }} {{ template "Menu" }}
2 <h2>New Name and City</h2>
3 <form method="POST" action="insert">
4   <label> Name </label><input type="text" name="name" /><br />
5   <label> City </label><input type="text" name="city" /><br />
6   <input type="submit" value="Save user" />
7 </form>
8 {{ template "Footer" }} {{ end }}
9
```

show.html

```
reza_50420900_pert5 - show.html

1 {{ define "Menu" }} <a href="/">HOME</a> |
2 <a href="/new">NEW</a>
3 {{ end }}
4
```

main.go

```
1 // Muhammad Raza Hidayat 50420900
2 package main
3
4 import (
5     "database/sql"
6     "html/template"
7     "log"
8     "net/http"
9
10    _ "github.com/go-sql-driver/mysql"
11 )
12
13 type Employee struct {
14     Id int
15     Name string
16     City string
17 }
18
19 func dbConn() (db *sql.DB) {
20     dbDriver := "mysql"
21     dbUser := "root"
22     dbPass := ""
23     dbName := "reza_50420900_pert5" // Ganti nama database dengan nama_rpg_pert5
24     db, err := sql.Open(dbDriver, dbUser+"@"+dbPass+"tcp("+localhost)/"+dbName)
25     if err != nil {
26         panic(err.Error())
27     }
28     return db
29 }
30
31 var tpl = template.Must(template.ParseGlob("form/*"))
32
33 func Index(w http.ResponseWriter, r *http.Request) {
34     db := dbConn()
35     selDB, err := db.Query("SELECT * FROM employee ORDER BY Id DESC")
36     if err != nil {
37         panic(err.Error())
38     }
39     emp := Employee{}
40     res := []Employee{}
41     for selDB.Next() {
42         var id int
43         var name, city string
44         err = selDB.Scan(&id, &name, &city)
45         if err != nil {
46             panic(err.Error())
47         }
48         emp.Id = id
49         emp.Name = name
50         emp.City = city
51         res = append(res, emp)
52     }
53     tpl.ExecuteTemplate(w, "Index", res)
54     defer db.Close()
55 }
56
57 func Show(w http.ResponseWriter, r *http.Request) {
58     db := dbConn()
59     nid := r.URL.Query().Get("id")
60     selDB, err := db.Query("SELECT * FROM employee WHERE id=?", nid)
61     if err != nil {
62         panic(err.Error())
63     }
64     emp := Employee{}
65     for selDB.Next() {
66         var id int
67         var name, city string
68         err = selDB.Scan(&id, &name, &city)
69         if err != nil {
70             panic(err.Error())
71         }
72         emp.Id = id
73         emp.Name = name
74         emp.City = city
75     }
76     tpl.ExecuteTemplate(w, "Show", emp)
77     defer db.Close()
78 }
79
80 func New(w http.ResponseWriter, r *http.Request) {
81     tpl.ExecuteTemplate(w, "New", nil)
82 }
83
84 func Edit(w http.ResponseWriter, r *http.Request) {
85     db := dbConn()
86     nid := r.URL.Query().Get("id")
87     selDB, err := db.Query("SELECT * FROM employee WHERE id=?", nid)
88     if err != nil {
89         panic(err.Error())
90     }
91     emp := Employee{}
92     for selDB.Next() {
93         var id int
94         var name, city string
95         err = selDB.Scan(&id, &name, &city)
96         if err != nil {
97             panic(err.Error())
98         }
99         emp.Id = id
100         emp.Name = name
101         emp.City = city
102     }
103     tpl.ExecuteTemplate(w, "Edit", emp)
104     defer db.Close()
105 }
106
107 func Insert(w http.ResponseWriter, r *http.Request) {
108     db := dbConn()
109     if r.Method == "POST" {
110         name := r.FormValue("name")
111         city := r.FormValue("city")
112         insert, err := db.Prepare("INSERT INTO employee(name, city) VALUES(?,?)")
113         if err != nil {
114             panic(err.Error())
115         }
116         insert.Exec(name, city)
117         log.Println("INSERT: Name: " + name + " | City: " + city)
118     }
119     defer db.Close()
120     http.Redirect(w, r, "/", 301)
121 }
122
123 func Update(w http.ResponseWriter, r *http.Request) {
124     db := dbConn()
125     if r.Method == "POST" {
126         name := r.FormValue("name")
127         city := r.FormValue("city")
128         id := r.FormValue("id")
129         update, err := db.Prepare("UPDATE employee SET name=?, city=? WHERE id=?")
130         if err != nil {
131             panic(err.Error())
132         }
133         update.Exec(name, city, id)
134         log.Println("UPDATE: Name: " + name + " | City: " + city)
135     }
136     defer db.Close()
137     http.Redirect(w, r, "/", 301)
138 }
139
140 func Delete(w http.ResponseWriter, r *http.Request) {
141     db := dbConn()
142     emp := r.URL.Query().Get("id")
143     delForm, err := db.Prepare("DELETE FROM employee WHERE id=?")
144     if err != nil {
145         panic(err.Error())
146     }
147     delForm.Exec(emp)
148     log.Println("DELETE")
149     defer db.Close()
150     http.Redirect(w, r, "/", 301)
151 }
152
153 // ! jangan lupa untuk mengubah port sesuai dengan port yang digunakan
154 func main() {
155     log.Println("Server started on: http://localhost:8080")
156     http.HandleFunc("/", Index)
157     http.HandleFunc("/show", Show)
158     http.HandleFunc("/new", New)
159     http.HandleFunc("/edit", Edit)
160     http.HandleFunc("/insert", Insert)
161     http.HandleFunc("/update", Update)
162     http.HandleFunc("/delete", Delete)
163     http.ListenAndServe(":8080", nil)
164 }
165
166 }
```

B. OUPUT PROGRAM

