5210411383_ALLAN BIL FAQIH

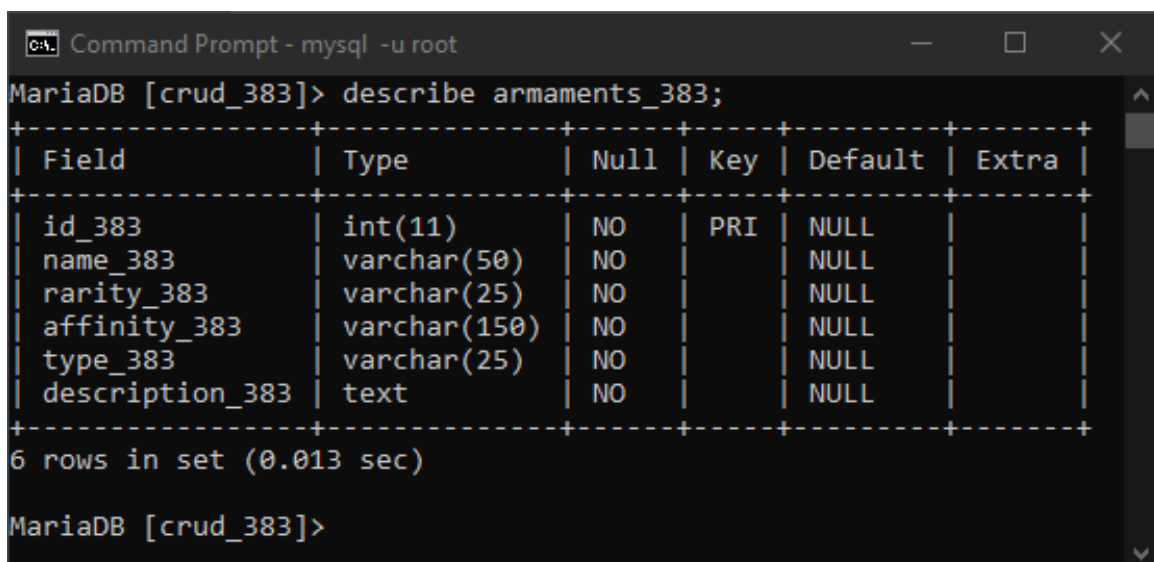**POSTLAB 9** | REKAYASA WEB PRAKTIK

Pertanyaan

1. Buatlah sebuah basis data dengan satu buah tabel yang terdiri dari 6 atribut (atribut ini nantinya menerima masukan bertipe number, text, radio, checkbox, dropdown/select-option dan textarea), pastikan nama basis data, nama tabel dan nama atribut diakhir 3 digit terakhit NIM/NPM anda!

2. Buatlah sebuah program aplikasi berbasis web yang memiliki operasi create, read, update dan delete (gunakan 6 jenis masukan seperti number, text, radio, checkbox, dropdown/select-option dan textarea)!

