SE-441 Continuous Delivery and DevOps
Winter 2018-2019
Homework 5
Due On: February 21, 2019
50 points

Submit your assignment to D2L by February 21, 2019.

Assignment

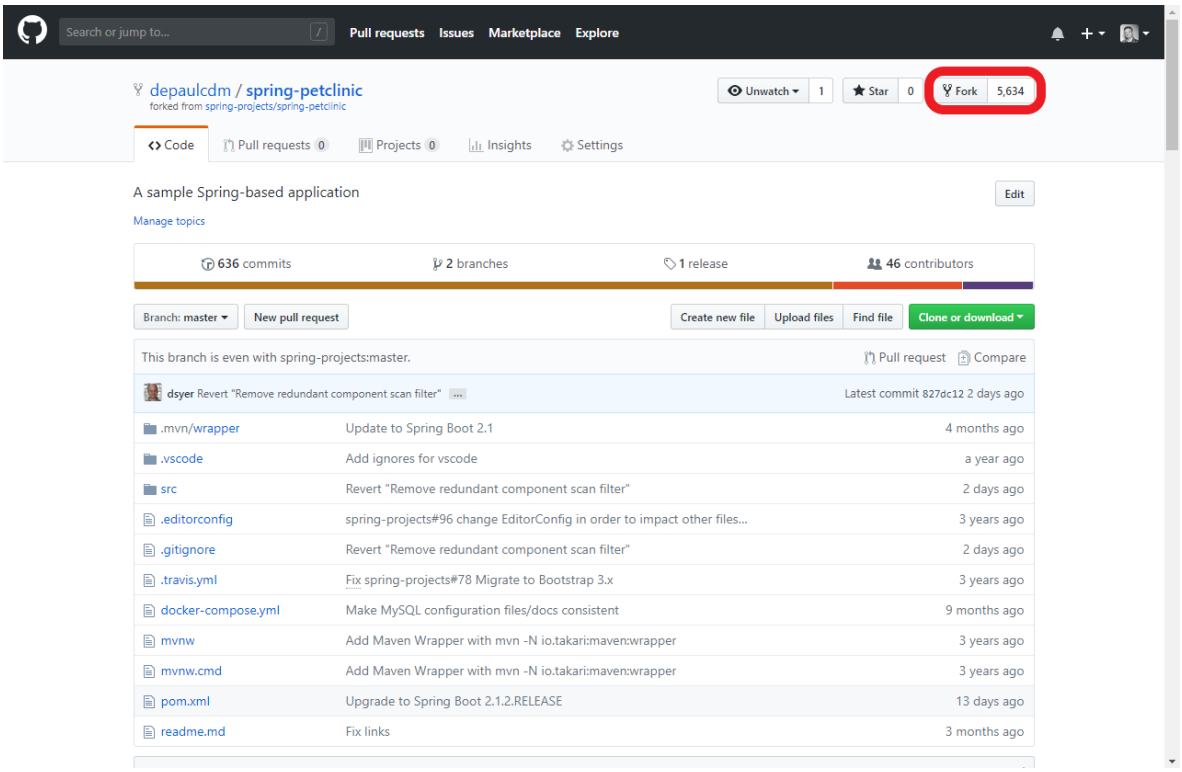
You will create a Travis CI project and attach it to a Github repository. Make sure you look over the entire assignment and the deliverables before you begin.

Fork the Spring PetClinic Github Repo

You need to create a remote repository, but I don't want your changes being added back into my repository each time you do a commit. In this exercise you'll create a fork of my Github repo for your own use.

1. Go to the public repo of your course project:
   `https://github.com/depaulcdm/spring-petclinic`

2. Click the "Fork" button:



3. When prompted, choose your account from the popup dialog. For example, when I attempt to fork a repository, I'm presented with the following dialog.[1]

This will create a copy of the repository in your Github account. You can now work on it independent of the original repository.