```
undefined - pert5.sql

Setting environment for using XAMPP for Windows.
R@DESKTOP-Q3HDCLA c:\xampp
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 10
Server version: 10.4.25-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

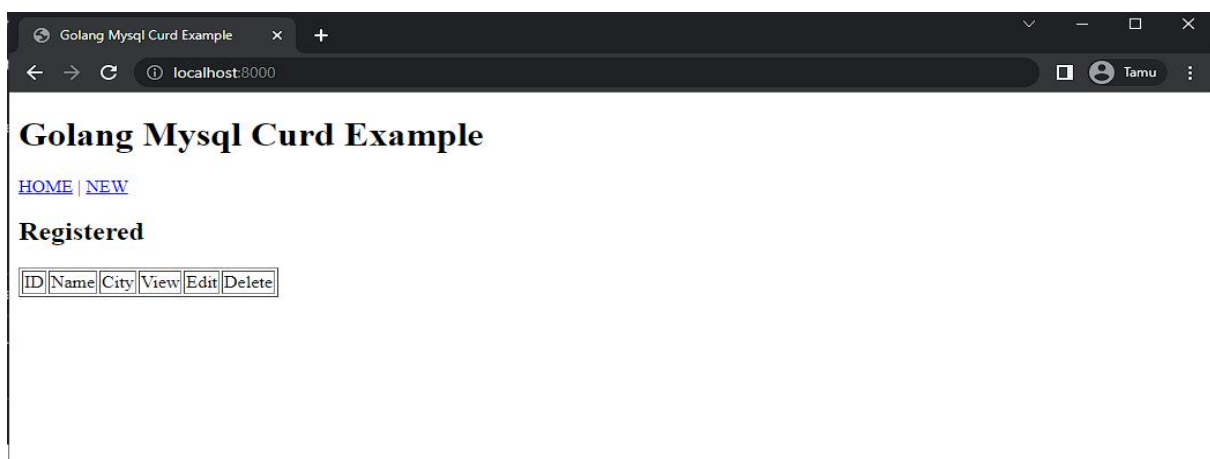
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> CREATE DATABASE reza_50420900_pert5;
Query OK, 1 row affected (0.001 sec)

