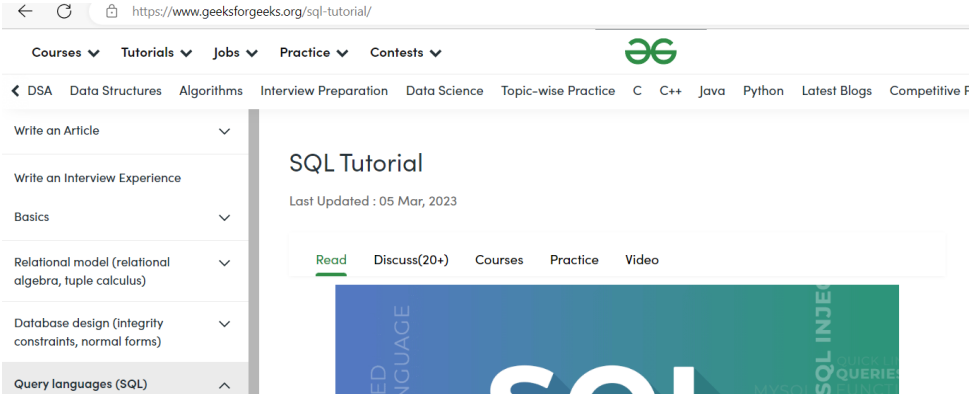# Assessment Criteria: (Activity 2.2 | Coding Fundamentals: Apply and Prove (Online & Workplace))

Behaviour Learning Outcome:

