

James Anderson (DfE Cloud2)
QA Ltd DevOps Bootcamp Final Project

Diagrams

Fig. 1 - Docker container architecture of the application

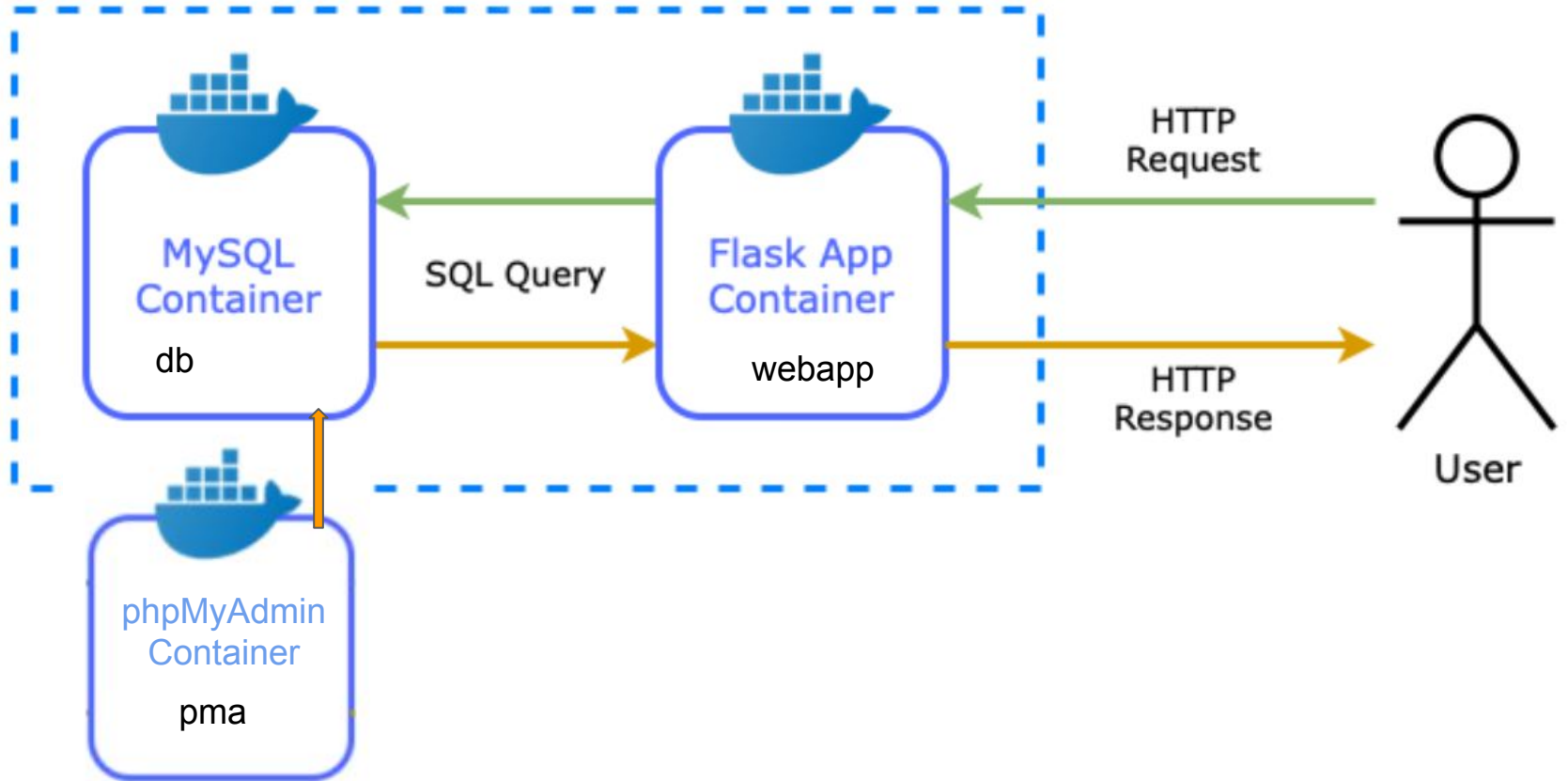


Fig. 2

MoSCoW Chart

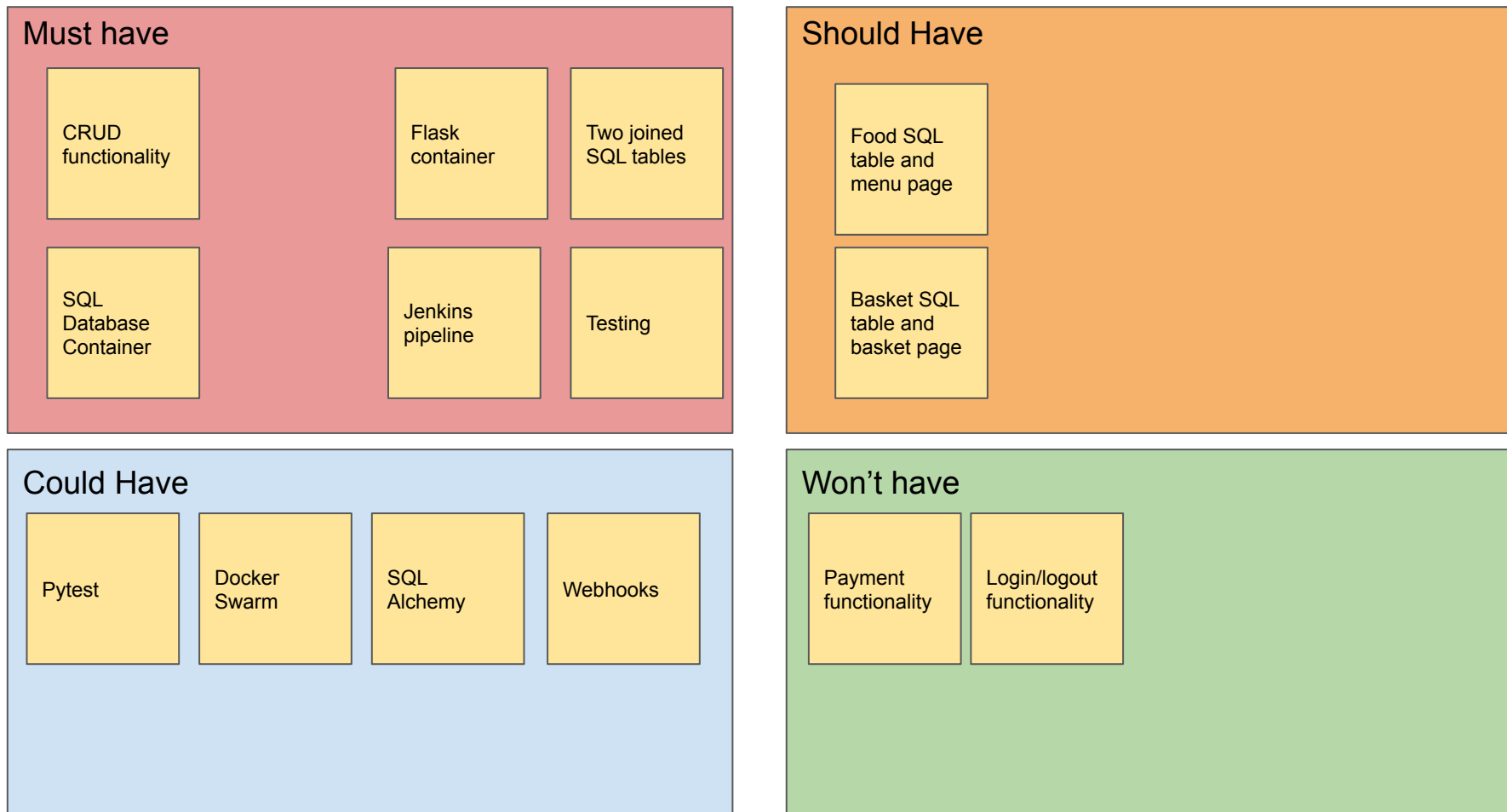


Fig. 3

User journey