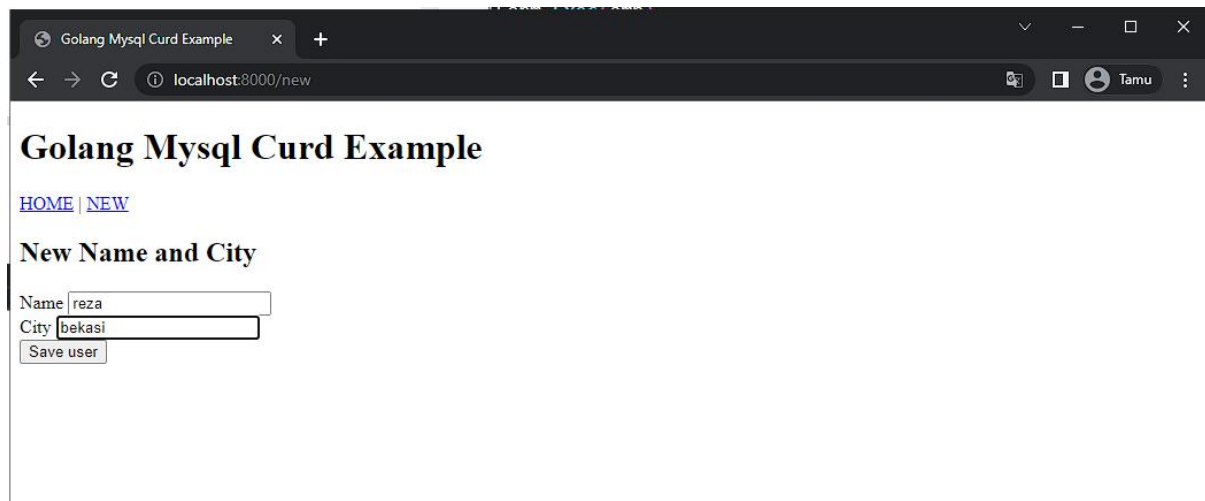
MariaDB [reza_50420900_pert5]> CREATE TABLE employee (
  ->   id int(6) AUTO_INCREMENT primary key,
  ->   name varchar(30),
  ->   city varchar(30));
Query OK, 0 rows affected (0.020 sec)

