
492 WEEKLY REPORT #2

Cloud Environment Manager

Group Number: 39

Client: PwC

Advisor: Lotfi Ben Othmane

Team Members:

Adis Osmankic - Team leader

Zane Seuser - Cloud Architect

Jet Jacobs - System Architect

Rishabh Bansal - Report Manager

Gavin Monroe - Meeting Scribe

Past Week:

- Backend- Rishabh Bansal
 - Worked on the Template_update API for the backend.
 - Getting started with Docker concepts
 - Tested up mongo db locally and use of pymongo for python.
- Frontend- Jet Jacobs
 - Began creating display component for running machines list
 - Began creating form for template creation using backend routes
- Backend- Zane Seuser
 - Wrote MongoDB interaction functions
 - Implemented MongoDB updates on lab DELETES and POSTs (AWS)
 - Implemented properly formatted lab GET for all and single (AWS)
- DevOps - Adis Osmankic
 - Created Scripts to build and run frontend/backend
 - Connected scripts to GitLab for CI/CD
 - Dockerized frontend/backend
 - Restructured server file layout
 - Began security integration

Individual Contributions:

| Name | Contribution | Hours weekly | Hours Semester |
|----------------|---|--------------|----------------|
| Adis Osmankic | <ul style="list-style-type: none">● Created CI/CD pipeline<ul style="list-style-type: none">○ Created a CI/CD pipeline integrated with GitLab (Git Repo) and Discord (Team Communication Platform) to test/build/deploy frontend/backend to server in both a test and prod environment● Dockerized app<ul style="list-style-type: none">○ Created Dockerfiles and restructured project to run in containers to have a consistent environment and deployment control● GCP Ansible playbooks<ul style="list-style-type: none">○ Create GCP account for team to use○ Began setup environment to work with Ansible GCP | 6 | 14 |
| Zane Seuser | <ul style="list-style-type: none">● Created MongoDB connection and interaction functions● Pulled template from MongoDB in /lab POST● Insert deployment in /lab POST & delete deployment in /lab DELETE● Properly formatted response for all labs in /lab GET● Ability to get a single lab from /lab GET | 7 | 14 |
| Jet Jacobs | <ul style="list-style-type: none">● Worked on Frontend beginning on the template creation page● Wrote documentation for use of mongo containers for local deploy● Began writing more reusable react components so that we may reduce code repetition | 9 | 4+9 |
| Rishabh Bansal | <ul style="list-style-type: none">● Worked on the backend for the Update_ template API● Learned about docker and have some testing locally for concepts.● Initialized mongo db for the API I worked | 5 | 12 |

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|-----------------|--|---|----|
| | <ul style="list-style-type: none"> on for testing. ● Getting familiarized with pymongo.. | | |
| Gavin Monroe | <ul style="list-style-type: none"> ● Worked on the Frontend Template ● Focused on the Architecture design to make sure we can bring confidence in design and implementation ● Applied eslint standards ● Applied Coding Standards through prettier | 5 | 10 |

Upcoming Items:

Please reach out to one of the team members if you lack access to our [JIRA board](#).

- Begin implementation of /lab routes for next cloud platform (Zane)
- Document current /lab routes (Zane)
- Look into/implement simple API security (Zane)
- Finish implementation of GCP Ansible Playbooks (Adis)
 - Need to create/test/modularize playbooks for all functions in GCP
- Implement key service for storing/accessing keys for ansible (Adis)
 - Need to securely store keys used for ansible and cloud management
 - Need to consistently access these credentials without compromising security
- Finish up frontend cleanup (Jet Jacobs)
- Complete Template Creation Page (Jet Jacobs)
- Work on more API in backend.(Rishabh Bansal)
- Start initializing Docker. (Rishabh Bansal)