Jawaban

1. Database

2. Aplikasi

Source Codes

- app.py

```python
from flask import Flask, redirect, render_template, request, url_for, flash, session
from model import Model

app = Flask(__name__)
app.config["SECRET_KEY"] = "123"
db = Model()

@app.route("/")
def index():
    item = db.read()
    return render_template("index.html", dItem = item)
```

```python
@app.route("/add")
def add():
    return render_template("add.html")

@app.route("/add_save", methods=["POST", "GET"])
def add_save():
    if(request.method == "POST"):
        id = request.form["txtID"]
        name = request.form["txtName"]
        rarity = request.form["rarity"]
        affinity = ', '.join(request.form.getlist('affinity'))
        itype = request.form["itemType"]
        desc = request.form["txtDesc"]
        if(db.add(id, name, rarity, affinity, itype, desc)):
            flash("New Data have been Added")
        else:
            flash("Error detected, data can't be added!")
        return redirect(url_for("index"))
    else:
        return redirect(url_for("index"))

@app.route("/remove/<int:id>", methods=["GET", "POST"])
def remove(id):
    if(request.method == "GET"):
        if(db.remove(id)):
            flash("The Data have been Deleted")
        else:
            flash("Error detected, data can't be deleted!")
        return redirect(url_for("index"))

@app.route("/edit/<int:id>", methods=["GET", "POST"])
def edit(id):
    session["edit"] = id
    getted = db.edit(id)
    return render_template(
        "edit.html",
        pData = getted,
        oldID = id)

@app.route("/edit_save", methods=["POST"])
def edit_save():
    if(request.method == "POST"):
        id = request.form["txtID"]
        name = request.form["txtName"]
        rarity = request.form["rarity"]
        affinity = ', '.join(request.form.getlist('affinity'))
        itype = request.form["itemType"]
        desc = request.form["txtDesc"]
```

```python
            if(db.edit_save(id, name, rarity, affinity, itype, desc, session["edit"])):
                flash("The Data have been Edited")
            else:
                flash("Error detected, data can't be edited!")
            return redirect(url_for("index"))
        else:
            return redirect(url_for("index"))

if __name__ == "__main__":
    app.run(debug=True)
```

- model.py

```python
import mysql.connector

class Model:
    def connect(self):
        return mysql.connector.connect(
            host = "localhost",
            user = "root",
            password = "",
            database = "crud_383")

    def read(self):
        con = Model.connect(self)
        cur = con.cursor()
        cur.execute("select * from armaments_383")
        return cur.fetchall()

    def add(self, id, name, rarity, affinity, itype, desc):
        con = Model.connect(self)
        cur = con.cursor()
        cur.execute("""insert into armaments_383(id_383, name_383,
                    rarity_383, affinity_383, type_383, description_383)
                    values(%s, %s, %s, %s, %s, %s);""",
                    (id, name, rarity, affinity, itype, desc,))
        con.commit()
        return True

    def remove(self, id):
        con = Model.connect(self)
        cur = con.cursor()
        cur.execute("delete from armaments_383 where id_383=%s", (id,))
        con.commit()
        return True
```

```python
    def edit(self, id):
        con = Model.connect(self)
        cur = con.cursor()
        cur.execute("select * from armaments_383 where id_383=%s", (id,))
        return cur.fetchall()

    def edit_save(self, id, name, rarity, affinity, itype, desc, oldID):
        con = Model.connect(self)
        cur = con.cursor()
        cur.execute("""update armaments_383 set id_383=%s, name_383=%s,
                    rarity_383=%s, affinity_383=%s, type_383=%s,
                    description_383=%s where id_383=%s;""",
                    (id, name, rarity, affinity, itype, desc, oldID,))
        con.commit()
        return True
```

- head.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Akihiko Dojo</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"></script>
  <script src="https://code.jquery.com/jquery-3.6.0.js"
  integrity="sha256-H+K7U5CnXl1h5ywQfKtSj8PCmoN9aaq30gDh27Xc0jk="
crossorigin="anonymous"></script>
</head>
```

- index.html

```html
{% include 'head.html' %}
<body>
  <div class="content-wrapper">
    <section class="content-header">
      <div class="container-fluid">
```

```html
        <div class="p-3 bg-secondary text-white rounded">
          <h2>Armaments Data</h2>
          <p>This is the data for our Weaponry or Armaments in Akihiko
Dojo</p>
        </div>
      </div>
    </div>
  </div>
    <div class="content-wrapper">
      <section class="content">
        <div class="container-fluid">
          <div class="row">
            <div class="col">
              <a href="/add" class="mt-2 mb-2 ms-2 btn btn-success"><span>+
| Add</span></a>
              <table class="table table-striped table-bordered table-hover">
                <thead>
                  <tr class="table-primary">
                    <th scope="col">#</th>
                    <th scope="col">Name</th>
                    <th scope="col">Rarity</th>
                    <th scope="col">Affinity</th>
                    <th scope="col">Type</th>
                    <th scope="col">Description</th>
                    <th scope="col">Actions</th>
                  </tr>
                </thead>
                <tbody>
                    {% for data in dItem %}
                  <tr>
                      <th scope="row">{{ data.0 }}</th>
                      <td>{{ data.1 }}</td>
                      <td>{{ data.2 }}</td>
                      <td>{{ data.3 }}</td>
                      <td>{{ data.4 }}</td>
                      <td>{{ data.5 }}</td>
                      <td>
                        <a href="/edit/{{ data[0] }}" title="Edit"
                        class="btn btn-warning">Edit</a>
                        <a href="/remove/{{ data[0] }}"
onclick="confirm('Are you sure?')"
                        class="btn btn-danger"
title="Delete">Delete</a>
                      </td>
                  </tr>
                    {% endfor %}
                </tbody>
              </table>
            </div>
```