MariaDB [reza_50420900_pert5]> desc employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra           |
+-----+-----+-----+-----+-----+-----+
| id    | int(6)        | NO   | PRI | NULL    | auto_increment |
| name  | varchar(30)   | YES  |     | NULL    |                 |
| city  | varchar(30)   | YES  |     | NULL    |                 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.009 sec)
```

<http://localhost:8000/>



<http://localhost:8000/new>



Golang Mysql Curd Example

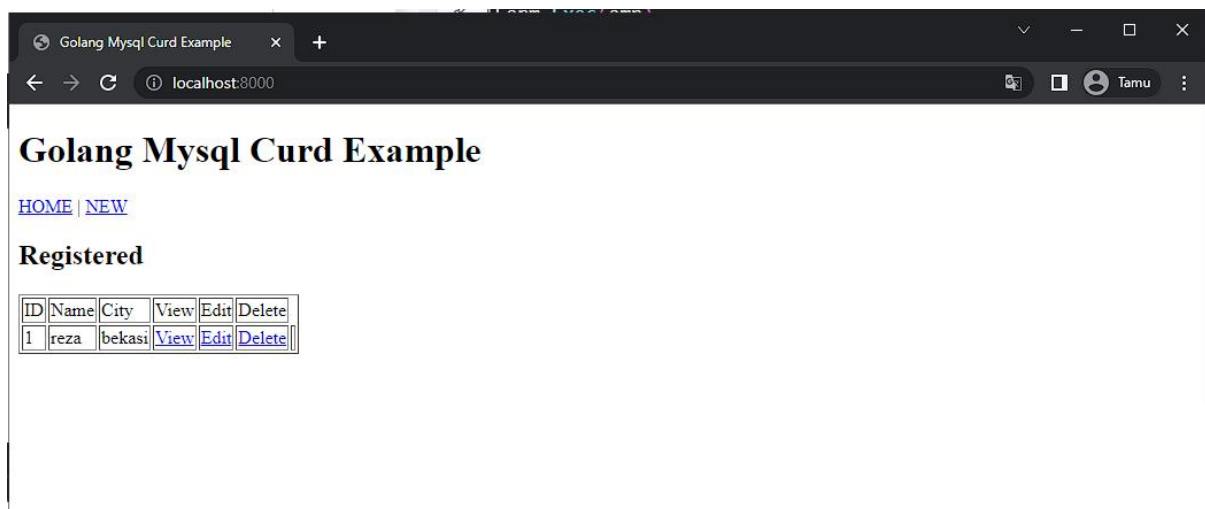
[HOME](#) | [NEW](#)

New Name and City

Name

City

<http://localhost:8000/>



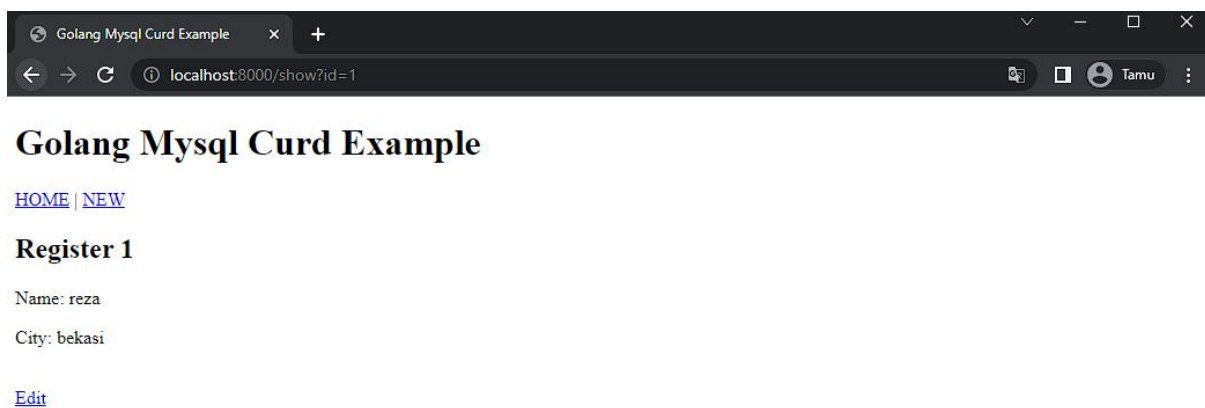
Golang Mysql Curd Example

[HOME](#) | [NEW](#)

Registered

ID	Name	City	View	Edit	Delete
1	reza	bekasi	View	Edit	Delete

<http://localhost:8000/show?id=1>



Golang Mysql Curd Example

[HOME](#) | [NEW](#)

Register 1

Name: reza

City: bekasi

[Edit](#)

<http://localhost:8000/edit?id=1>



Golang Mysql Curd Example

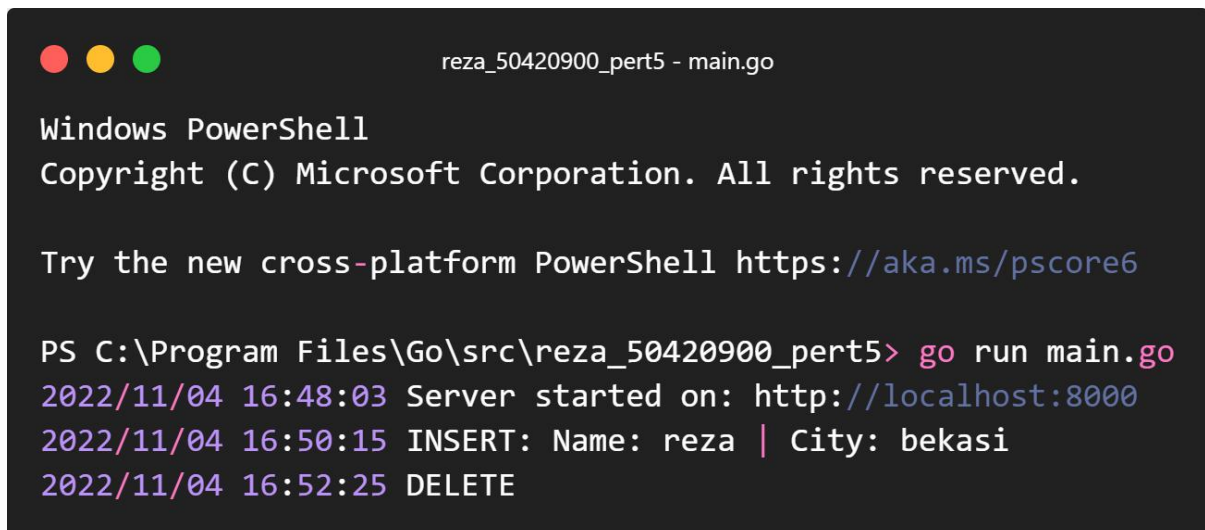
[HOME](#) | [NEW](#)

Edit Name and City

Name

City

main.go



```
reza_50420900_pert5 - main.go

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Program Files\Go\src\reza_50420900_pert5> go run main.go
2022/11/04 16:48:03 Server started on: http://localhost:8000
2022/11/04 16:50:15 INSERT: Name: reza | City: bekasi
2022/11/04 16:52:25 DELETE
```