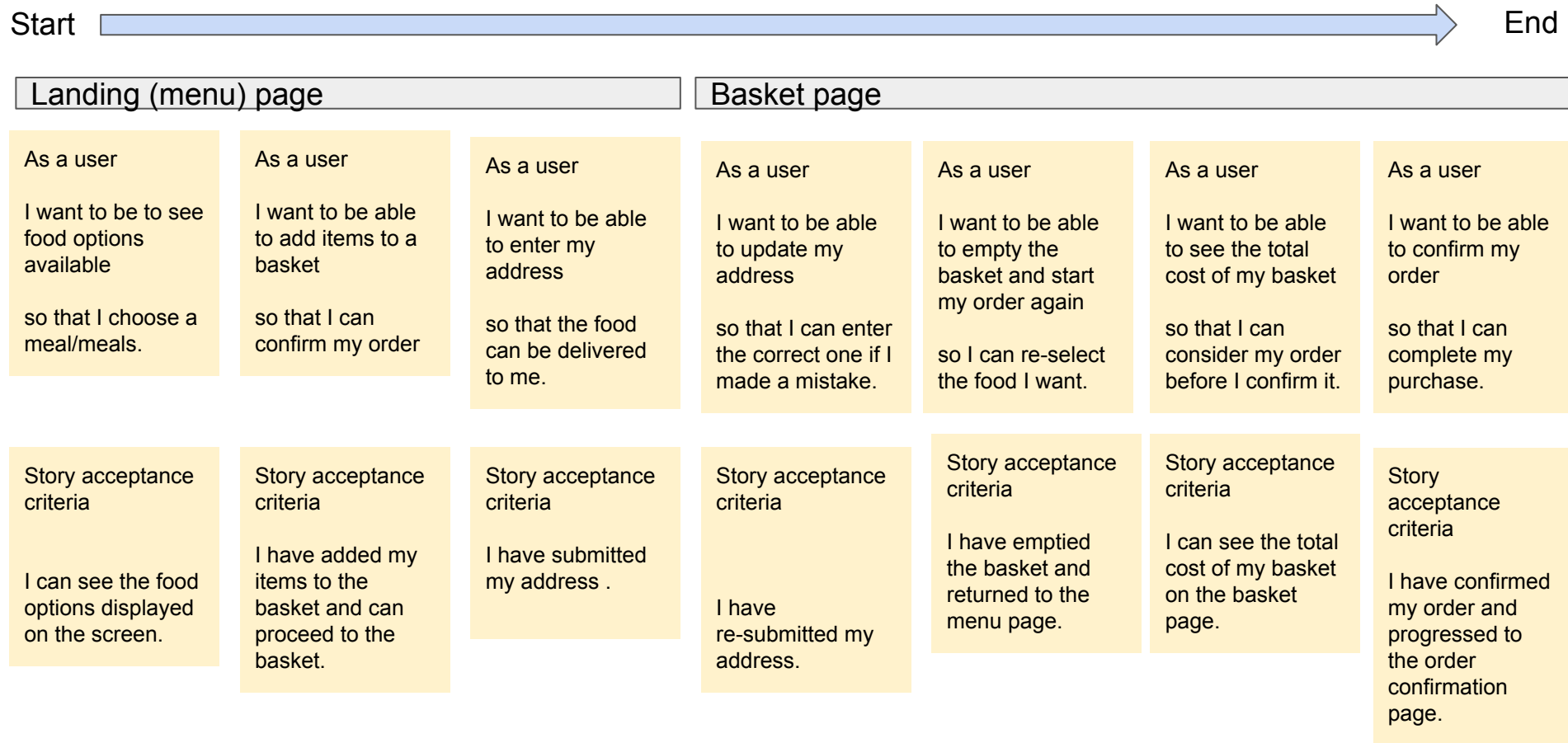


Fig. 4

Agile Project Management using Jira

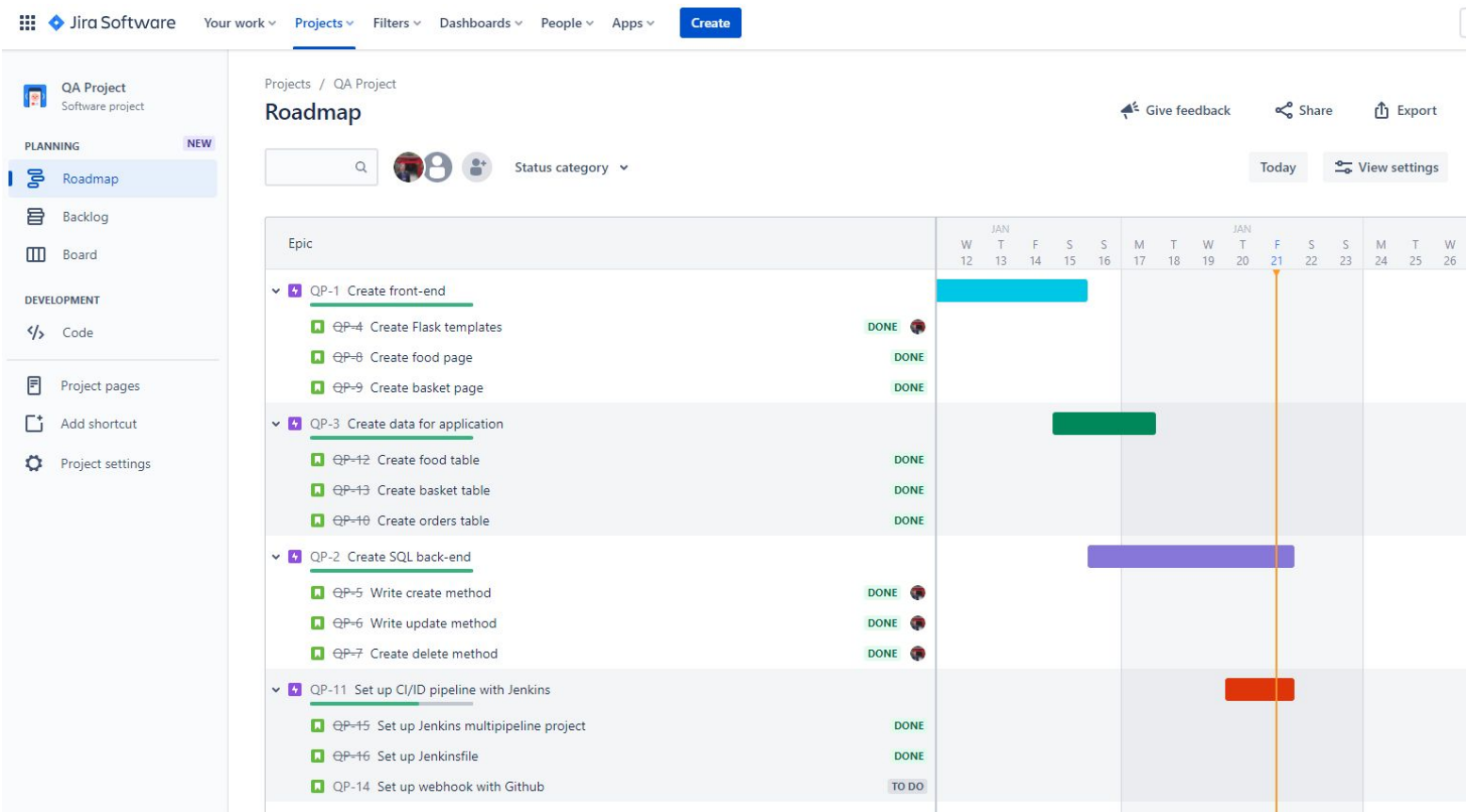


