HW3: Improve a pipeline

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Welcome to **Not Another List App** ↗ **(https://gitlab.com/c3334/not-another-list-app)**, a multi-container app with a React frontend, Python FastAPI Backend w/Alchemy, and a MySQL database. Your task is to make improvements to the CICD pipeline for this app.

Collaboration policy: You may assist your classmates for part 1 and part 2 in the form of hints and/or technical support. Don't cross the line of doing it all for someone. Part 3 is on your own. List your collaborators in your final submission.

Setup

First, clone the repository to your local development environment. Get the app running locally using docker-compose as instructed in the README. Create a branch with your name in it and work on the following steps. Use regular git commits. After each step, push your branch to GitLab. After the last step, submit a merge request.

Keep in mind that working through errors and issues is part of the assignment. Even if something doesn't work out, you will still receive (generous) partial credit for documenting your good faith effort to solve the issue. Don't be afraid to try something out.

[15 points] Part 1

Add a stage in the gitlab-ci.yml file for Hadolint, a **Dockerfile linter** ↗ **(https://github.com/hadolint/hadolint)**. You can test the linter locally but you need to add it into the pipeline stages. Hint: there may be handy Hadolint container registry entries that can make this step pretty smooth.

Update: try to fix some of the easier reported issues if you can, but no worries if you don't know how. If it's running, you win.

[15 points] Part 2

Add a stage in the gitlab-ci.yml file for **sql-lint** ↗ **(https://github.com/joereynolds/sql-lint)**. A link to the docs is at the very bottom of the README. You'll need to find a way to install the linter *in the GitLab CICD pipeline* and then run it against the .sql files in the project.

Update: try to fix some of the easier reported issues if you can, but no worries if you don't know how. If it's running, you win.

[20 points] Part 3

Choose your own adventure. Enhance the pipeline in a nontrivial way. You can choose from the list below for initial ideas, or use your own. You will be graded on success and perceived effort.

- add a deploy stage to **Heroku** ⬈ **(https://devcenter.heroku.com/articles/build-docker-images-heroku-yml#heroku-yml-overview)** or some other production environment
- add in some **security/compliance** ⬈ **(https://docs.gitlab.com/ee/user/application_security/configuration/index.html)** checks (keep in mind the scope of the application)
- [your great idea here]

Submission and help

Use Slack for help and feel free to help your classmates (without giving away *everything*) for parts 1 and 2. To Canvas, submit a link to your merge request and a summary document of your progress/results for parts 1-3. Make sure your effort for part 3 is documented clearly, and your resources cited.

Points	50
Submitting	a text entry box, a website url, or a file upload

Due	For	Available from	Until
Jun 15	Everyone	-	-

+ **Rubric**