15-400 Spring 2018 Bi-Weekly Report 3 Shuli Jiang

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**Major Changes:** 

Major changes of milestones. (See the updated milestone)

What You Have Accomplished Since Your Last Meeting:

1) We just submitted a demo paper on March.1. We have been all working on making the

OtterTune system — including the controller, the oltpbenchmark and the server running on

the new machine.

2) We are now working on improving the robustness of the system. I'm still working on

handling edges cases like when users uploading too few data points that are not enough to

train the machine learning model and bootstrapping.

3) After improving the robustness of the machine, I'll start doing experiments on data knobs

configurations across different versions for MySQL. This will hopefully start in next two

weeks (if there are no major bugs or shutdowns in the new system).

**Meeting Your Milestone:** 

I have changed the milestone. (The current version is still tentative. It might need future

changes.)

**Surprises:** No surprises found so far.

**Looking Ahead:** 

Over the next two weeks, I'll focus on improving the system and start doing experiments on

knobs configurations across different versions of the database.

**Revisions to Your Future Milestones:** 

The new OtterTune system is the main focus now, not the primary ML pipeline on the server's

side the would recommend the best knobs configurations given user current knobs and metrics

data from the database. I'll work on improving the system first and start doing my experiments and then see where I'll be and plan the next step (playing around different ML models).

**Resources Needed:** 

Yes. I have got all the resources I need and have built more resources.