



KOLEJ PROFESIONAL MARA BERANANG
DIPLOMA IN COMPUTER SCIENCE

COURSE NAME	: WEBSITE APPLICATION DEVELOPMENT
COURSE CODE	: CSC2173
ACADEMIC SESSION	: SESSION 2 2023/2024
TYPE OF ASSESSMENT	: PRACTICAL TEST 1
DURATION	: 1.5 HOURS

CLO 2: BUILD DYNAMIC WEBSITE BASED ON WEB FRAMEWORK.

INSTRUCTION TO CANDIDATES:

1. Time allowed is **1.5 HOURS**.
2. Execute all tasks.
3. Submit Django project folder (compressed/zip) and a document containing the screenshots.

Personal Details	
Name	
I/D Number	BCS
Class	DCS 4 [A] [B] [C] [D]
Lecturer	PUAN NORAZIMAH PUAN NURHANNANIE

Section / Question No.	Marks
Part A	/3
Part B	/10
Part C	/5
Part D	/17
Total	/35

Overview

Tables shown below are part of Singer Album database.

Singer

Singerid (PK)	singername	singerorigin
Sg1	Blackpink	Korea
Sg2	The Calling	California
Sg3	Siti Nurhaliza	Malaysia

Album

albumname	singerid (FK)	albumyear
Bornpink	Sg1	2022
Kill this love	Sg1	2019
Camino Palmero	Sg2	2001
Sitism	Sg3	2023

Song

songid (PK)	id-Album (FK)	songname	minutes
Song1	(Bornpink)	Pink Venom	3
Song2	(Bornpink)	Yeah Yeah Yeah	3
Song3	(Sitism)	Menjaga Cintamu	4

Software requirement: Visual Studio Code

Language : Python

Framework : Django

Complete and provide screenshots for all tasks (Part A until Part D).

Part A: Create a Django project (Task 1-3)

1. Create a django project name 'yourstudentid_name' for example: BCS2207001_Ahmad.
2. Create application named 'songlist'.
3. Set application into project.

Part B: Define Models. (Task 4)

4. Create all models based on the tables provided in the overview above with appropriate:
 - a. Model name
 - b. Field type and validation
 - c. Relationship / Key field

Part C: Create and apply migrations (Task 5-7)

5. Create initial migrations.
6. Apply migrations.
7. Show migrated fields Visual Studio Code application.

Part D: Implement CRUD operation in database (Task 8-18)

8. Open Django management command; interactive console.
9. Import models in interactive console.
10. **Insert** all objects into database using command prompt.
11. **Display** objects for all models using command prompt.
12. **Display** all tables and its objects using dbSqlite tool viewer in Visual Studio Code.
13. Terminate interactive console.
14. Add a new **field songstatus** in Song and set default value to '**Hit**'. Provide screenshot of models.py file.
15. **Update singerorigin** for The Calling to USA.
16. **Delete** object Camino Palmero in Album.
17. **Display** only Siti Nurhaliza information from table Singer.
18. Display all objects in all tables after executing all tasks until task 17.

Assessment Rubrics:

No.	Task	Marks	Mark Obtained
Part A : Create a Django project			
1	Create a django project name 'yourstudentid_name' for example: BCS2207001_Ahmad.	<input type="checkbox"/> Successfully create Django project.	1
2	Create a subproject name songlist.	<input type="checkbox"/> Successfully create application.	1
3	Set application into project.	<input type="checkbox"/> Correct application is set into Django project.	1
Total (Part A) :			/ 3
Part B : Define Models			
4	Create all models based on the tables provided in the overview above with appropriate: a) Model name	<input type="checkbox"/> Appropriate class name created. (Each class: 1m, Total: 3m)	3
	b) Field type and validation	<input type="checkbox"/> Appropriate data type and maximum length for appropriate field. (Each Class: 1m, Max: 3m)	3
	c) Relationship / Key field	<input type="checkbox"/> Correctly define key field. (Primary key and Foreign key, Total:4m)	4
Total (Part B) :			/ 10
Part C : Create and apply migrations			
5	Create initial migrations	<input type="checkbox"/> Apply command prompt to packaging up the models into individual migration files. (Each table: 1m, Max: 3m)	3
6	Apply migrations	<input type="checkbox"/> Apply command to execute all the tables of the installed apps are created in database file.	1

No.	Task	Marks		Mark Obtained
7	Show migrated fields Visual Studio Code application.	<input type="checkbox"/> Show tables' structures including its fields and their data types using SQLite Explorer tool.	1	
Total (Part B) :				/ 5
Part D: Implement CRUD operation in database (Task 8-18)				
8	Open Django management command; interactive console	<input type="checkbox"/> Able to activate interactive console.	1	
9	Import models in interactive console.	<input type="checkbox"/> Able to import all models in interactive console.	1	
10	Insert all objects into database using command prompt.	<input type="checkbox"/> Successfully insert objects into partial dependency tables using command prompt. (Each table: 1m, Total: 2m)	2	
		<input type="checkbox"/> Successfully insert objects into fully functional dependency table using command prompt.	2	
11	Display objects for all models using command prompt.	<input type="checkbox"/> Show inserted object in all tables using command prompt. (Each table: 0.5, Total:1.5m)	1.5	
12	Display all tables and its objects using dbSqlite tool viewer in Visual Studio Code.	<input type="checkbox"/> Provide screenshots for all tables containing at least one object using Visual Studio Code (Each table: 0.5, Total:1.5m)	1.5	
13	Terminate interactive console by using command prompt and provide screenshot.	<input type="checkbox"/> Provide screenshot of a successful terminating interactive console by using command prompt.	1	
14	Add a new field songstatus in Song and set default value to ' Hit '. Provide screenshot of models.py file.	<input type="checkbox"/> Provide screenshot of codings in models.py	1	
		<input type="checkbox"/> Provide screenshot showing updated field and its objects in table using Visual Studio Code.	2	
15	Update singerorigin for The Calling to USA.	<input type="checkbox"/> Provide screenshot of a successful command prompt to update object.	1	

No.	Task	Marks		Mark Obtained
16	Delete object Camino Palmero in Album.	<input type="checkbox"/> Provide screenshot of a successful command prompt to delete object.	1	
17	Display Display only Siti Nurhaliza information from table Singer.	<input type="checkbox"/> Provide screenshot of a successful command prompt to display specific object.	1	
18	Display all objects in all tables after executing all tasks until task 17.	<input type="checkbox"/> Provide correct screenshots for all tables and its objects after executing all tasks until task 17.	1	
Total (Part D) :				/ 17
Total Marks Earned				/ 35
Total Percentage (20%)				/ 20