```html
            </div>
          </div>
        </section>
      </div>
      {% for message in get_flashed_messages() %}
    <div class="alert alert-success alert-dismissible">
        <button type="button" class="btn-close" data-bs-
dismiss="alert"></button>
        <strong>{{ message }}</strong>
    </div>
{% endfor %}
</body>
</html>
```

- add.html

```html
{% include 'head.html' %}
<body>
<div class="content-wrapper">
  <section class="content-header">
    <div class="container-fluid">
      <div class="p-3 bg-secondary text-white rounded">
        <h2>Armaments Data</h2>
        <p>This is the data for our Weaponry or Armaments in Akihiko Dojo</p>
      </div>
    </div>
  </section>
</div>
<div class="content-wrapper">
<section class="content">
<div class="container-fluid">
<div class="row">
  <div class="col-md-12">
    <div class="card card-secondary">
      <div class="card-header">
        <h3 class="card-title">Add New Armaments</h3>
      </div>
      <form role="form" action="/add_save" method="POST">
        <div class="card-body">
          <div class="row">
            <div class="col-sm-4">
              <div class="form-group">
                <label class="fs-5">ID</label>
                <input type="number" class="form-control"
                name="txtID" placeholder="Enter the ID" required>
              </div>
            </div>
            <div class="col-sm-8">
```

```html
        <div class="form-group">
          <label class="fs-5">Name</label>
          <input type="text" class="form-control"
          name="txtName" placeholder="Enter the Armaments name" required>
        </div>
      </div>
    </div>
    <div class="row pt-2 pb-2">
      <div class="form-group">
        <div class="row">
          <div class="col-sm-1">
            <label class="fs-5">Rarity</label>
            <div class="form-group pt-2 pb-2">
              <div class="form-check">
                <input class="form-check-input"
                type="radio" value="Lord" name="rarity">
                <label class="form-check-label">
                  Lord
                </label>
              </div>
              <div class="form-check">
                <input class="form-check-input"
                type="radio" value="Hero" name="rarity">
                <label class="form-check-label">
                  Hero
                </label>
              </div>
              <div class="form-check">
                <input class="form-check-input"
                type="radio" value="Adventurer" name="rarity">
                <label class="form-check-label">
                  Numen
                </label>
              </div>
              <div class="form-check">
                <input class="form-check-input"
                type="radio" value="Commoner" name="rarity">
                <label class="form-check-label">
                  Common
                </label>
              </div>
            </div>
          </div>
          <div class="col-sm-4">
            <label class="fs-5">Affinity</label>
            <div class="form-group pb-2 pt-2">
              <div class="row">
                <div class="col-sm-3">
```

