

ASSIGNMENT 1

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1. Create registration page in html with username, email and phone number and by using POST method display it in next html page.

Register.html

```
<html>

<head>

    <title> Registration Page</title>

    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

</head>

<body>

    <h1>Registration Page</h1>

    <form action="Register.php" method="POST">

        <label for="User Name">User Name:</label>

        <input type="text" name="User Name"> <br/>

    <br/>

        <label for="Email">Email:</label>

        <input type="Email" name="Email"> <br/>

    <br/>

        <label for="Phone Number">Phone Number:</label>

        <input type="Phone Number" name="Phone Number"> <br/>

    <br/>

        <input type="submit" value="Register!">

    </form>
```

</body>

</html>

Register.php <?php

echo "You have submitted, User Name: " . \$_POST['User Name'] . ", Email: " . \$_POST['Email']. " and
Phone Number: " . \$_POST['Phone Number'];

?>

2. Develop a flask program which should contain at least 5 packages used from pypi.org.

```
import os
import shutil
import pytest
from flask import render_template,
render_template_string, request
from jinja2.exceptions import
TemplateNotFound
from jinja2.sandbox import SecurityError
from werkzeug.test import Client
from CTFd.config import TestingConfig
from CTFd.utils import get_config, set_config
from tests.helpers import
create_ctfd, destroy_ctfd, gen_user, login_as_user

def test_themes_run_in_sandbox():
    app = create_ctfd()
    with app.app_context():
        try:
            app.jinja_env.from_string(
                "{{ (__class__.__bases__[0].__subclasses__()[40]('./test_utils.py')).read() }}"
            ).render()
        except SecurityError:
            pass
    except:
        pass

    Exception as e:
        raise e

    destroy_ctfd(app)

def test_themes_cant_access_configpy_attributes():
```

```

app = create_ctfd()

with app.app_context():

    assert app.config["SECRET_KEY"] == "AAAAAAAAAAAAAAAAAAAAAA"

    assert (

        app.jinja_env.from_string("{ { get_config('SECRET_KEY') } }").render()

## ... source file abbreviated to get to Flask examples ...

        r = client.get("/challenges")          assert

r.status_code == 200          assert "Challenges" in

r.get_data(as_text=True)          r =

client.get("/scoreboard")          assert r.status_code ==

200          assert "Scoreboard" in

r.get_data(as_text=True)    destroy_ctfd(app) def

test_that_request_path_hijacking_works_properly():

app = create_ctfd(setup=False, application_root="/ctf")

assert app.request_class.__name__ == "CTFdRequest"

with app.app_context():

    with app.test_request_context("/challenges"):

assert    request.path    ==    "/ctf/challenges"

destroy_ctfd(app)

app = create_ctfd()          assert

app.request_class.__name__ == "CTFdRequest"    with

app.app_context():          with

app.test_request_context("/challenges"):

    assert request.path == "/challenges"    from flask

import Flask    test_app = Flask("test")    assert

```

```

test_app.request_class.__name__ == "Request"      with
test_app.test_request_context("/challenges"):
    assert request.path == "/challenges"
destroy_ctfd(app)                                def
test_theme_fallback_config():                    class
ThemeFallbackConfig(TestingConfig):
THEME_FALLBACK = False                          app =
create_ctfd(config=ThemeFallbackConfig)
    try:
        os.mkdir(os.path.join(app.root_path, "themes", "foo_fallback"))
except OSError:
    pass
    with
app.app_context():
    app.config["THEME_FALLBACK"] = False
set_config("ctf_theme", "foo_fallback")          assert
app.config["THEME_FALLBACK"] == False
    with app.test_client() as client:
        try:
r = client.get("/")

```