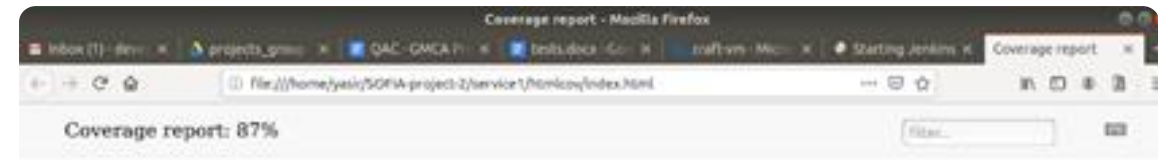




## Testing

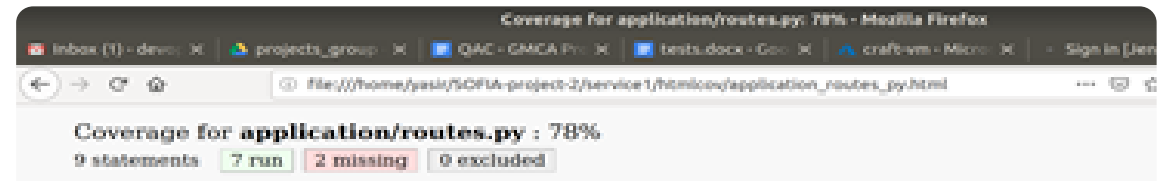
- . Unit testing and integration testing using pytest and selenium.
- . Coverage reports and percentages

# Integration testing Service One



Module /	statements	missing	excluded	coverage
application/_init_.py	8	0	0	100%
application/models.py	6	1	0	83%
application/routes.py	9	2	0	78%
<b>Total</b>	<b>23</b>	<b>3</b>	<b>0</b>	<b>87%</b>

coverage.py v5.1, created at 2020-03-04 00:23



```
1 From flask import render_template
2 from application import app, db
3 from application.models import result
4 import requests
5
6 @app.route('/')
7 @app.route('/home', methods=['GET', 'POST'])
8 def home():
9     # response = requests.get("URL")
10    response = requests.get("http://localhost:8080/generator/")
11    random = response.text
12
13    # db.session.add(random)
14    # db.session.commit()
15
16    # print (random)
17
18    # @staticmethod/def __new__(cls, *args, **kwargs):
19    return render_template("home.html", random=random, title="Home")
```

index coverage.py v5.1, created at 2020-03-04 00:23

# Unit Testing Service Two

Coverage report - Mozilla Firefox

file:///home/yasin/SOFA-project-2/service2/htmlcov/index.html

coverage report: 100%

file	statements	missing	excluded	coverage
location/_init_.py	4	0	0	100%
location/routes.py	6	0	0	100%
total	10	0	0	100%

run on v3.1, created at 2020-05-03 22:06

Coverage for application/routes.py: 100% - Mozilla Firefox

file:///home/yasin/SOFA-project-2/service2/htmlcov/application\_routes\_py.html

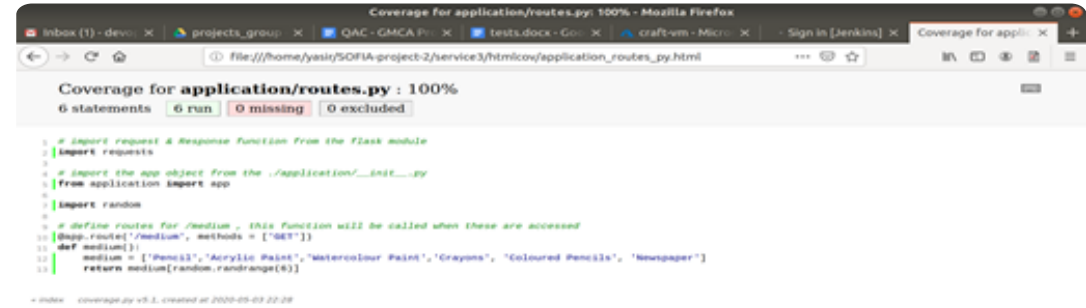
Coverage for **application/routes.py** : 100%

