

COMP0034 2023/24 Coursework 2 (Individual)

Coursework content

1. Application code

The application codes run well.

2. Test code

Supporting evidence:

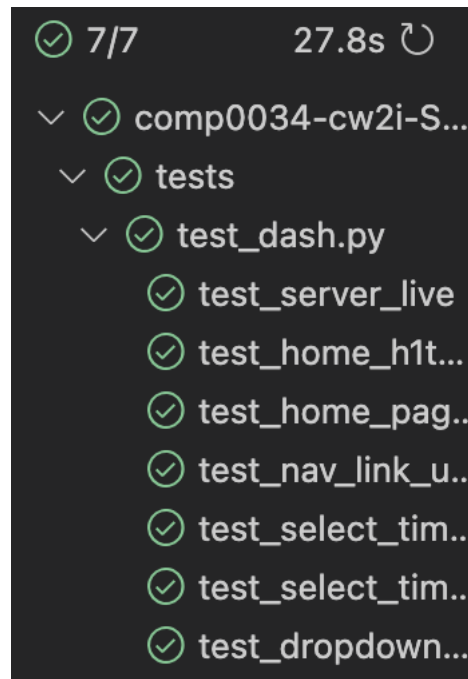


Figure 1. Evidence of test codes passed

3. Tools and techniques

Source code control URL: <https://github.com/ucl-comp0035/comp0034-cw2i-SHOX1ie.git>

I demonstrated every commit in github source control for good descriptions of what I did.

Set-up instructions:

```
# COMP0034 2023/24 Coursework 2 starter repository (Dash App)

## Set-up
1. Create and activate a virtual environment in the project folder e.g.
   - MacOS: `python3 -m venv .venv` then `source .venv/bin/activate`
   - Windows: `py -m venv .venv` then `.venv\Scripts\activate`

2. Check `pip` is the latest versions: `pip install --upgrade pip`

3. Install the requirements.
   - e.g. `pip install -r requirements.txt`

4. Install the paralympics app code e.g. `pip install -e .`

## Running the apps in the src directory
- Run the `app.py` file using Python.
  - e.g.: `python src/app.py`.
  The Dash app should now be running on your localhost. Open a web browser and enter the URL provided in the terminal to view the app.
  This Dash app contains 4 pages: Home, Undergraduate, Postgraduate and Analysis. Each of them contains interactive charts.

## Running the tests in the tests directory
- Execute the tests with pytest when the server is running:
  - e.g.: `pytest`
  The test runner will discover and execute all test functions defined in the `tests` directory.
```

Figure 2. Instructions in README.md

```
[project]
name = "comp0034-cw2i-SH0X1ie"
version = "1"
description = "COMP0034 Coursework 2: A Dash application for data analysis and visualization."
dependencies = [
    # Ommitted - see requirements.txt
]

[build-system]
requires = ["setuptools", "setuptools-scm"]
build-backend = "setuptools.build_meta"

[tool.setuptools.packages.find]
where = ["src"] # list of folders that contain the packages (["."] by default)
exclude = ["tests"]

[tool.pytest.ini_options]
addopts = "-v"
testpaths = ["tests",]
```

Figure 3. pyproject.toml

Dependency management:

```
# For Dash apps
dash
dash-bootstrap-components
pandas
requests
# For testing
pytest
selenium
# pytest-flask
pytest-cov
# Dash testing may need to be escaped: dash\[testing]
# see https://dash.plotly.com/testing
dash[testing]
```

Figure 4. requirement.txt

4. Reference

Acknowledgement of the use of AI:

Name: Github Copilot

Publisher: Github

Copilot helps me to find make simple description of codes and give me suggestions for some errors. That saves a lot of time for describing and explaining my codes.

Reference of dataset:

<https://explore-education-statistics.service.gov.uk/find-statistics/initial-teacher-training-performance-profiles#releaseHeadlines-tables>