POLITEKNIK MALAYSIA MUKAH

**DEPARTMENT OF INFORMATION & COMMUNICATION TECHNOLOGY**
**COURSE WORK ASSESSMENT (Session 1: 2021/2022)**

| | |
|---|---|
| CLO 1P (25) | |
| **TOTAL (25)** | |
| % | |

**Name** : _____ **Registration No.** : _____

**Code & Course** : **DFP 50173 WEB DEVELOPMENT TECHNOLOGY** **Programme** : _____

**Lecturer** : _____ **Week (Date)** : **W13 (27/12/2021 - 02/01/2022)**

**Lab Exercise(s) No: 1 / 2 / 3 / 4** **[CLO: CLO 1]** **Submission Date : 02/01/2022**

**Instruction(s): Answer all questions. You are advised to put your name and registration number on the top of your code.**

**QUESTION:**

Hakim as a system developer in the software house company located in Kuala Lumpur is required to develop a Java web-based Vehicle Registration System (VRS) to record occupants' vehicle information for a specific condominium located at Bangsar South. VRS can be used by two types of users, which is occupant and administrator. Each user has a different role and function as below:

a) Administrator

- The administrator can access VRS and view occupant's vehicle registration information application.
- The administrator has a privileged to approve or decline occupant's vehicle registration information application.

b) Occupant

- The occupant can access VRS and request to register their vehicle information by fill up all the required information such as vehicle owner, vehicle type, vehicle brand, vehicle model, vehicle color, vehicle registration number and vehicle chassis number.
- The occupant can view the vehicle information request whether approved or declined.

The system **MUST** include the requirements as follows.

I. Implement form based authentication **(j_security_check)** to authenticate user when login the system **[CLO1, P3 |5 marks ]**

II. Construct declarative security **(Web.xml and Tomcat User)** to authorize user and check whether a user has access to given resource **[CLO1, P4|10 marks ]**

III. implement programmatic security method **(String getRemoteUser() and Boolean isUserInRole(String role))** to authorize user and check whether a user has access to given resource **[CLO1, P3 |10 marks ]**

Design your program creatively.

***Prepared by:***

MUHAMMAD THARIQ BIN ABDUL RAZAK
Pegawai Pendidikan Pengajian Tinggi (DH41)
Jabatan Teknologi Maklumat & Komunikasi
Politeknik Mukah

**(MUHAMMAD THARIQ BIN ABDUL RAZAK)**
Date: 10/12/2021

***Verified by:***

ROHALIZA BINTI KARIM
Ketua Program
Jabatan Teknologi Maklumat dan Komunikasi
Politeknik Mukah.

Signature of Head of Programme
**(ROHALIZA BINTI KARIM)**
Date: 10/12/2021

POLITEKNIK MALAYSIA

**DEPARTMENT OF INFORMATION & COMMUNICATION TECHNOLOGY**
**ANSWER & MARKING SCHEME RULES (Session 1: 2021/2022)**

**CODE/COURSE NAME: DFP 50173 WEB DEVELOPMENT TECHNOLOGY** **LAB EXERCISE(s) No : 1 / 2 / 3 / 4**

| CLO | CRITERIA | Excellent [5] | Good [4] | Modest [3] | Weak [2] | Very Weak [1] | No Submission [0] | SCORE |
|---|---|---|---|---|---|---|---|---|
| CLO1 \| P3 | Able to implement **form-based authentication (j_security_check)** to construct a dynamic web application. | Very clear evidence of knowledge and understanding to implement **form-based authentication (j_security_check)** to construct a dynamic web application. | Able to implement **form-based authentication (j_security_check)** to construct a dynamic web application. | Able to implement **form-based authentication (j_security_check)** to construct a dynamic web application with required minor improvements. | Able to implement **form-based authentication (j_security_check)** to construct a dynamic web application with required major improvements. | Not able to implement **form-based authentication (j_security_check)** to construct a dynamic web application. | Fail to submit laboratory exercise 4 | |
| | Able to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application. | Very clear evidence of knowledge and understanding to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application. | Able to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application. | Able to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application with required minor improvements. | Able to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application with required major improvements. | Not able to implement **programmatic security method (String getRemoteUser())** to construct a dynamic web application. | Fail to submit laboratory exercise 4 | |
| | Able to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application. | Very clear evidence of knowledge and understanding to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application. | Able to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application. | Able to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application with required minor improvements. | Able to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application with required major improvements. | Not able to implement **programmatic security method (Boolean isUserInRole (String role))** to construct a dynamic web application. | Fail to submit laboratory exercise 4 | |
| CLO1 \| P4 | Able to use **declarative security (Web.xml)** to construct a dynamic web application. | Very clear evidence of knowledge and understanding to implement **declarative security (Web.xml)** to construct a dynamic web application. | Able to implement **declarative security (Web.xml)** to construct a dynamic web application. | Able to implement **declarative security (Web.xml)** to construct a dynamic web application with required minor improvements. | Able to implement **declarative security (Web.xml)** to construct a dynamic web application with required major improvements. | Not able to implement **declarative security (Web.xml)** to construct a dynamic web application. | Fail to submit laboratory exercise 4 | |

| CLO | CRITERIA | Excellent [5] | Good [4] | Modest [3] | Weak [2] | Very Weak [1] | No Submission [0] | SCORE |
|---|---|---|---|---|---|---|---|---|
| | Able to use **declarative security (Tomcat User)** to construct a dynamic web application. | Very clear evidence of knowledge and understanding to use suitable **declarative security (Tomcat User)** to construct a dynamic web application. | Able to use suitable **declarative security (Tomcat User)** to construct a dynamic web application. | Able to use suitable **declarative security (Tomcat User)** to construct a dynamic web application with required minor improvements. | Able to use suitable **declarative security (Tomcat User)** to construct a dynamic web application with required major improvements. | Not able to use suitable **declarative security (Tomcat User)** to construct a dynamic web application. | Fail to submit laboratory exercise 4 | |

**Prepared by:**

**(MUHAMMAD THARIQ BIN ABDUL RAZAK)**
Date : 10/12/2021

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Signature of Head of Programme
**(ROHALIZA BINTI KARIM)**
Date : 10/12/2021