# 492 WEEKLY REPORT #3 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

### **Summary:**

Since this report is over only one week, we did not get as much done as we normally do. This week was kicking many of our items into gear and continually integrating all parts. We had major frontend work pushed and are in the process of testing the integration with the backend. The backend is continuing to create extra routes for the project and the frontend is beginning to integrate with these new routes.

#### Past Week:

- Backend- Rishabh Bansal
  - Working more on the Template\_Update API for the backend.
  - Getting more use of pymongo.
  - Tested Docker Locally
  - Getting to use Postman more frequently.
- Frontend- Jet Jacobs & Gavin Monroe
  - Began creating display component for running machines list
  - Began creating form for template creation using backend routes
  - Began researching frameworks for backend communications
  - Started Proto-typing frontend communication frameworks
- Backend- Zane Seuser
  - Implemented request sanitization / validation

- o Began working on implementation of basic API authentication / security
- o General cleanup and refactoring
- DevOps Adis Osmankic
  - o Fixed bugs causing issues in pipeline
  - o Setup azure ansible integration
  - o Created key management setup

# **Pending Issues:**

None

Please reach out to one of the team members if you lack access to our <u>JIRA</u> <u>board</u>.

# **Individual Contributions:**

Name	Contribution	Hours weekly	Hours Semester
Adis Osmankic	<ul> <li>Created and published documentation for azure playbooks</li> <li>Setup azure integration</li> <li>Azure key management         <ul> <li>Created principal account and setup programmatic access permissions</li> <li>Setup keystore for Azure credentials</li> </ul> </li> </ul>	4	18
Zane Seuser	<ul> <li>Implemented request sanitization for /lab routes</li> <li>Implemented error catching for /lab POST &amp; DELETE so that errors get passed to the API users</li> <li>Implemented more accurate API status codes in all responses</li> <li>Basic cleanup and refactoring in anticipation of future cloud platforms</li> <li>Began researching how to implement basic API security / authorization</li> </ul>	4	18
Jet Jacobs	Worked on Frontend beginning on the template creation page	5	13+5

	<ul> <li>Finished up componentizing all existing parts, should be set to reuse components easier.</li> </ul>		
Rishabh Bansal	<ul> <li>Working on in-depth for the Update-template API</li> <li>Resolved the issues file facing implementing this API.</li> <li>Worked on inheriting Pymongo for this API</li> <li>Testing this API through the postman</li> <li>Creating the Atlas for the MongoDB for the API testing and maybe using it in future for more APIs</li> <li>Used Docker to run it locally.</li> </ul>	5	17
Gavin Monroe	<ul> <li>Started researching backend technology frameworks to implement for communication.</li> <li>Started Prototyping these frameworks to make sure we have a structure and view of the technology</li> <li>Reviewed requests and code pushed to the gitlab</li> </ul>	6	16

#### **Screenshots:**

No screenshots to share this week as most work was just code and code screenshots are redundant.

# **Upcoming Items:**

Please reach out to one of the team members if you lack access to our <u>JIRA</u> board.

- Continue implementation of /lab routes for next cloud platform (Zane)
- Implement simple API security (Zane)
- Finish implementation of GCP Ansible Playbooks (Adis)
  - Need to create/test/modularize playbooks for all functions in GCP
  - (Note: This is on here again because I was under the assumption the report would be in two weeks, not one)
- Secure programmatic access with GCP (Adis)
- Begin environment monitor page

- Complete Template Creation Page (Jet Jacobs)
- Will be taking more APIs to work on further. (Rishabh Bansal)
- Using mongo DB for more similar APIs that will be used in the past. (Rishabh Bansal)