4. Clone your forked repository.

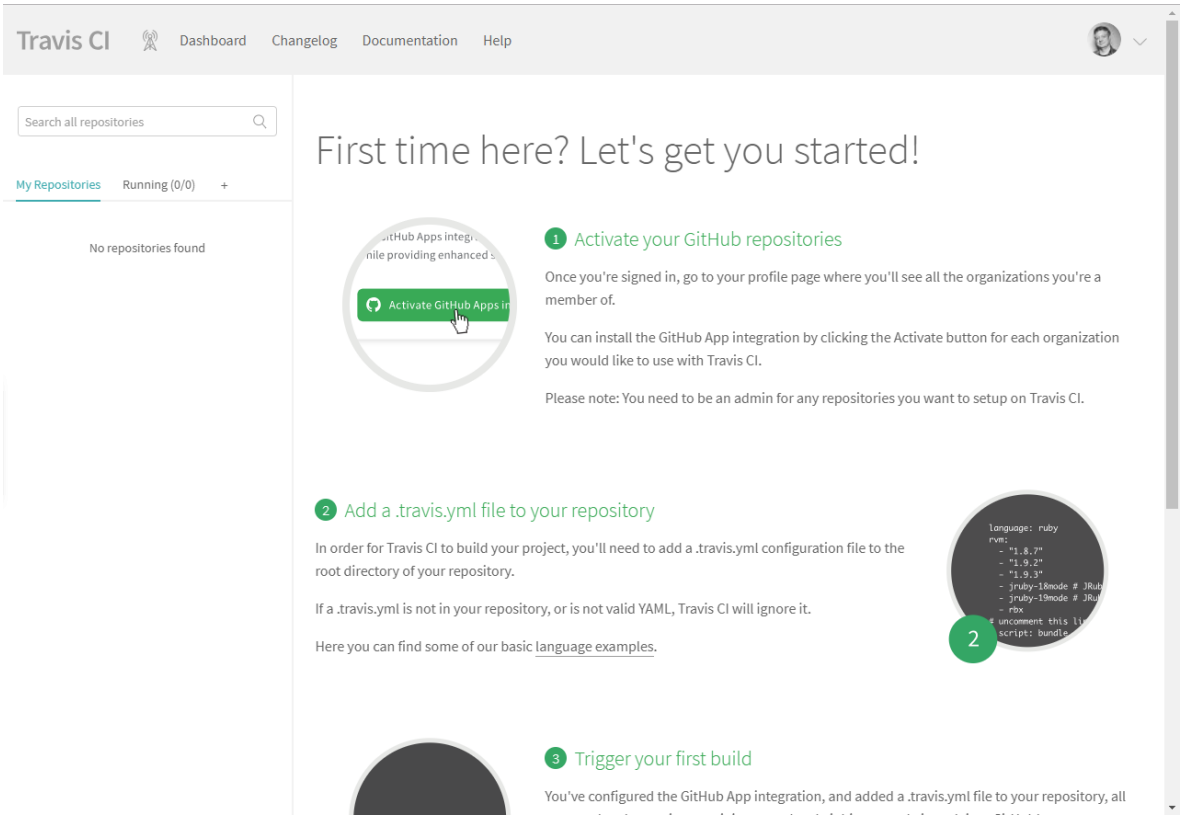
5. Verify that you can build and start the application using the instructions in the `readme.md`.

[1] My dialog may look different from yours since we each belong to different Github accounts and organizations.

Create a Travis-CI Account

1. Go to the Travis website at:
   `https://travis-ci.org`.

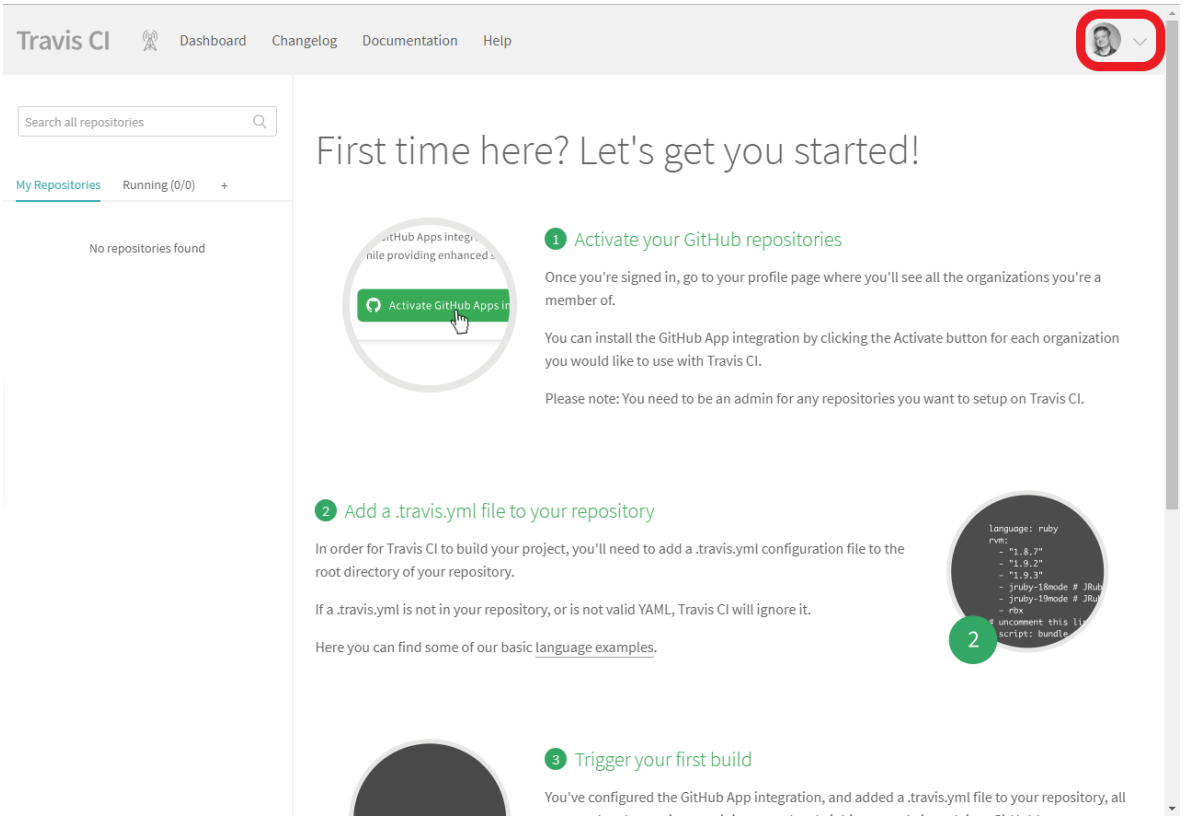
2. Sign in with your Github account. After signing in for the first time, you will be presented with the 'Getting Started' page:



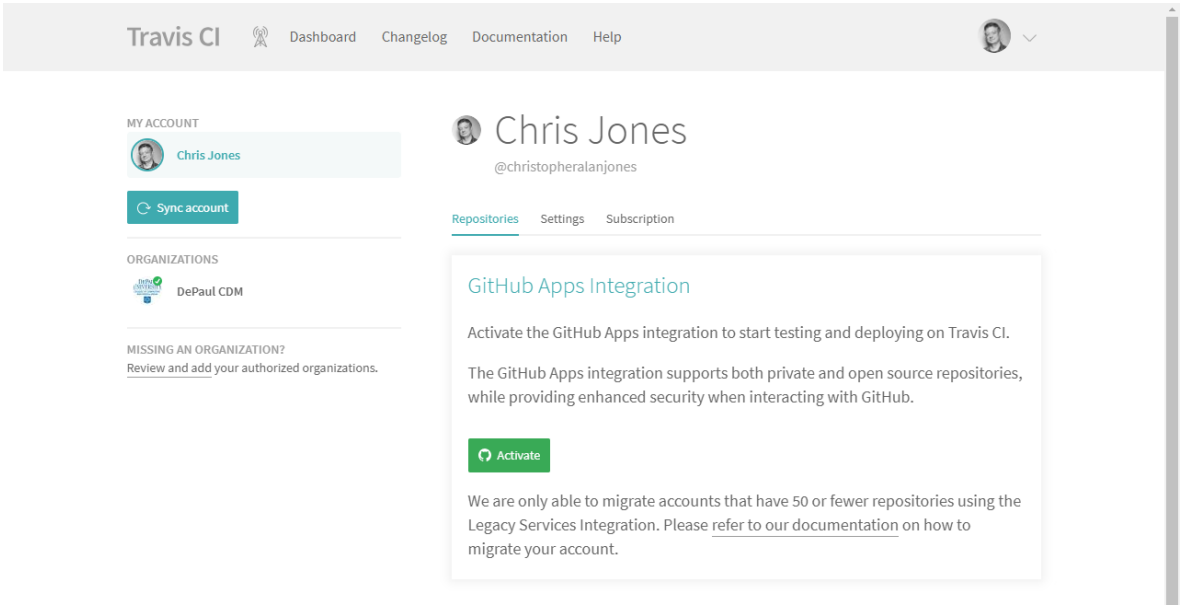
Take a few minutes to read over the Getting Started page to understand the workflow required to get your project building under Travis CI.