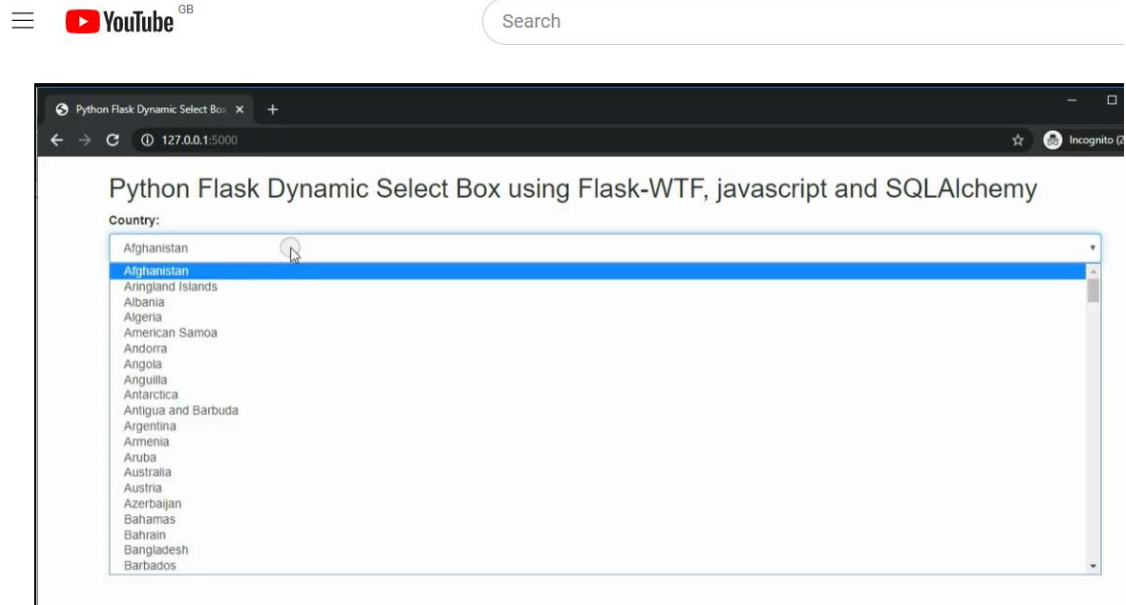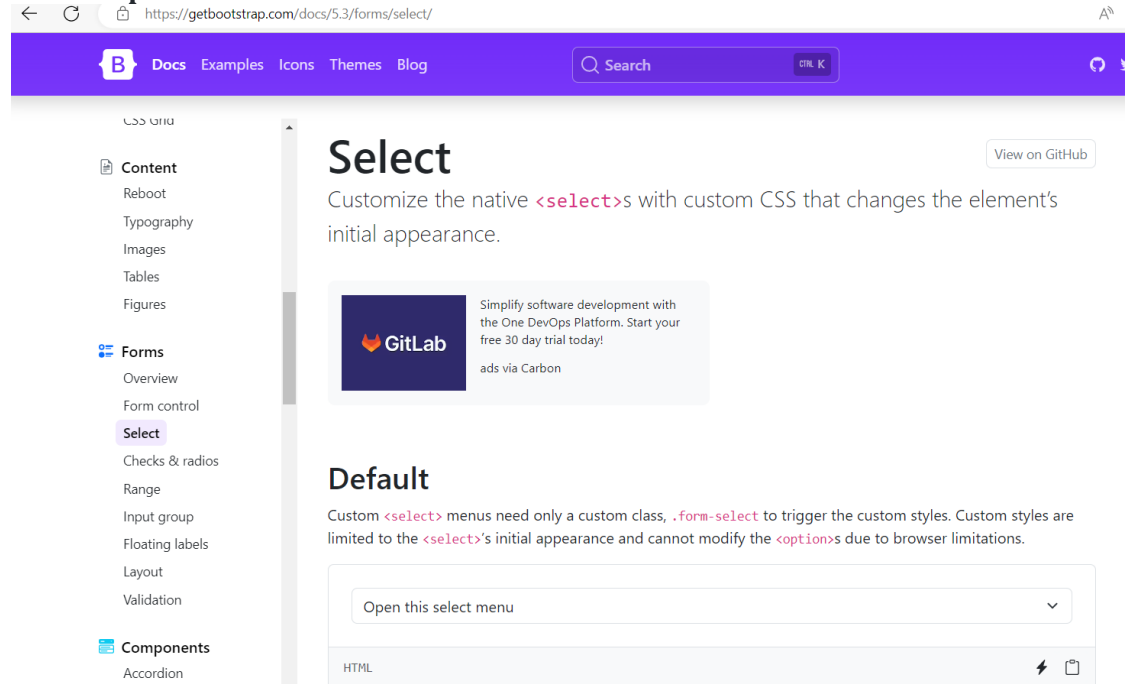|	
B1: Exhibits enthusiasm, openness and an aptitude	**Email exchange 1:** between my manager and myself. Hi Jonny, Can you please give me a python project/exercise on which I can work? This project will become a part of my main portfolio and is also one of the activities from QA. QA has given the below **Activity outline.** In this activity, you will: • Create a Python application that you will subsequently run through a basic CI pipeline. • Document the project context as well as the design of your application and pipeline. • Push your project to an appropriate repository. We recommend that you collaborate with your employer so that you can identify appropriate examples to use. We understand that some data may be sensitive, you are welcome to anonymise this. **Purvi Thakkar** | Jr DevOps Engineer **Email exchange 2:** between my manager and myself. Hi Jonny, Can we have a 10 min call anytime today? I want to share the progress and get insights if I am on the right path. **Purvi Thakkar** | Jr DevOps Engineer
B2: Invests time and effort in their own development	**Tutorials:** from geekforgeeks
B3: Displays a commitment to the mantra 'You build it, you run it'	

Skills Learning Outcome:

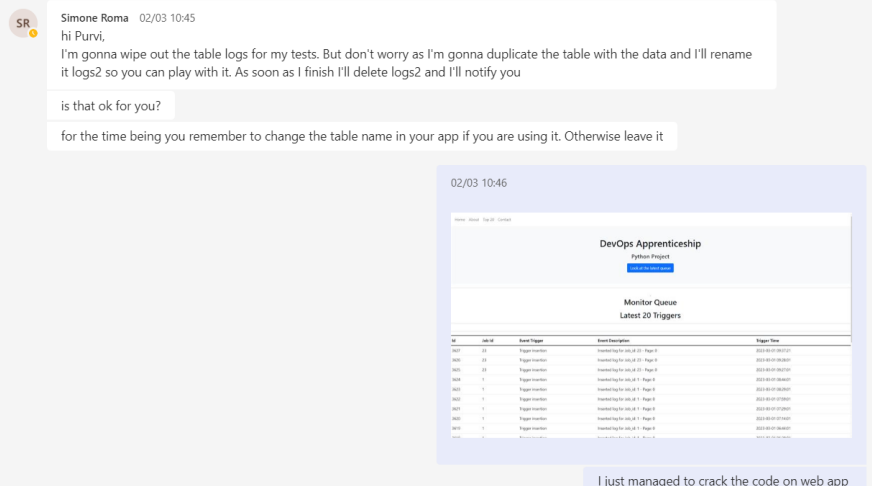| S16: Invest in continuous learning	**YouTube Videos:** **Bootstrap:**
S1: Communicate credibly	**Teams chat:** Topic – SQL database name

