

BigData

LAB – I

Submitted by
Mahesh Vemula
16158759

Part 1:

Group Members:

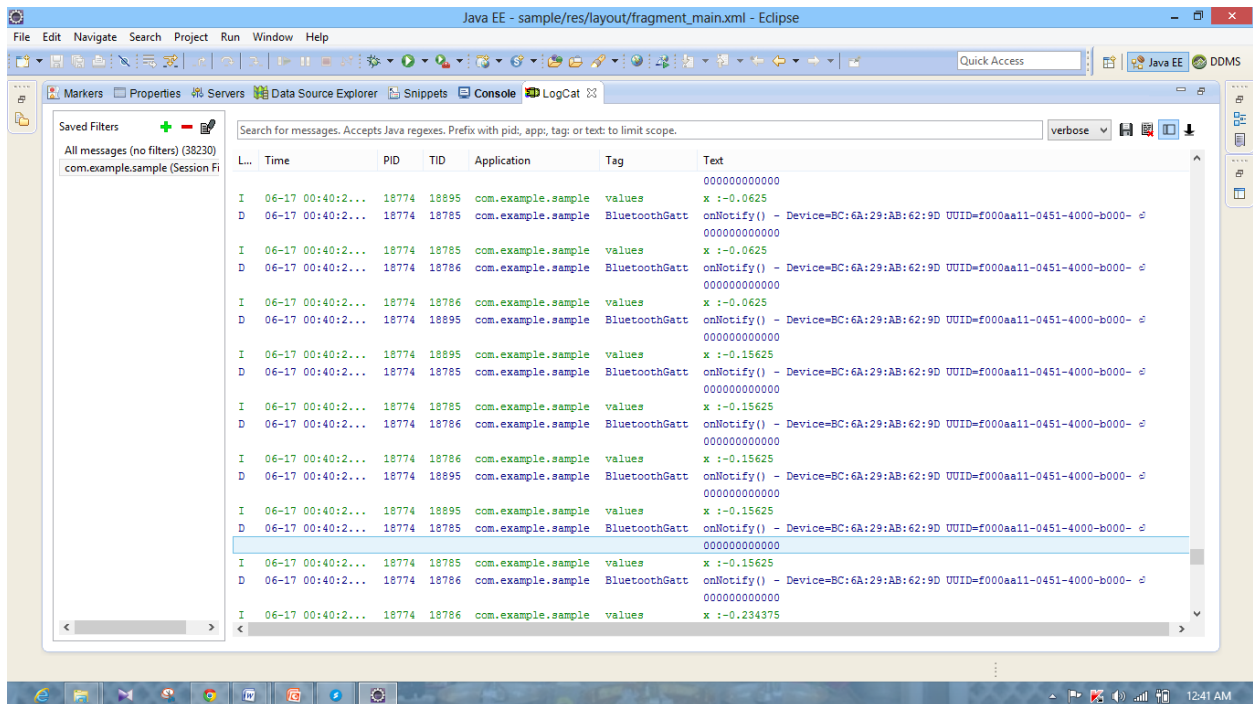
- Deshpande,Aditya
- Meka,Tej Kiran
- Jagadish Rao
- Mahesh Vemula

Task1: Android application using TI sensor tag.