Add the Repository

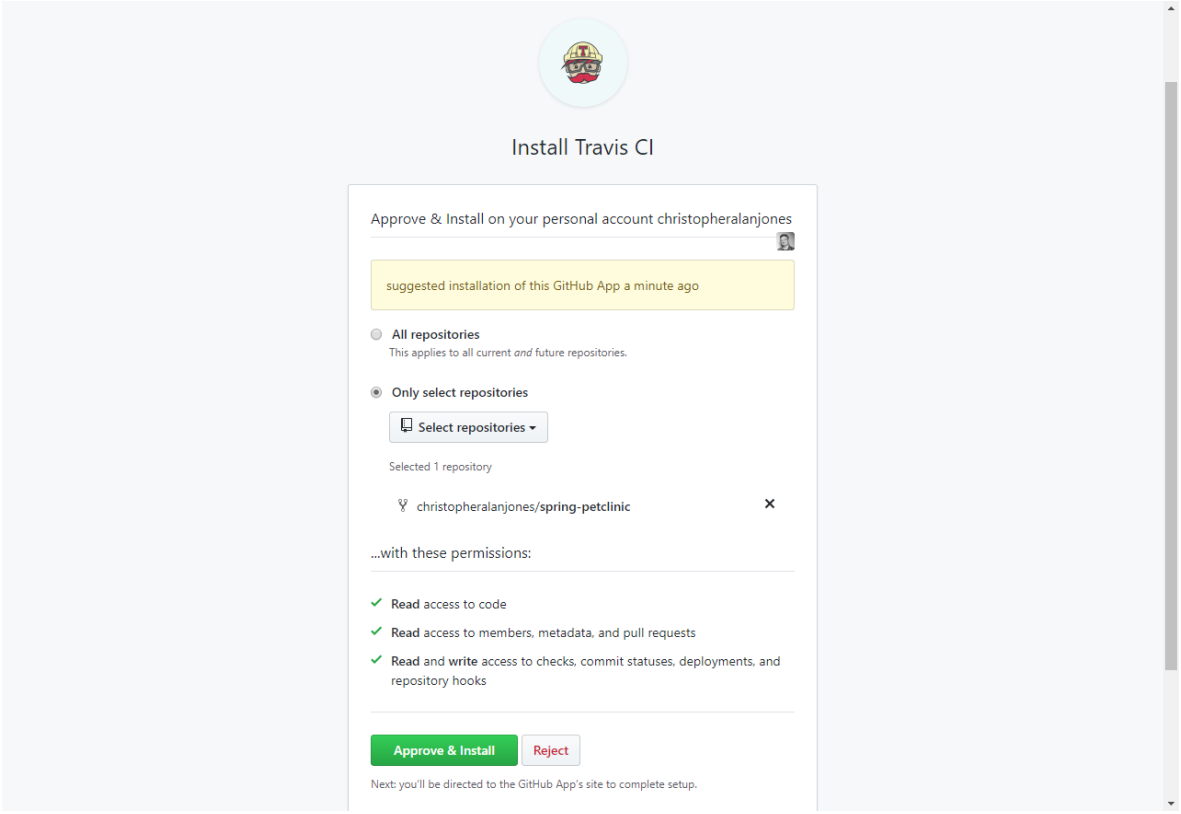
1. Go to your 'Accounts' page by clicking on the icon in the upper left-hand corner:



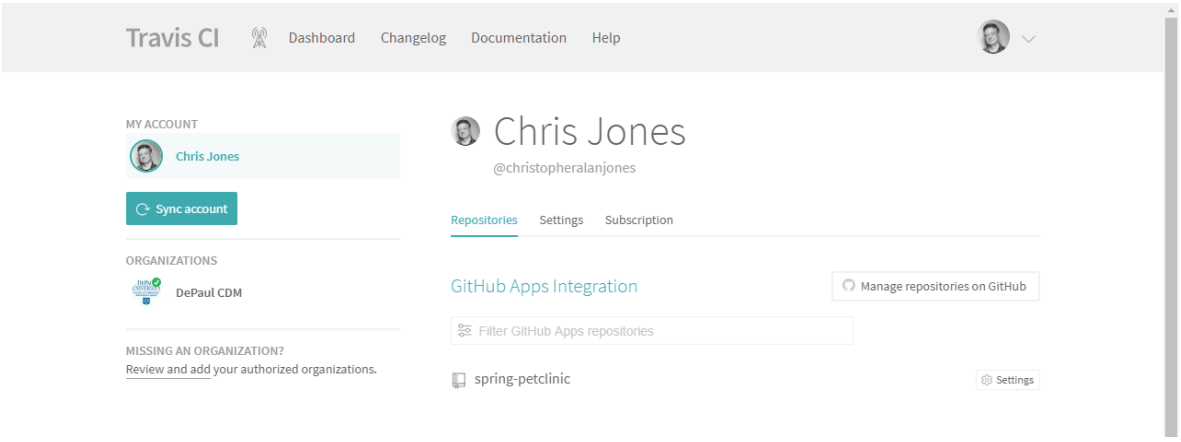
2. If this is your first time here, you will need to activate your Github integration by clicking the 'Activate' button in the 'Github Apps Integration' page:



3. Select the repositories to which you want Travis CI to have access. In the example below, I have selected only the forked Spring PetClinic repository, but you may make your own selection as long as they include your own Spring PetClinic repository.