S8: Work in agile, multi-disciplinary .delivery teams	**Agile methodology** is an iterative and collaborative approach to software development that emphasizes flexibility, adaptability, and customer collaboration. I have chosen Scrum as my preferred methodology for this project: **Scrum:** Scrum is a popular agile framework for managing and completing complex projects. It involves a cross-functional team working together in short, time-boxed iterations called sprints, in my project its 1 week. My focus was to deliver a potentially shippable working code at the end of each sprint. Scrum emphasizes transparency, inspection, and adaptation through daily stand-up meetings, sprint planning, sprint review, and sprint retrospective meetings. **Delivery team:** **Jonny Gray - Manager**: Jonny gave me the project specification and the desired outcome at the end of the project. **Purvi Thakkar – Project Owner / Developer / Tester** **Simone Roma** – Simone was my touch point when I had a few questions regarding the database (on which I was working) **Rory Patten** – Rory was my touch point when I had a few python question.. **Collaboration:** 1. The objective of this project was to monitor queues from Monitor Database (SQL). 2. My role was to create a flask application that can connect to the SQL database and display the below on a web app: - Home page - About page - Top 20 – (Top20 displays the latest 20 queues from the current time) - Top 50 – (Top50 displays the latest 50 queues from the current time) - Top 100 – (Top100 displays the latest 100 queues from the current time) - Job Id – (Job Id takes input as job_id from the user using the GET method and displays all the queues for that job_id using the POST method) - Last week – (Last week displays all the queues for the last week from the current day/time) - Last 24 hours – (This page displays all the queues for the last 24 hours from the current day/time) - Contact page **Progress and Iteration:** 1. **Progress 1:** Create and run a simple application using flask and display web pages like home, about and contact us.

2. **Progress 2:** Connect to the database and view the top 20 queues on the Top20 web page.
3. **Progress 3:** Add the Top50 page to show the latest 50 queues from the Monitor database. Add the Top100 page to show the latest 100 queues from the Monitor database.
4. **Progress 4:** Job Id page added, which uses the GET method to take input from the user and displays the database as per user input using the POST method.
5. **Progress 5:** Run pytest to view all the functions running smoothly.
6. **Progress 6:** Install Pylint and run app.py - fix the issues – scored 10.00 /10.
7. **Progress 7:** Capture screenshots of all the pages
8. **Progress 8:** Create a Readme file to display project information.

Project artifacts:

User stories:	**As a user,** I want to view the latest triggers online quickly and easily. **So that** I can save time and avoid the hassle of going to the portal and tracking the latest queues.

In this user story, the users are the employees of S2R Analytics who need to track the latest triggers (queues). The user's goal is to save time and avoid the inconvenience of physically going to the database. This user story would be used to guide the development of a web app that meets the needs of busy employees.

Product Backlog.	
Sprint Board.	

	Project outcome:
S13: Engage in productive pair/mob programming	Email exchange between my manager and myself. **Subject:** Is your project in GitLab? If not, can you put it in the Prototype group and send me a link to the repo. Then I can prepare some feedback, recommendations, and the next set of requirements. I would like to build on this and have the App also update the Schedule. Many thanks, Jonny **Jonny Gray** | Founder & Solutions Lead PT **Purvi Thakkar** To Jonny Gray Hi Jonny, The project link is here: https://gitlab.com/s2ranalytics/prototyping/monitor-queues.git Thank you, and I look forward to the feedback and recommendation. **Purvi Thakkar** | Jr DevOps Engineer
S22: Incremental refactoring	**Teams chat:** Topic – Add more functionalities on the web app

S14:
 	
Write tests and follow Test Driven Development discipline
	Pytest: All Passed
	
	Run: Python tests in test_app.py
	
	✓ ⊘ ↓₂ ↓₂ Ī »» ✓ Tests passed: 10 of 10 tests – 40 ms
	
	> ✓ Test Results 40 ms C:\Users\PurviThakkar\PycharmProjects\pythonProject2\test
	
	`============================ test session starts ============================`
	`collecting ... collected 10 items`
	