Fig. 5

Entity Relationship Diagram

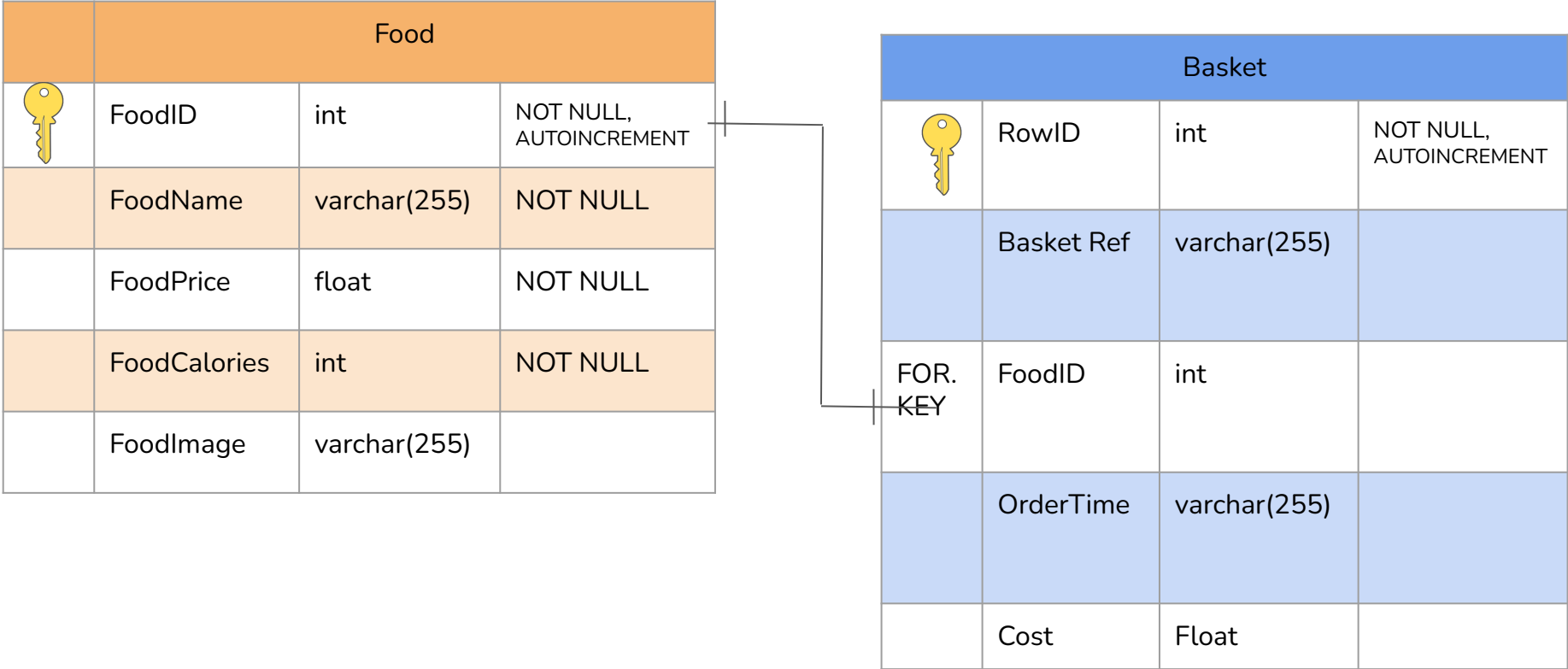


Fig. 6

Entity Relationship Diagram (next steps)

