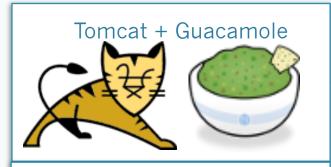
Web Based Testing of Android Apps on Amazon EC2

Mark Ahern's Final Year Project
UCD Computer Science and Informatics

Project Overview

- Motivation
 - Simplify process of testing Android apps.
 - Enable crowd-sourced testing of apps.
 - Reduce cost of testing.
- Objective
 - Developer: Submits an app for testing, specifying devices to test on.
 - Tester: Follows link to android emulator with the appready to test.

Proposed System Architecture





Tight VNC Server

Android Emulator on Fluxbox Window Manager









Ubuntu Server on Amazon EC2



Tester with HTML5 Capable Browser



Provide Job Link and Report Form to Tester Send Feedback to from Testing back to Web App

Set up job on Server



Web App for creation and Assignment of Testing Jobs

State of the Project

- Progress so far:
 - Web accessible Android Emulator works.
 - Can have Multiple users on system at once.
 - Runs smoothly when there are enough System Resources
 - Running Emulator + X Windows + Fluxbox + Tomcat is resource heavy.
- Next steps:
 - Create workflow for setting up ready-made testing Environment.
 - Investigate Performance implications / limitations of having concurrent users.
- Working on project alongside my Final Year classes.

Links

- http://www.ahern.ie (Project Blog)
- http://bit.ly/coggFj (Project Description)
- http://developer.android.com (Android Developers)
- http://guacamole.sourceforge.net (Guacamole)
- http://aws.amazon.com (Amazon Web Services)
- http://fluxbox.org (Fluxbox Window Manager)
- http://www.tightvnc.com/ (VNC Server)
- http://alestic.com (Ubuntu AMI's for Amazon EC2)
- http://ubuntu.com (Ubuntu Home Page)