	`test_app.py::test_home PASSED                                        [ 10%]`
	`test_app.py::test_about PASSED                                       [ 20%]`
	`test_app.py::test_contactus PASSED                                  [ 30%]`
	`test_app.py::test_top20 PASSED                                      [ 40%]`
	`test_app.py::test_top50 PASSED                                      [ 50%]`
	`test_app.py::test_top100 PASSED                                     [ 60%]`
	`test_app.py::test_jobid PASSED                                      [ 70%]`
	`test_app.py::test_getjob PASSED                                     [ 80%]`
	`test_app.py::test_hours24 PASSED                                    [ 90%]`
	`test_app.py::test_lastweek PASSED                                   [100%]`
	
	`============================ 10 passed in 0.14s ============================`
	
	`Process finished with exit code 0`
	
	Linting Score: The code has been rated at 10:00/10
	
	Terminal: Git Bash + ∨
	
	`Your code has been rated at 9.74/10 (previous run: 9.74/10, +0.01)`
	
	`(venv) PS C:\Users\PurviThakkar\PycharmProjects\pythonProject2> pylint app.py`
	
	`-------------------------------    -------------------------------`
	`Your code has been rated at 10.00/10 (previous run: 9.74/10, +0.26)`
	
	`(venv) PS C:\Users\PurviThakkar\PycharmProjects\pythonProject2>`
| S20:<br><br>Writing code<br><br><br>S17:<br><br>Code in a general purpose programming language | **App.py**<br><br>```
1   """ IMPORT FLASK , RENDER TEMPLATE AND REQUEST
2   from flask import Flask, render_template, requ
3   from variable import cursor
4
5   app = Flask(__name__)
6
    ▲ Purvi Thakkar *
7   @app.route("/")
8   def home():
9       """ Home page function"""
10      return render_template("home.html")
11
12
    ▲ Purvi Thakkar *
13  @app.route("/about")
14  def about():
15      """ About page function"""
16      return render_template("about.html")
17
18
    ▲ Purvi Thakkar *
19  @app.route("/contactus")
20  def contactus():
21      """ Contact page function"""
22      return render_template("contactus.html")
``` |

S11:	My unit test kept failing, and then I tried pytest, which failed a few times. Then I googled the error and tried a couple of solutions I found of stack overflow. Finally, the tests were passed.
Employ a systematic approach to solving problems	**Failed:**

Failed:

```
❌ Tests failed: 1 of 1 test – 0 ms

test_app.py::test_home FAILED                                    [100%]
test_app.py:0 (test_home)
pytestconfig = <_pytest.config.Config object at 0x000001C75B86FF10>

    def test_home(pytestconfig):
>       response = pytestconfig.get("/")
E       AttributeError: 'Config' object has no attribute 'get'

test_app.py:2: AttributeError



============================== 1 failed in 0.26s ==============================

Process finished with exit code 1
```

Passed:

```
Run:    Python tests in test_app.py ×
▶  ✓ ⊘  ↓ᵃ↓ᶻ  ≡    »  ✓ Tests passed: 10 of 10 tests – 40 ms
 >  ✓ Test Results        40 ms    C:\Users\PurviThakkar\PycharmProjects\pythonProject2\test

                                   ============================== test session starts ==============================
                                   collecting ... collected 10 items

                                   test_app.py::test_home PASSED                              [ 10%]
                                   test_app.py::test_about PASSED                             [ 20%]
                                   test_app.py::test_contactus PASSED                         [ 30%]
                                   test_app.py::test_top20 PASSED                             [ 40%]
                                   test_app.py::test_top50 PASSED                             [ 50%]
                                   test_app.py::test_top100 PASSED                            [ 60%]
                                   test_app.py::test_jobid PASSED                             [ 70%]
                                   test_app.py::test_getjob PASSED                            [ 80%]
                                   test_app.py::test_hours24 PASSED                           [ 90%]
                                   test_app.py::test_lastweek PASSED                          [100%]

                                   ============================== 10 passed in 0.14s ==============================

                                   Process finished with exit code 0
```

Thank you