

Programming Assignment 5
Performance
Due: In Blackboard

Description:

Frequently cloud service based systems need to support thousands or even millions of users (or subscribers) often simultaneously. In order to more accurately model these type of systems, one needs to employ traffic modeling systems that can both create events as well as measure responses.

Using assignment 2 or 3 (or any other assignment you wish) as a template, or "driver", you need to create a cloud based system that responds to user queries and that (on the "cloud") performs simple database queries and formats a web interface response to the user. You will test (exercise) that system remotely, from your PC, and gather performance metrics. "Jmeter" is one (free) software tool that will provide the needed features, others will work well, too.

1. Create/implement a cloud based web site similar to assignment 2 or 3, or any that responds to user queries, retrieving information from a relational database.
2. Test your implementation.
3. Obtain Jmeter (or similar), install, test your understanding.
4. Use Jmeter to drive your cloud application. Try several parameters, such as amount of requests per unit time, intervals between requests, and similar variations on request traffic.
5. Get, and interpret, results.

Please, submit in Blackboard. Work must be individualized, but may be done in a group.

You must submit this lab, working (or partially) by the due date.

Your program should be well commented and documented, make sure the first few lines of your program contain your name, this course number, and the lab name and number.

Your comments should reflect your design and issues in your implementation.

Your design and implementation should address error conditions.