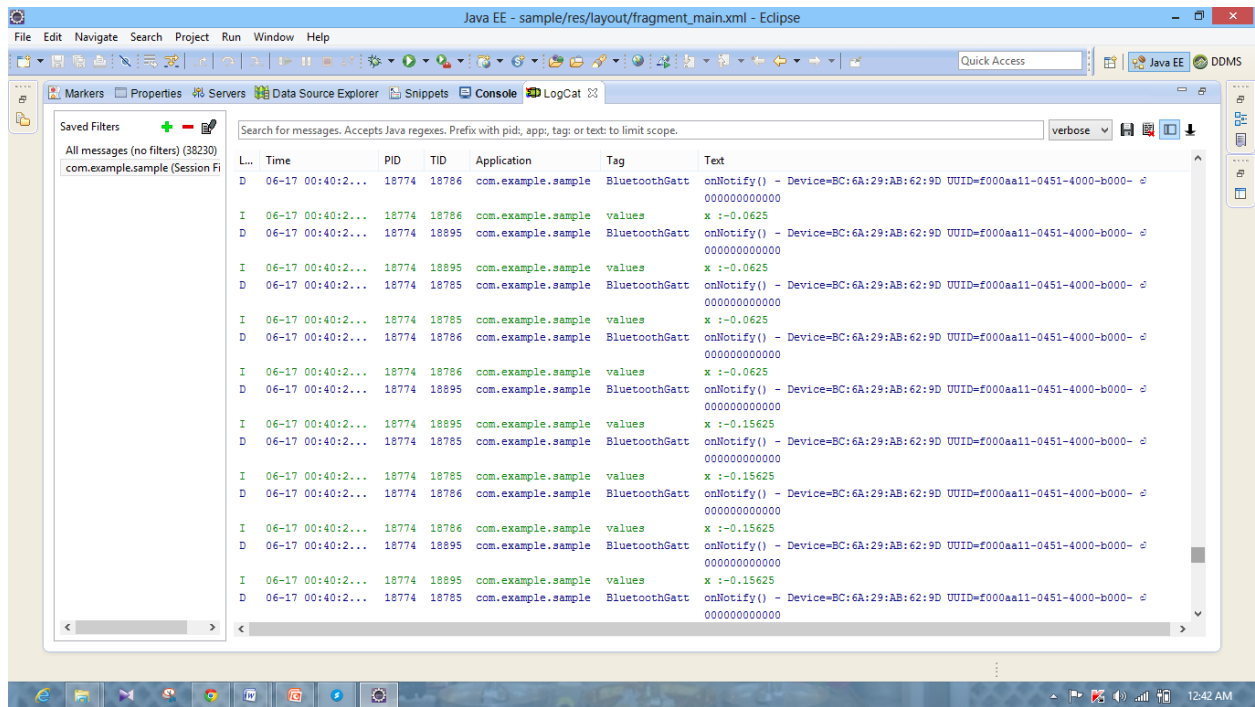
Step 1: Extract the application from download file.

Step 2: Run the application on the device after enabling debugging mode.

Step 3: Observe the output in eclipse and take the screen shots of result.