6 statements 6 run 0 missing 0 excluded

```
1 from application import app
2 import random
3 import requests
4
5 @app.route('/colour', methods=['GET'])
6 def colour():
7     #an array of colours
8     listofcolours = ['Red', 'yellow', 'Pink', 'Blue', 'orange', 'Purple', 'green']
9     #random colour from the array of colours is chosen
10    return listofcolours[random.randrange(7)]
```

index coverage.py v3.1, created at 2020-05-03 22:06

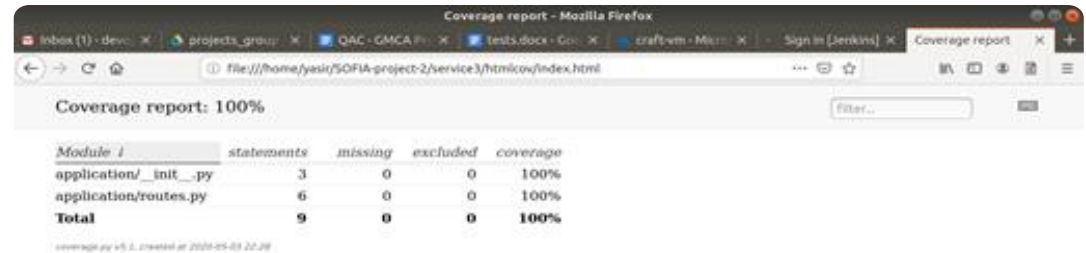
# Unit Testing Service Three



Coverage for application/routes.py: 100%  
6 statements 6 run 0 missing 0 excluded

```
1 # Import request & Response Function from the Flask module
2 import requests
3
4 # Import the app object from the ./Application/_init_.py
5 from application import app
6
7 import random
8
9 # Define routes for /medium, this function will be called when these are accessed
10 @app.route('/medium', methods = ["GET"])
11 def medium():
12     medium = ['Pencil', 'Acrylic Paint', 'Watercolour Paint', 'Crayons', 'Coloured Pencils', 'Newspaper']
13     return medium[random.randrange(6)]
```

coverage.py v5.1, created at 2020-05-03 22:28



Coverage report: 100%

Module /	statements	missing	excluded	coverage
application/_init_.py	3	0	0	100%
application/routes.py	6	0	0	100%
<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>100%</b>

coverage.py v5.1, created at 2020-05-03 22:28

# Unit Testing Service Four

Coverage report - Mozilla Firefox

File:///home/yasir/SOFIA-project-2/service4/htmlcov/index.html

Coverage report: 20%

Module /	statements	missing	excluded	coverage
application/_init_.py	3	0	0	100%
application/routes.py	105	86	0	18%
<b>Total</b>	<b>108</b>	<b>86</b>	<b>0</b>	<b>20%</b>

coverage.py v5.1, created at 2020-05-03 22:02

Coverage for application/routes.py: 78% - Mozilla Firefox

File:///home/yasir/SOFIA-project-2/service1/htmlcov/application\_routes\_py.html

Coverage for **application/routes.py** : 78%

9 statements 7 run 2 missing 0 excluded

```
1 from flask import render_template
2 from application import app, db
3 from application.models import result
4 import requests
5
6 @app.route("/")
7 @app.route("/home", methods=['GET', 'POST'])
8 def home():
9     # response = requests.get('URL')
10    response = requests.get('http://service4:5003/generator')
11    random = response.text
12
13    # db.session.add(random)
14    # db.session.commit()
15
16    # print (random)
17
18    # d209a358e24e9189804920b7749ae3f2be5345a9
19    return render_template("home.html", random=random, title="Home")
```

index coverage.py v5.1, created at 2020-05-04 00:25