```html
                    <div class="form-check">
                      <input class="form-check-input"
                      type="checkbox" value="Arcane" name="affinity">
                      <label class="form-check-label" >
                        Arcane
                      </label>
                    </div>
                    <div class="form-check">
                      <input class="form-check-input"
                      type="checkbox" value="Faith" name="affinity">
                      <label class="form-check-label" >
                        Faith
                      </label>
                    </div>
                    <div class="form-check">
                      <input class="form-check-input"
                      type="checkbox" value="Intelligence" name="affinity">
                      <label class="form-check-label" >
                        Intelligence
                      </label>
                    </div>
                  </div>
                  <div class="col-sm-3">
                    <div class="form-check">
                      <input class="form-check-input"
                      type="checkbox" value="Strength" name="affinity">
                      <label class="form-check-label" >
                        Strength
                      </label>
                    </div>
                    <div class="form-check">
                      <input class="form-check-input"
                      type="checkbox" value="Dexterity" name="affinity">
                      <label class="form-check-label" >
                        Dexterity
                      </label>
                    </div>
                  </div>
                </div>
              </div>
            </div>
          </div>
        </div>
        <div class="form-group">
          <label class="fs-5">Armaments Type</label>
          <select class="form-select" id="itemType" name="itemType">
            <option value="0">-- Select Armaments Type --</option>
```

```html
                        <option value="Dagger">Dagger</option>
                        <option value="Sword">Sword</option>
                        <option value="Axe">Axe</option>
                        <option value="Hammer">Hammer</option>
                        <option value="Flail">Flail</option>
                        <option value="Spear">Spear</option>
                        <option value="Staff">Staff</option>
                        <option value="Sacred Seal">Sacred Seal</option>
                    </select>
                </div>
                <div class="form-group">
                    <label class="fs-5">Description</label>
                    <textarea class="form-control" name="txtDesc"
                    placeholder="Enter the Description or Lore" rows="4" required></textarea>
                </div>
            </div>
            <div class="card-footer">
                <button type="submit" class="btn btn-success btn-block">Submit</button>
                <a href="/" class="btn btn-secondary"><span>Go Back</span></a>
            </div>
        </form>
    </div>
  </div>
</section>
</div>
</body>
</html>
```

- edit.html

```html
{% include 'head.html' %}
<body>
<div class="content-wrapper">
<section class="content-header">
<div class="container-fluid">
  <div class="p-3 bg-secondary text-white rounded">
    <h2>Armaments Data</h2>
    <p>This is the data for our Weaponry or Armaments in Akihiko Dojo</p>
  </div>
</div>
</div>
{% for data in pData %}
<div class="content-wrapper">
<section class="content">
  <div class="container-fluid">
    <div class="row">
      <div class="col-md-12">
```

```html
<div class="card card-secondary">
  <div class="card-header">
    <h3 class="card-title">Edit Armaments</h3>
  </div>
  <form role="form" action="/edit_save" method="POST">
    <div class="card-body">
      <div class="row">
        <div class="col-sm-4">
          <div class="form-group">
            <label class="fs-5">ID</label>
            <input type="hidden" value="{{ data.0 }}" name="oldID" >
            <input type="number" class="form-control"
            name="txtID" placeholder="Enter the ID"
            value="{{ data.0 }}" required>
          </div>
        </div>
        <div class="col-sm-8">
          <div class="form-group">
            <label class="fs-5">Name</label>
            <input type="text" class="form-control"
            name="txtName" value="{{ data.1 }}"
            placeholder="Enter the Armaments name" required>
          </div>
        </div>
      </div>
      <div class="row pt-2 pb-2">
        <div class="form-group">
          <div class="row">
            <div class="col-sm-1">
              <label class="fs-5">Rarity</label>
              <div class="form-group pt-2 pb-2">
                <div class="form-check">
                  <input class="form-check-input" type="radio"
                  value="Lord" name="rarity"
                  {{ "checked" if data.2=="Lord" }}>
                  <label class="form-check-label">
                    Lord
                  </label>
                </div>
                <div class="form-check">
                  <input class="form-check-input" type="radio"
                  value="Hero" name="rarity"
                  {{ "checked" if data.2=="Hero" }}>
                  <label class="form-check-label">
                    Hero
                  </label>
                </div>
                <div class="form-check">
```