Output showing the results of sensor values



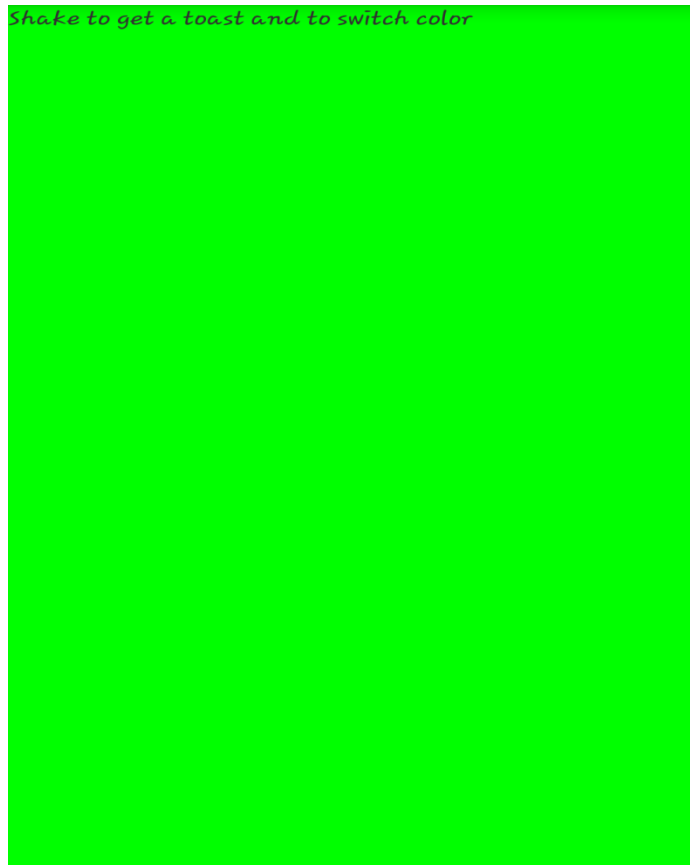
Capture-2

Task 2: Mobile sensor with Android sensor app

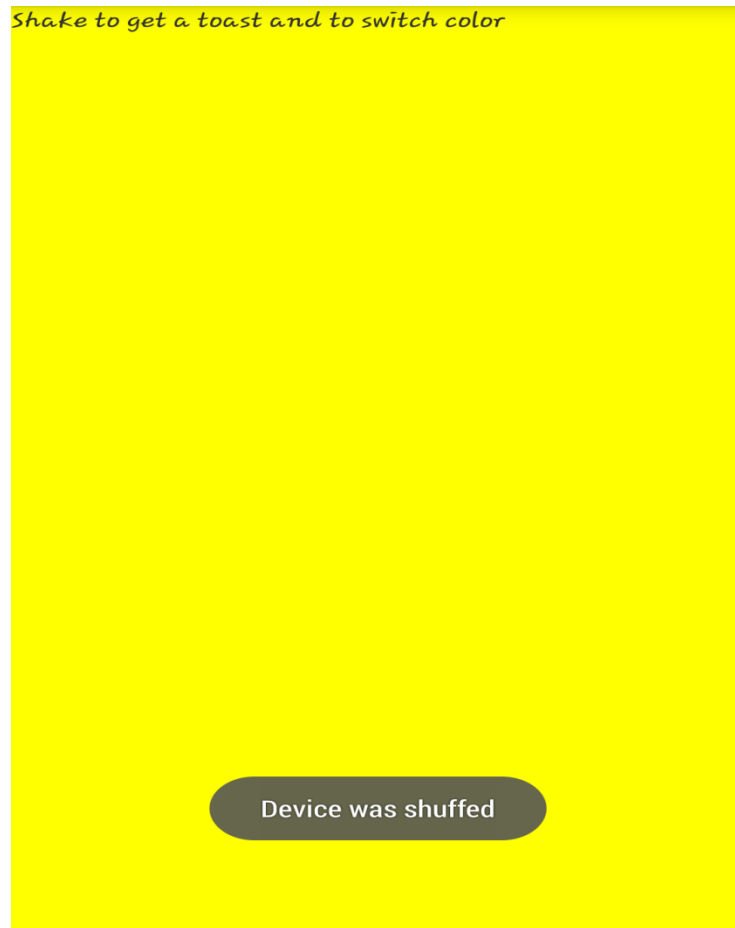
Step 1: Extract and modify the application from blackboard.

Step 2: Run the application on the device after enabling debugging mode.

