OpenStack Capstone Post Mortem Report

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Table of Contents

1.   Postmortem Results

1.1 Things That Went Well

- Developed various use cases and have active feedback and participation with the departments.
- We were able to determine project feasibility and constraints.
- We have been able to keep up with our Microsoft Project plan schedule.
- We have been kept Trac up-to-date.
- We have been able to learn OpenStack and become familiar with its architecture.

1.2 Things That Did Not Go Well

- Scheduling conflicts with our mentor.
- OpenStack breaking and having to debug it.

1.3 Lessons Learned While Doing the Project

- Devstack hides too much configuration from us. (i.e. we don't know how it works exactly)
- If an OpenStack component breaks, the entire system usually breaks.

1.4 What Could We Have Done Differently

- We should have started earlier with a manual installation rather than depending on Devstack.

1.5 Recommendations for Future Projects

- Do a lot of research and use VMs to test your findings. Snapshots are extremely helpful and save a lot of time.
- Devstack is good for quick tests and demonstrations but not for a production environment of OpenStack.
- Use online documentation from OpenStack.org as well as IRC and forums.
- Keep backups of all your work, including commands, scripts and tutorials.

2. Project Size and Effort Estimates

2.1 Effort Estimates

Task	Estimate	Actual Size
Research	8 hours	15 hours
Deploy Devstack	2 hours	15 hours
Devstack with thin clients	3 hours	6 hours
Documentation	10 hours	15 hours

Research was learning what OpenStack is and how each component works. Deploy Devstack was using the Devstack script to do automated installation. This also included fixing and assessing errors that arose. Devstack with thin clients, was setting up a OpenStack environment with X2Go (an application for remote desktop).

2.2 Project Effort Breakdown

Project Area	Effort (%)
Documentation	30%
Research	40%
Implementation	30%

Documentation including doing the turned-in documentation combined with any extra documentation requested by IBM. Research was learning what OpenStack is and how it works. It also included researching use cases with professors. Implementation included working with Devstack and debugging.