```html
                        <input class="form-check-input" type="radio"
                        value="Adventurer" name="rarity"
                        {{ "checked" if data.2=="Adventurer" }}>
                        <label class="form-check-label">
                          Numen
                        </label>
                      </div>
                      <div class="form-check">
                        <input class="form-check-input" type="radio"
                        value="Commoner" name="rarity"
                        {{ "checked" if data.2=="Commoner" }}>
                        <label class="form-check-label">
                          Common
                        </label>
                      </div>
                    </div>
                  </div>
                  <div class="col-sm-4">
                    <label class="fs-5">Affinity</label>
                    <div class="form-group pb-2 pt-2">
                      <div class="row">
                        <div class="col-sm-3">
                          <div class="form-check">
                            <input class="form-check-input" type="checkbox"
                            value="Arcane" name="affinity"
                            {{ "checked" if "Arcane" in data.3 }}>
                            <label class="form-check-label" >
                              Arcane
                            </label>
                          </div>
                          <div class="form-check">
                            <input class="form-check-input" type="checkbox"
                            value="Faith" name="affinity"
                            {{ "checked" if "Faith" in data.3 }}>
                            <label class="form-check-label" >
                              Faith
                            </label>
                          </div>
                          <div class="form-check">
                            <input class="form-check-input" type="checkbox"
                            value="Intelligence" name="affinity"
                            {{ "checked" if "Intelligence" in data.3 }}>
                            <label class="form-check-label" >
                              Intelligence
                            </label>
                          </div>
                        </div>
                        <div class="col-sm-3">
```

```html
                        <div class="form-check">
                          <input class="form-check-input" type="checkbox"
                          value="Strength" name="affinity"
                          {{ "checked" if "Strength" in data.3 }}>
                            <label class="form-check-label" >
                              Strength
                            </label>
                        </div>
                        <div class="form-check">
                          <input class="form-check-input" type="checkbox"
                          value="Dexterity" name="affinity"
                          {{ "checked" if "Dexterity" in data.3 }}>
                            <label class="form-check-label" >
                              Dexterity
                            </label>
                        </div>
                      </div>
                    </div>
                  </div>
                </div>
              </div>
            </div>
            <div class="form-group">
              <label class="fs-5">Armaments Type</label>
              <select class="form-select" id="itemType" name="itemType">
                <option value="0">-- Select Armaments Type --</option>
                <option value="Dagger"
                {{ "selected" if data.4=="Dagger" }}>Dagger</option>
                <option value="Sword"
                {{ "selected" if data.4=="Sword" }}>Sword</option>
                <option value="Axe"
                {{ "selected" if data.4=="Axe" }}>Axe</option>
                <option value="Hammer"
                {{ "selected" if data.4=="Hammer" }}>Hammer</option>
                <option value="Flail"
                {{ "selected" if data.4=="Flail" }}>Flail</option>
                <option value="Spear"
                {{ "selected" if data.4=="Spear" }}>Spear</option>
                <option value="Staff"
                {{ "selected" if data.4=="Staff" }}>Staff</option>
                <option value="Sacred Seal"
                {{ "selected" if data.4=="Sacred Seal" }}>Sacred Seal</option>
              </select>
            </div>
            <div class="form-group">
              <label class="fs-5">Description</label>
              <textarea class="form-control" name="txtDesc"
```