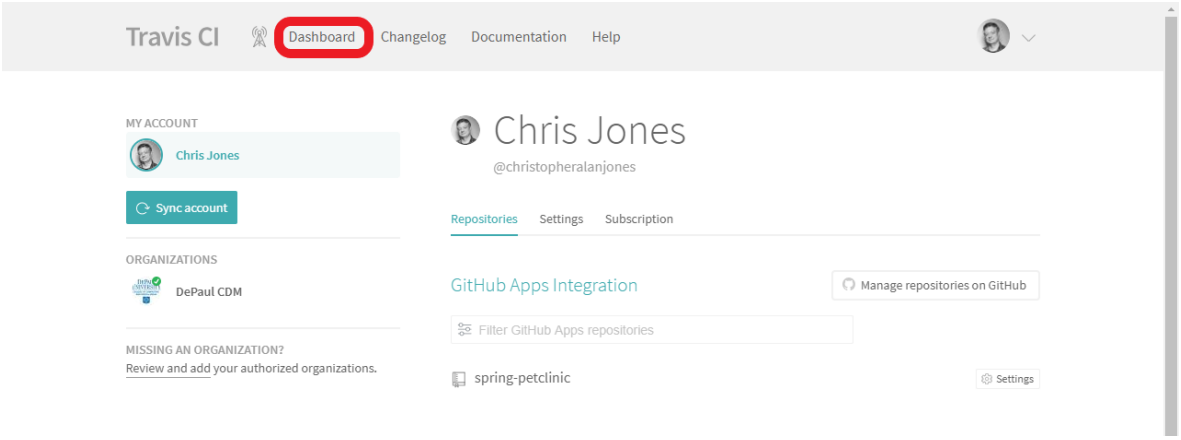


4. Once you have made your selections, click the 'Approve & Install' button. Once the activation process is complete for your choose repositories you will be returned to Travis CI where you will see a list of the repositories you selected.

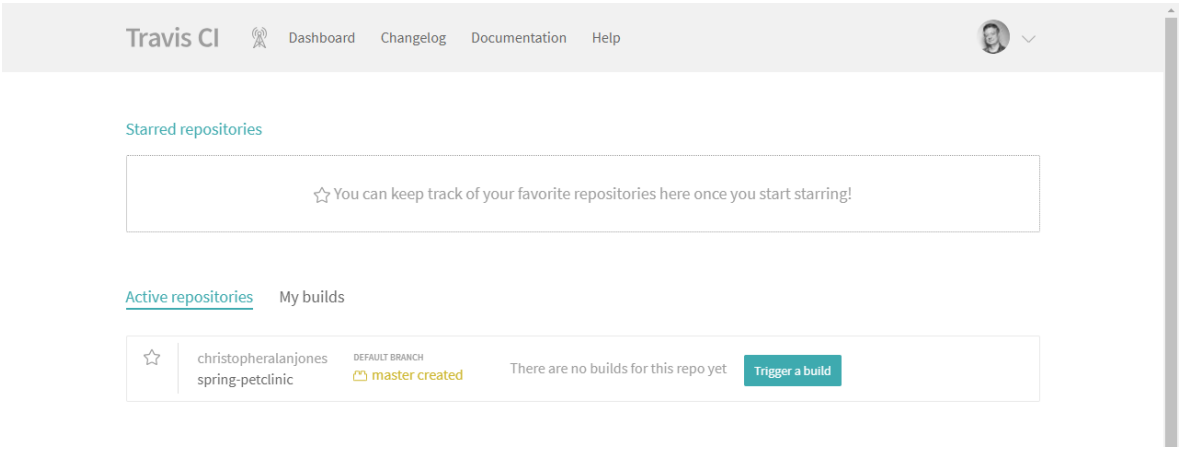


Note: If you don't see your Spring PetClinic repository listed, it's likely that it is a private repository. Change the repository to be public in Github and click the 'Sync account' button.

