Assignment 3: Swiftcart Docker Containerization – Brief Report

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BDV 102: Interactivity and Databases

The primary goal for the third and last assignment was to docker containerization of the functional e-commerce backend created in the two previous assignments. In this report, I will present the source code, Dockerfile, docker-compose.yml file with the OpenAPI specification used for testing along with step-by-step build and run instructions for the docker implementation.  
**Source code** (or link to your GitHub repo).

1. **Dockerfile**
   * The file you created above.
2. **docker-compose.yml**
   * The file for running locally.
3. **Screenshot** of your Docker Hub repository containing the pushed image.
4. **OpenAPI specification** used for testing.

Additionally, in your **write-up (1–2 pages)**, be sure to address:

* **Step-by-step build and run instructions**:
  1. Clone the repo.
  2. Ensure .env is created (optional, if you rely on docker-compose.yml environment).
  3. docker-compose up --build or docker run ... -e ...
  4. Visit http://localhost:3000 or whichever route for your endpoints.
* **Explanation of Dockerfile**: what each instruction does (FROM, WORKDIR, COPY, RUN, EXPOSE, CMD).
* **Explanation of docker-compose.yml**: how environment variables are set, how the service is exposed, etc.
* **Push to Docker Hub**: show the commands you ran (docker build -t ..., docker push ...).

Lastly, here the GitHub link for this project, <https://github.com/danielmason89/bdv_102_capstone_project_part_2_documentation_daniel_mason/tree/main>.

*References*