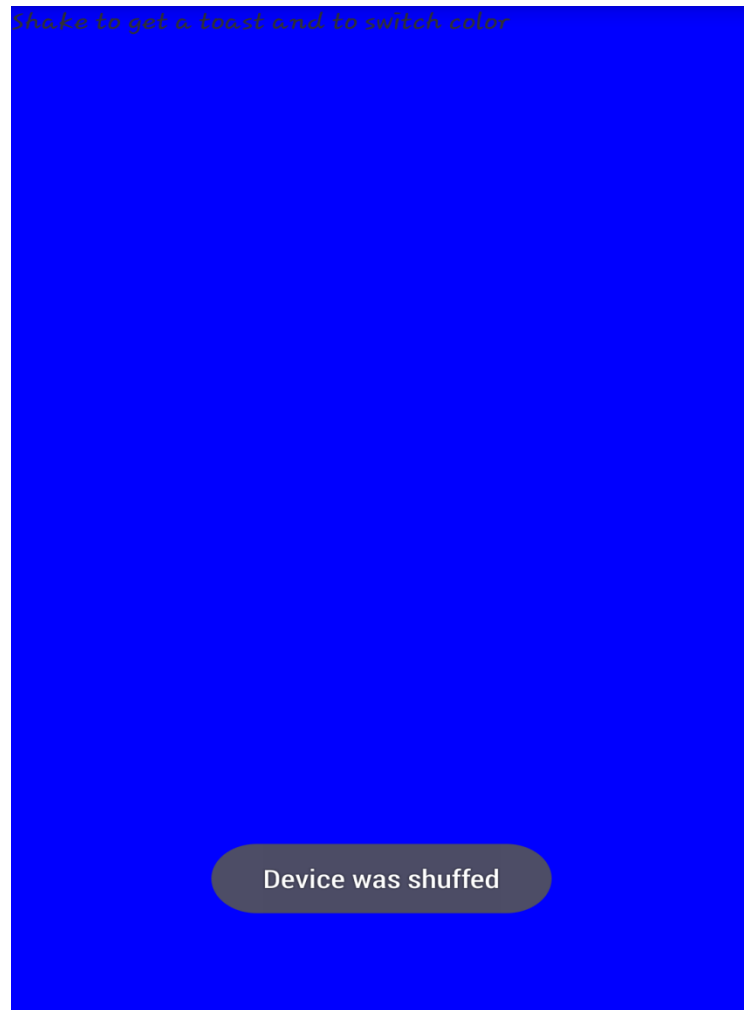
Step 3: Observe the output and take the screen shots of result.



First screen of the application



When we shake the device the sensor detects and gives sensor output. By detecting output we change the colour of the device.



Again when we shake the device the sensor detects and gives sensor output. By detecting output we change the colour of the device.