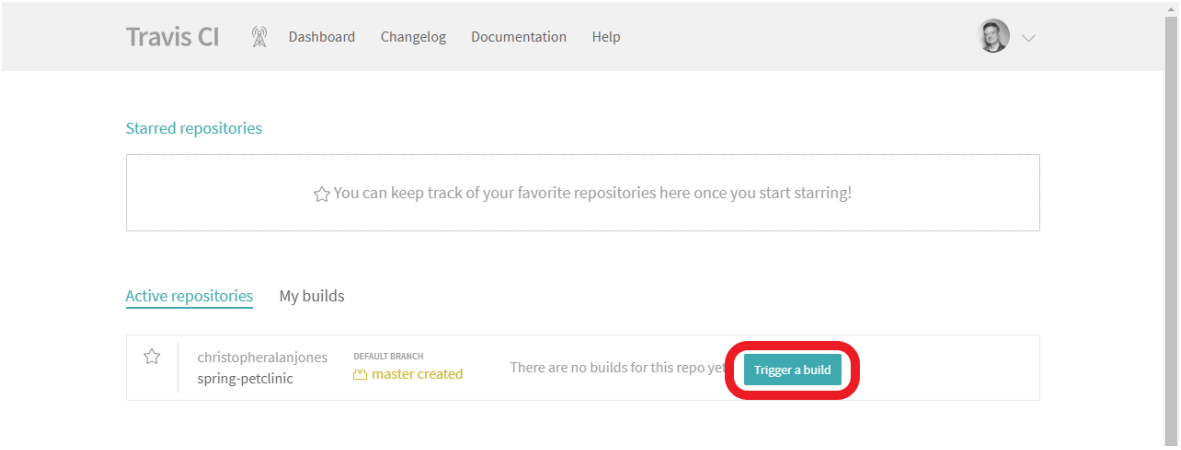
5. Click the 'Dashboard' link.



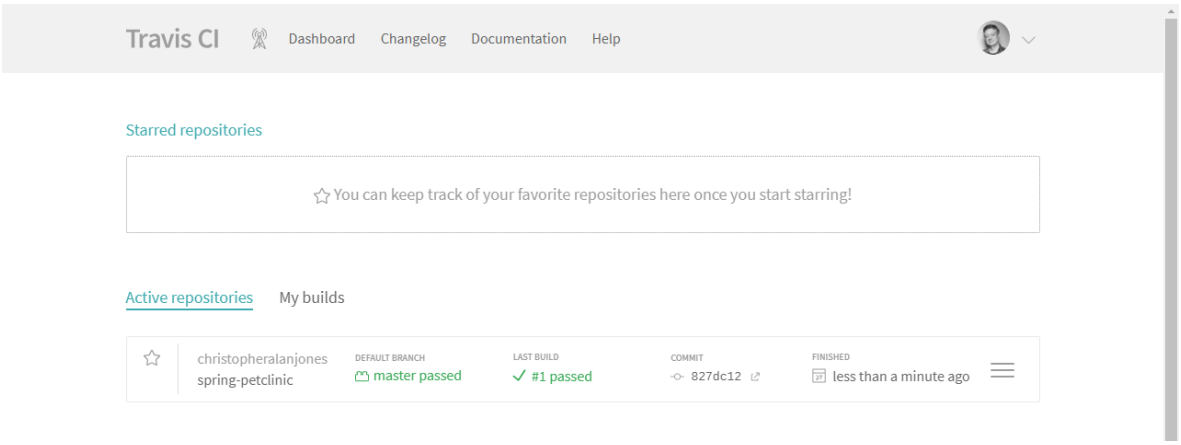
You'll be taken to the dashboard for your account.



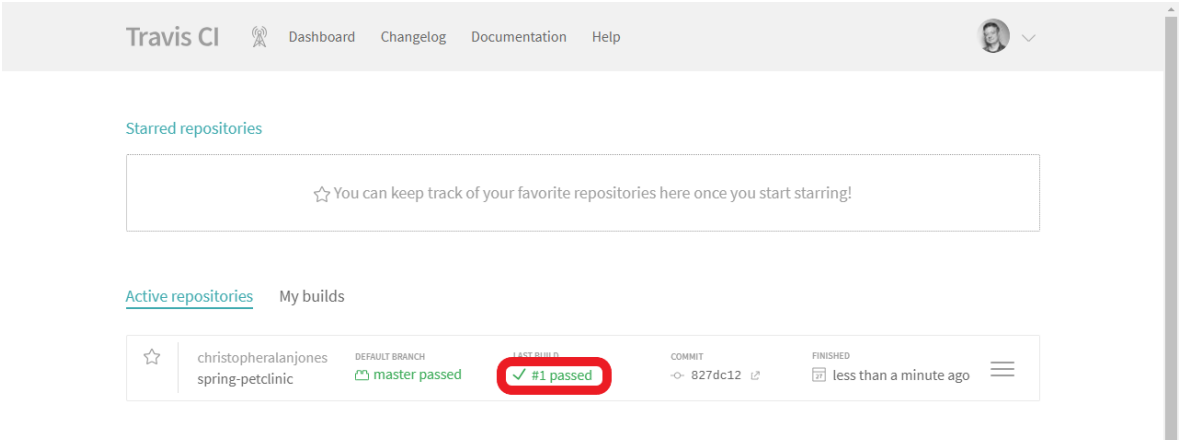
6. Trigger a manual build by clicking the 'Trigger Build' button.