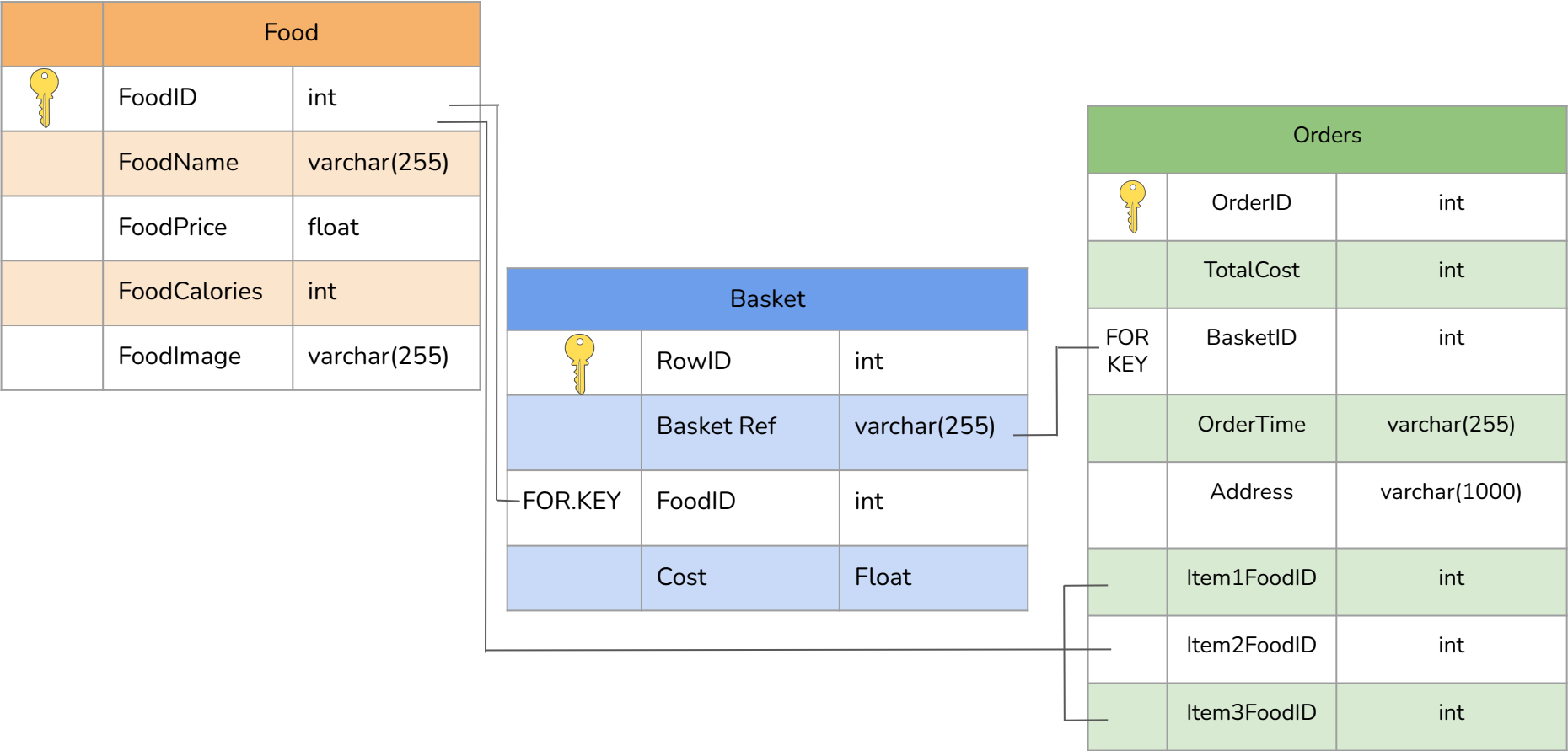
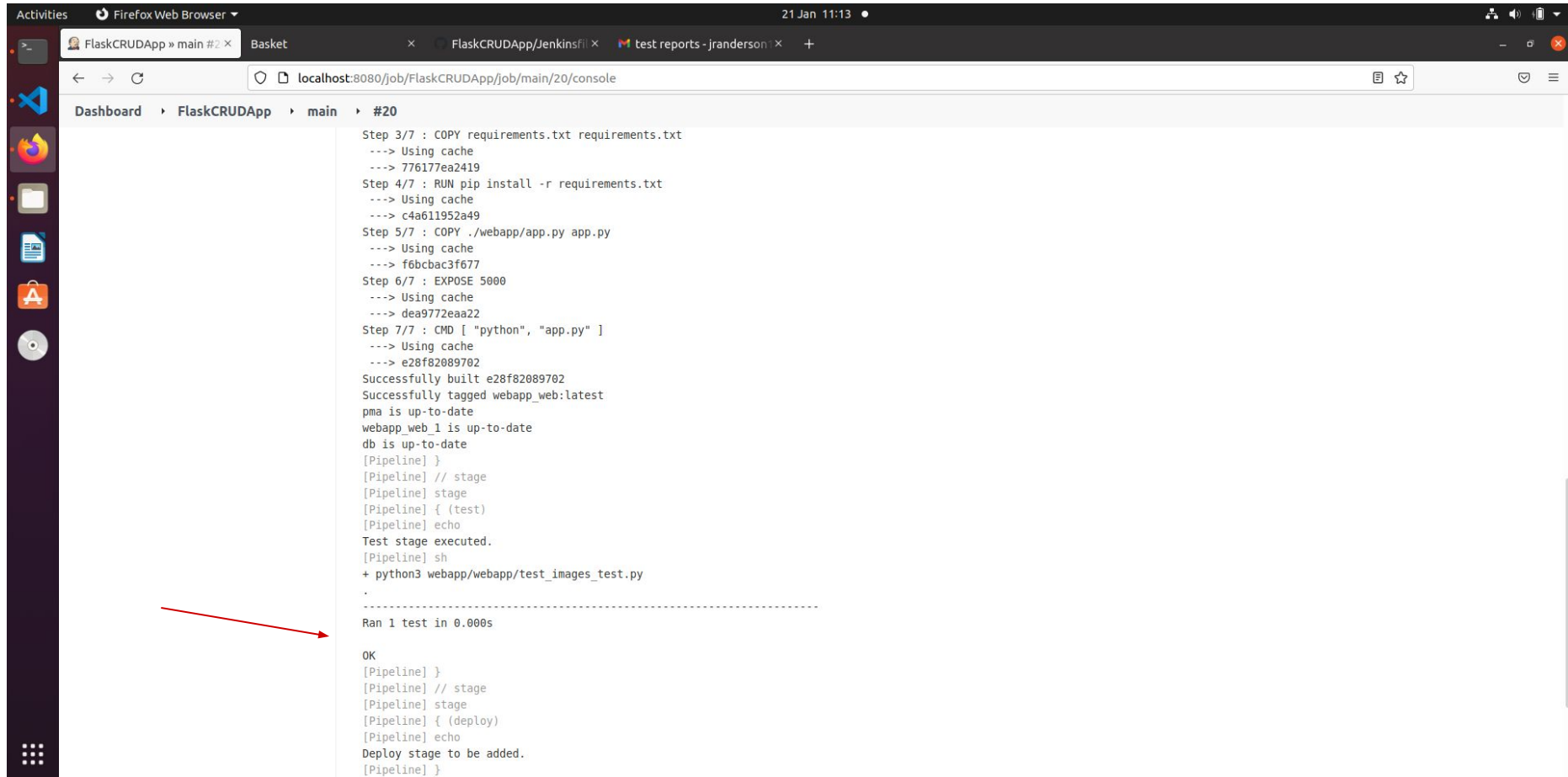


