

**Student's Name:** Ayush Jain

**Mentor:** Vincent Terrone

**Project:** Feilong-Ansible Module

**Project Description:** Create sustainable open source Ansible modules for creating/managing virtual server instances (mostly in OpenStack) and then to control storage devices connected to IBM Z. The final target state products could be used to communicate to various storage devices connected to mainframe and control HW function to automate storage managements. Intermediate target state would be communicating to IBM DS8K/FS8K CLIs and/or RestfulAPIs to help initialization of storage devices for virtual servers.

**Problem Definition:** Create an ansible module to control the IBM DS8K/FS8K using REST calls.

## Plan:-

So this is a high level design & plan for the project **Feilong-Ansible module**.

Week	Deliverables
Community Bonding Period + Plan <b>Week 1-5</b> Apr 8 - May 15	<ul style="list-style-type: none"><li>• High Level Design and Plan-<b>Done</b></li><li>• Read Documentation for Ansible-<b>Done</b></li><li>• Read Documentation of FS8K REST Call- <b>Done</b></li><li>• Set up Linux on z accounts and IBM FS8K usage accounts.-<b>Done</b></li><li>• Clear if any doubts.</li></ul>
<b>Week 6 &amp; 7</b> May 15 - May30	<ul style="list-style-type: none"><li>• FS9K Rest Call for WWPN(required storage)-<b>Working</b></li><li>• Design ansible module.</li></ul>

	<ul style="list-style-type: none"> <li>• Integrate call,params into ansible module</li> </ul>
<b>Week 8</b> Jun 1 - Jun 5	<ul style="list-style-type: none"> <li>• Write the test cases if any</li> <li>• Test the storage &amp; cleanup in fs9k</li> <li>• Document the process</li> <li>• Get feedback from the mentor</li> </ul>
<b>Week 9-12</b> Jun 6 - July 1 <b>[Midterm Starts]</b>	<ul style="list-style-type: none"> <li>• Integration with Feilong &amp; OpenStack</li> <li>• Design a high level integration plan</li> <li>• Submission of Work</li> </ul>
<b>Week 12 - 17</b> July 2 - Aug 19	<ul style="list-style-type: none"> <li>• Implement the changes suggested in midterm evaluation</li> <li>• Implement the integration - Initialize the storage via Feilong for Server Instance.</li> <li>• Write test cases for the current modules</li> <li>• Document the process</li> </ul>
<b>Week 17 - Week 18</b> Aug 19 - Aug 23	<ul style="list-style-type: none"> <li>• Integration Testing</li> <li>• Document the Process</li> <li>• Get feedback from the mentor</li> <li>• We should have fully functional ansible modules by this time.</li> </ul>
<b>Week 19</b> Aug 23 - Sep 1	Buffer week - for any pending or extra work
<b>Week 20 (Final Week)</b> Sep 1 - Sep 7	<ul style="list-style-type: none"> <li>• Clean up the documentation and run final tests</li> </ul>

## Architecture:-