After a few minutes you should see that the build successfully passed.

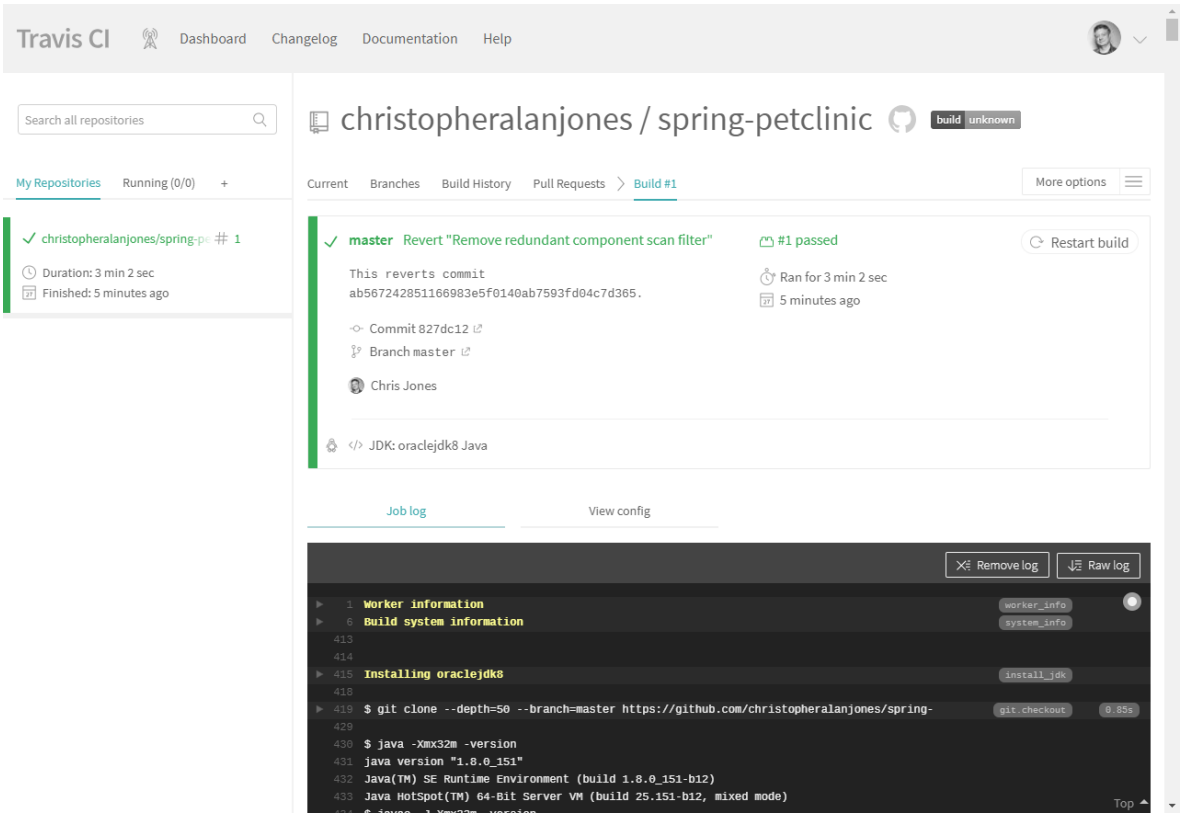


7. View the latest build's details by clicking the link for the build number.



You'll be taken to the details of the build including the text of the individual steps that were performed.