Fig. 7 - Unit test success in Jenkins pipeline



The screenshot shows a web browser window displaying the Jenkins console output for a pipeline named 'FlaskCRUDApp'. The breadcrumb navigation shows 'Dashboard > FlaskCRUDApp > main > #20'. The console output details the execution of several steps, including installing requirements, running tests, and deploying. A red arrow points to the line 'Ran 1 test in 0.000s', indicating a successful unit test.

```
Step 3/7 : COPY requirements.txt requirements.txt
---> Using cache
---> 776177ea2419
Step 4/7 : RUN pip install -r requirements.txt
---> Using cache
---> c4a611952a49
Step 5/7 : COPY ./webapp/app.py app.py
---> Using cache
---> f6bcbac3f677
Step 6/7 : EXPOSE 5000
---> Using cache
---> dea9772eaa22
Step 7/7 : CMD [ "python", "app.py" ]
---> Using cache
---> e28f82089702
Successfully built e28f82089702
Successfully tagged webapp_web:latest
pma is up-to-date
webapp_web_1 is up-to-date
db is up-to-date
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (test)
[Pipeline] echo
Test stage executed.
[Pipeline] sh
+ python3 webapp/webapp/test_images_test.py
.
-----
Ran 1 test in 0.000s

OK
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (deploy)
[Pipeline] echo
Deploy stage to be added.
[Pipeline] }
```