```
                placeholder="Enter the Description or Lore" rows="4"
                required>{{ data.5 }}</textarea>
            </div>
          </div>
          <div class="card-footer">
            <button type="submit" class="btn btn-success btn-block">Submit</button>
            <a href="/" class="btn btn-secondary"><span>Go Back</span></a>
          </div>
        </form>
      </div>
    </div>
</section>
</div>
{% endfor %}
</body>
</html>
```
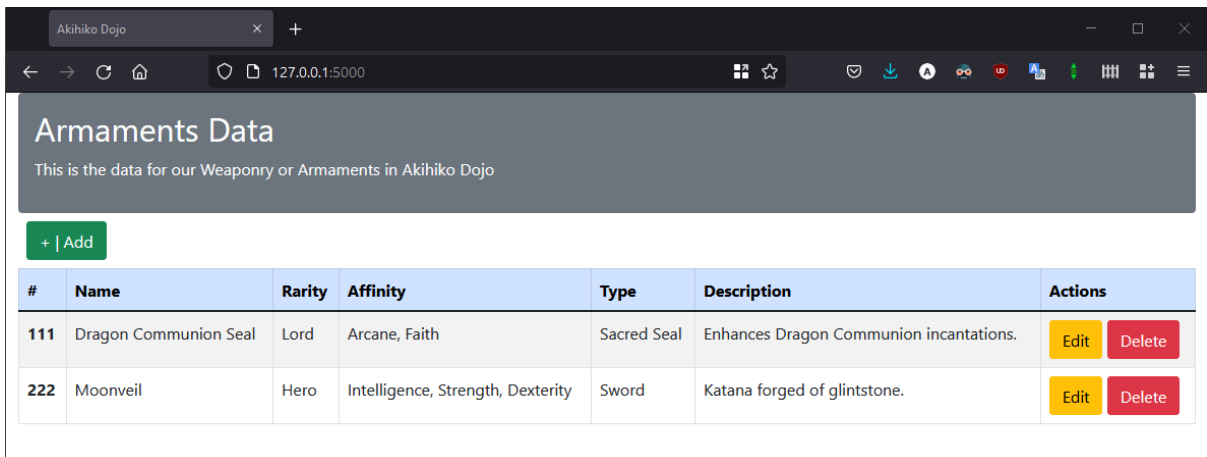
Screenshot

Armaments Data

This is the data for our Weaponry or Armaments in Akihiko Dojo

Add New Armaments

ID

Enter the ID

Name

Enter the Armaments name

Rarity   Affinity

- ○ Lord   ☐ Arcane   ☐ Strength
- ○ Hero   ☐ Faith   ☐ Dexterity
- ○ Numen   ☐ Intelligence
- ○ Common

Armaments Type

-- Select Armaments Type --

Description

Enter the Description or Lore

Submit   Go Back

Armaments Data

This is the data for our Weaponry or Armaments in Akihiko Dojo

+ | Add

#	Name	Rarity	Affinity	Type	Description	Actions
111	Dragon Communion Seal	Lord	Arcane, Faith	Sacred Seal	Enhances Dragon Communion incantations.	Edit Delete
123	asd	Commoner	Arcane	Staff	qwe	Edit Delete
222	Moonveil	Hero	Intelligence, Strength, Dexterity	Sword	Katana forged of glintstone.	Edit Delete

New Data have been Added   ✕

Armaments Data

This is the data for our Weaponry or Armaments in Akihiko Dojo

Edit Armaments

ID

123

Name

asd

Rarity

- ○ Lord
- ○ Hero
- ○ Numen
- ● Common

Affinity

- ☑ Arcane
- ☐ Faith
- ☐ Intelligence
- ☐ Strength
- ☐ Dexterity

Armaments Type

Staff

Description

qwe

Submit   Go Back

Armaments Data

This is the data for our Weaponry or Armaments in Akihiko Dojo

+ | Add

#	Name	Rarity	Affinity	Type	Description	Actions
111	Dragon Communion Seal	Lord	Arcane, Faith	Sacred Seal	Enhances Dragon Communion incantations.	Edit Delete
123	Morning Star	Commoner	Strength, Dexterity	Hammer	Ironic given its grace name, this weapon often reeks of blood.	Edit Delete
222	Moonveil	Hero	Intelligence, Strength, Dexterity	Sword	Katana forged of glintstone.	Edit Delete

The Data have been Edited   ✕

Armaments Data

This is the data for our Weaponry or Armaments in Akihiko Dojo

+ | Add

#	Name	Rarity	Affinity	Type	Description	Actions
111	Dragon Communion Seal	Lord	Arcane, Faith	Sacred Seal	Enhances Dragon Communion incantations.	Edit Delete
222	Moonveil	Hero	Intelligence, Strength, Dexterity	Sword	Katana forged of glintstone.	Edit Delete

The Data have been Deleted   ✕