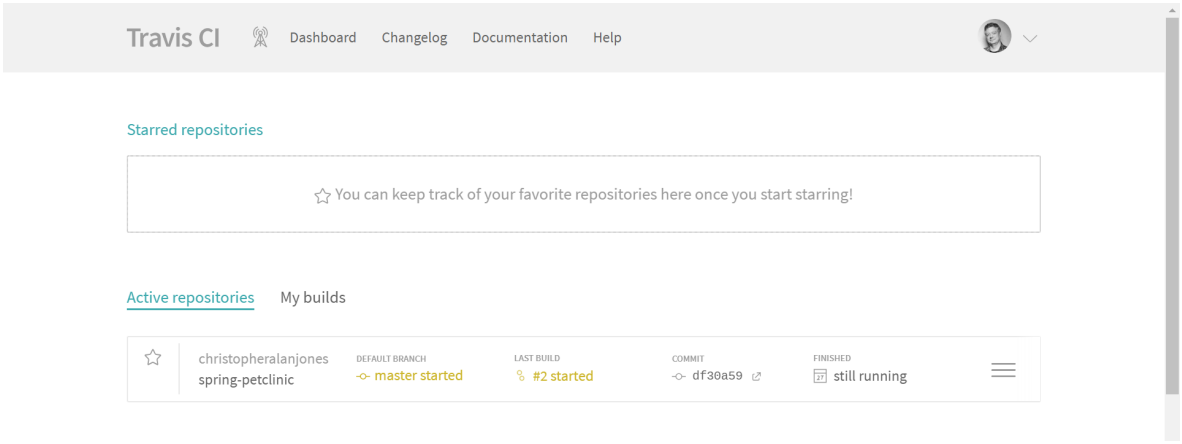
Note: Notice that Travis CI is automatically detecting the POM file and performing a couple of build tasks including compiling, installing, and running the tests.



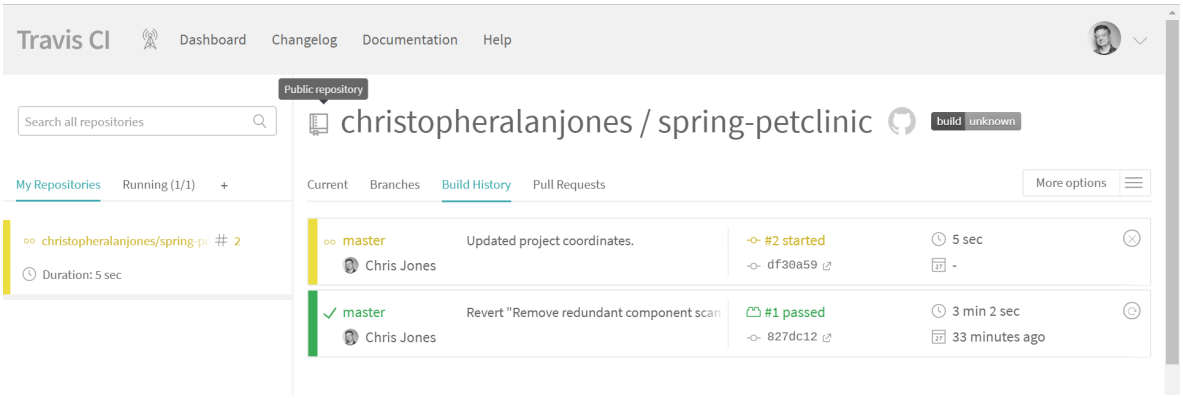
8. Update the 'build status' link in line 1 of the `readme.md` to refer to the URL for your Travis CI application so that it shows the status of your build of the project.

9. Update the group ID in the Maven POM file to be `edu.depaul.cdm.se441`. Verify that you can build and start the application using the instructions in the `readme.md`.

10. Commit the change to the Spring PetClinic repo and push it to Github. Wait a few minutes and then return to your dashboard in Travis CI. You should see your build either running or complete:



You can also see the build in Travis CI's application's details:



11. Force your build to fail by commenting out the Maven coordinates in the POM file. Commit and push your changes to Github. Go to Travis CI and wait for the next build to fail.

12. Fix the build and push the fix to Github. Go to Travis CI and wait for the next build to succeed.

Deliverables [50 pts]

For this week, create a new `SUBMISSION.md` file in your repo. Add the images to a new figures directory and add links to those images to the `SUBMISSION.md` file. The images you need are:

- 5 pts Your Github account showing that is has been forked from the `depaulcdm/spring-petclinic` repository.
- 5 pts Your Travis CI dashboard showing a successful first build.
- 5 pts The section of the POM file showing the coordinates after you've changed them.
- 5 pts Your Travis CI dashboard showing a successful build after your change of the group ID.
- 5 pts The section of the POM file showing the coordinates after you've commented them out.
- 5 pts Your Travis CI dashboard showing the unsuccessful build after the breaking change.
- 5 pts Your Github repository with the `readme.md` file selected showing the build failed status after the Travis CI build fails.
- 5 pts The section of the POM file showing the coordinates after you've fixed them.
- 5 pts Your Travis CI dashboard showing the successful build after the breaking change has been fixed.
- 5 pts Your Github repository with the `readme.md` file selected showing the build success status after the Travis CI build has recovered.

Submit a link to your repository in D2L. Make sure your Github repository is public.