Fig. 8 - Unit test success in IDE

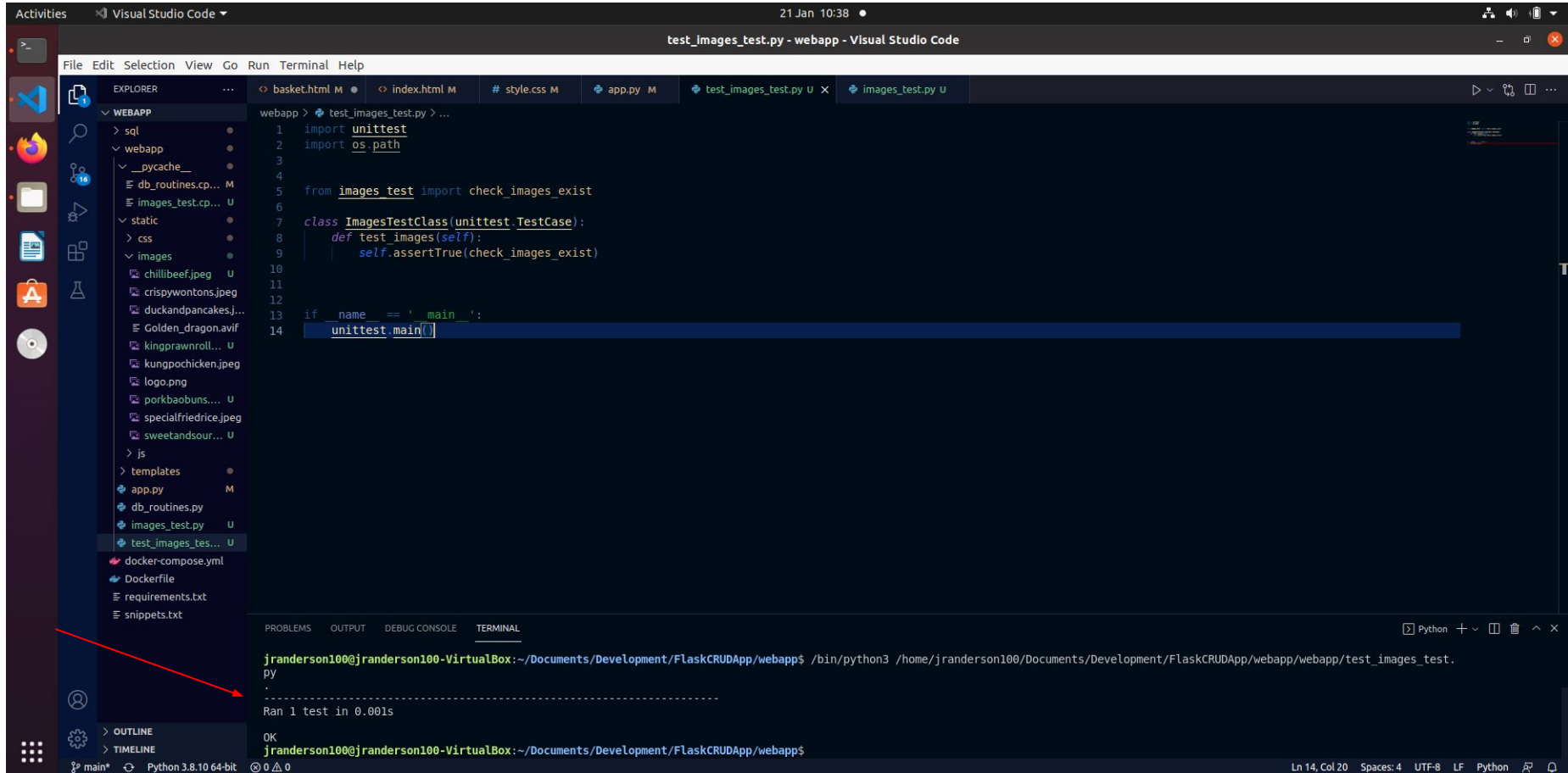


Fig. 9 Github web hook triggering Jenkins

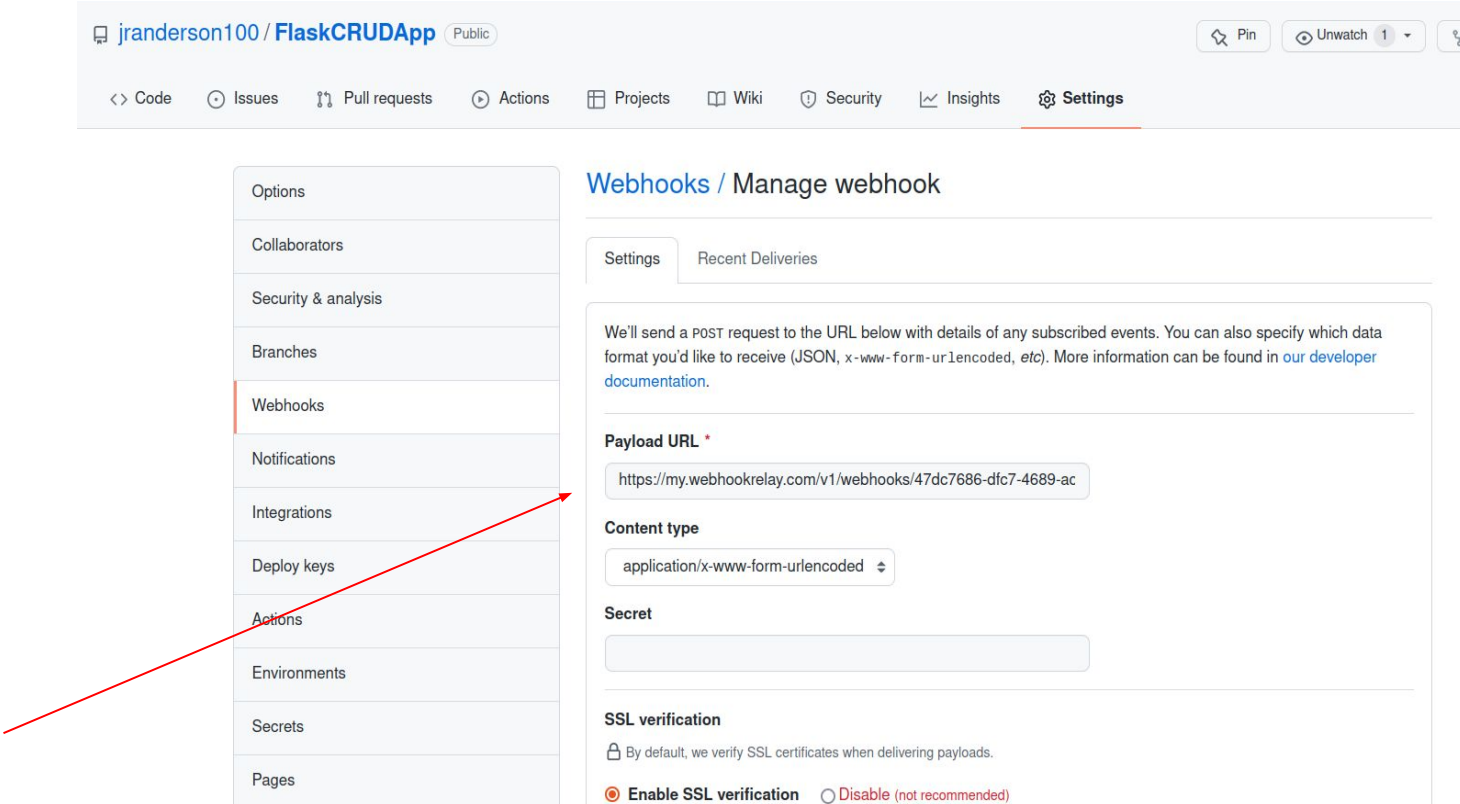


Fig. 10 Github web hook triggering Jenkins

The screenshot shows the Jenkins web interface in a Firefox browser window. The address bar displays `localhost:8080/job/FlaskCRUDAppWebHook/1/`. The Jenkins header includes a search bar, a notification icon, the user name "James Anderson", and a "log out" link. The breadcrumb navigation shows "Dashboard > FlaskCRUDAppWebHook > #1".

On the left sidebar, the "Status" option is selected. A red arrow points from the "Status" link to the build details section.

The main content area displays "Build #1 (21 Jan 2022, 14:33:26)" with a green checkmark icon. To the right of the build title are two buttons: "Keep this build forever" and "Add description". Below the title, it states "No changes." followed by a link "Started by GitHub push by jranderson100".

The build details section shows the following information:

- Revision: 211da3d734128384bb0fb5e46b08e87b651f2e18
- Repository: <https://github.com/jranderson100/FlaskCRUDApp>
- refs/remotes/origin/jranderson100-webhook

The bottom right corner of the interface shows "REST API" and "Jenkins 2.319.2".