STPCon Workshop Pre-requisites

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Workshop Pre-requisites

1. JAVA (1.7 or above) JDK:
    1. Download from here:
        1. Windows Platform Installation Steps: http://docs.oracle.com/javase/8/docs/technotes/guides/install/windows_jdk_install.html#CHDEBCCJ
        2. Mac OS X Installation Steps: http://docs.oracle.com/javase/8/docs/technotes/guides/install/mac_jdk.html#CHDBADCG
2. Node (0.10 or above):
    1. Windows x64 Installer: https://nodejs.org/download/release/latest/node-v4.1.1-x64.msi
    2. Windows x86 Installer https://nodejs.org/download/release/latest/node-v4.1.1-x86.msi
    3. Mac OSX Package: https://nodejs.org/download/release/latest/node-v4.1.1.pkg
3. Java Editor - IDEA IntelliJ: https://www.jetbrains.com/idea/download/ - You can download Community Edition
    1. Advanced user can select editor of their choice but be advised to make sure it supports the plug-ins used for workshop .
4. Maven : http://mirror.reverse.net/pub/apache/maven/maven-3/3.3.3/binaries/apache-maven-3.3.3-bin.zip
    1. Follow the installation instructions here:
        1. https://maven.apache.org/install.html

Pre-requisites: Android SDK setup

- We use Android for workshop(on both Mac and Windows platform):
  1. Download Android SDK Tools zip: Download from SDK Tools Only: http://developer.android.com/sdk/index.html#Other
     1. Windows: http://dl.google.com/android/android-sdk_r24.3.4-windows.zip
     2. Mac OS X: http://dl.google.com/android/android-sdk_r24.3.4-macosx.zip
  2. Extract the files into following location (Create the folder if required):
     1. Windows: C:\android-sdk
     2. Mac: /opt/android-sdk
  3. Set the ANDROID_HOME For Mac :
     1. Setup all the environment variables
        1. For Mac:
           1. Open the .bash_profile from home folder . You can use vi or other editor
           2. vi ~/.bash_profile
           3. Copy and paste following values – Make sure to replace 19.1.0 with latest API version you have present in opt/android-sdk/build-tools/ folder
              1. export ANDROID_HOME=opt/android-sdk
              2. export PATH=opt/android-sdk/tools:opt/android-sdk/platform-tools:opt/android-sdk/build-tools/19.1.0:$PATH
              3. If you already have sdk installed on different folder, change opt/android-sdk to your SDK folder from step 1
           4. Press ‘esc’ followed by :wq to save and quit the editor
        2. For Windows:
           1. Go To Computer->Properties->Advanced System Settings->Environment Details and add ”ANDROID_HOME” as system variable with value “C:\android-sdk”
  4. Restart the command prompt or mac terminal after completing following steps.

Create Android Virtual Device (AVD)

- Type “android” from windows command line or mac terminal and it will open “Android SDK Manager”, where you can manage android sdk packages on your system.
- For workshop, Install following packages:
  - Under tools -
    - Android SDK Platform-tools,
    - Android SDK Build-tools (19.1)
  - Under Android 4.4.2 (API 19)
    - SDK Platform
    - Google APIs Intel x86 Atom System Image
  - Under Extras -
    - Google USB Driver
    - Google Web Driver
    - Intel x86 Emulator Accelerator (HAXM installer)

Create AVD (using Command line)

- Following will help to setup an emulator from the command prompt -
  - Windows: “%ANDROID_HOME%\tools\android” list targets
  - Mac: $ANDROID_HOME/tools/android list targets
  - For ex: "Google Inc.:Google APIs (x86 System Image):19"

- Find the target that is for x86 version and replace the id for –t option in following command. For ex: I have the target id=1(in red color). Yours might be different.
  - Mac: $ANDROID_HOME/tools/android create avd -n STPCon2015 -t 1 -c 500M
  - Windows: “%ANDROID_HOME%/tools/android” create avd -n STPCon2015 -t 1 -c 500M

Launch AVD

- From Mac terminal
  - $ANDROID_HOME/tools/emulator @STPCon2015 –netfast
- From Windows command line
  - “%ANDROID_HOME%/tools/emulator” @STPCon2015 –netfast

Setting up Appium

- There are two versions of Appium:
  - Appium GUI
  - Appium Server
- Setting up the Appium GUI is straight forward
  - Download and setup Appium from http://appium.io/

Appium server (command line)

- Run following from Mac Terminal or Windows command line in sequence
  - npm install -g appium # get appium
  - npm install wd # get appium client
- Verify appium installation by running following command
  - appium & # start appium

- Showslow.org
- Fiddler
- Webpagetest.org
- Perfmap (github) zeman
- Yslow.org
- Pagespeed (google)
- Dynatrace (APM)
- Appdynamics
- Jprofiler