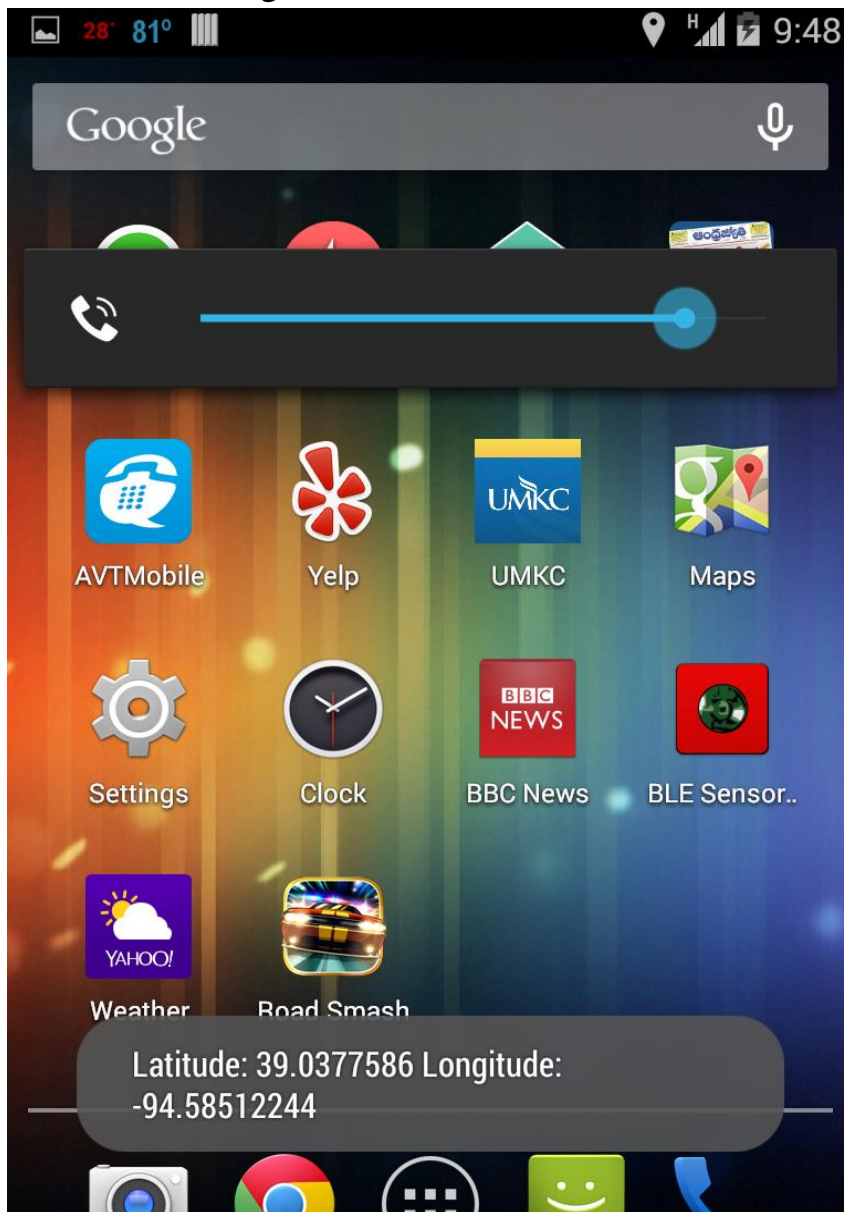
Task3: Geosensing android application

Step 1: Extract and modify the application and add libraries.

Step 2: Run the application on the device after enabling debugging mode.

Step 3: Observe the output and take the screen shots of result.

First screen detecting the geo location and Displaying address using google API service call with geo location coordinates.

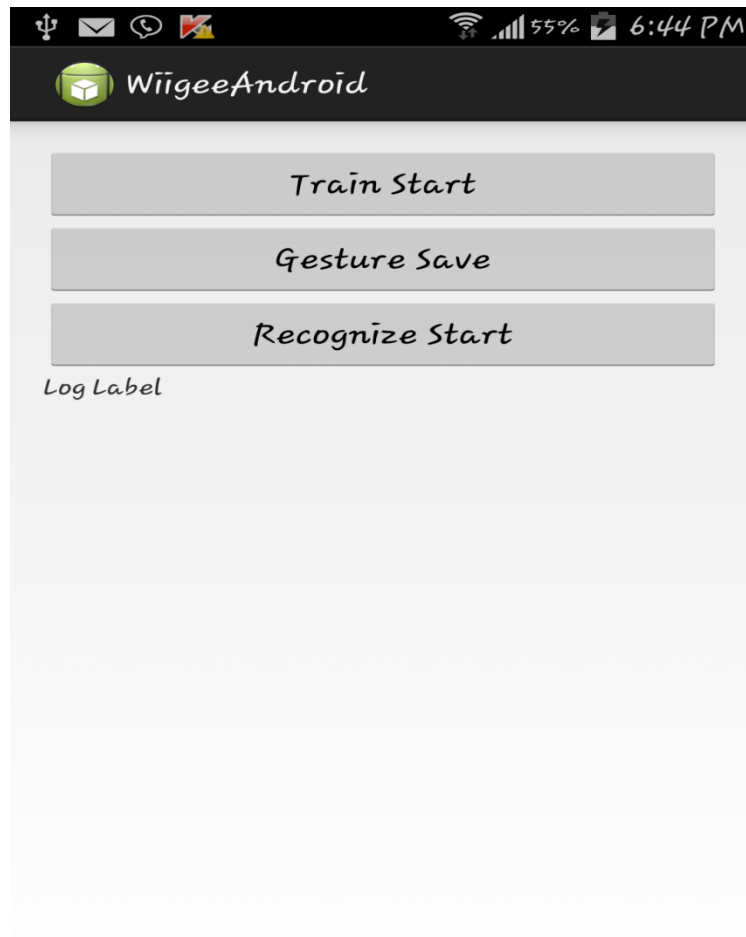


Task4: Wiigee app with Android smartphone

Step 1: Extract and modify the application. Modify build path.

Step 2: Run the application on the device after enabling debugging mode.

Step 3: Observe the output and take the screen shots of result.



First screen of the application



WiigeeAndroid

Train Start

Gesture Save

Recognize Start

click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false
click:onRecord:true
click:onRecord:false

When we capture gesture click on record a gesture and after motion click on stop.
After few samples click on save gesture.



Now to check the gesture we click on recognize and make motion. If motion matches it shows probability of gesture match.

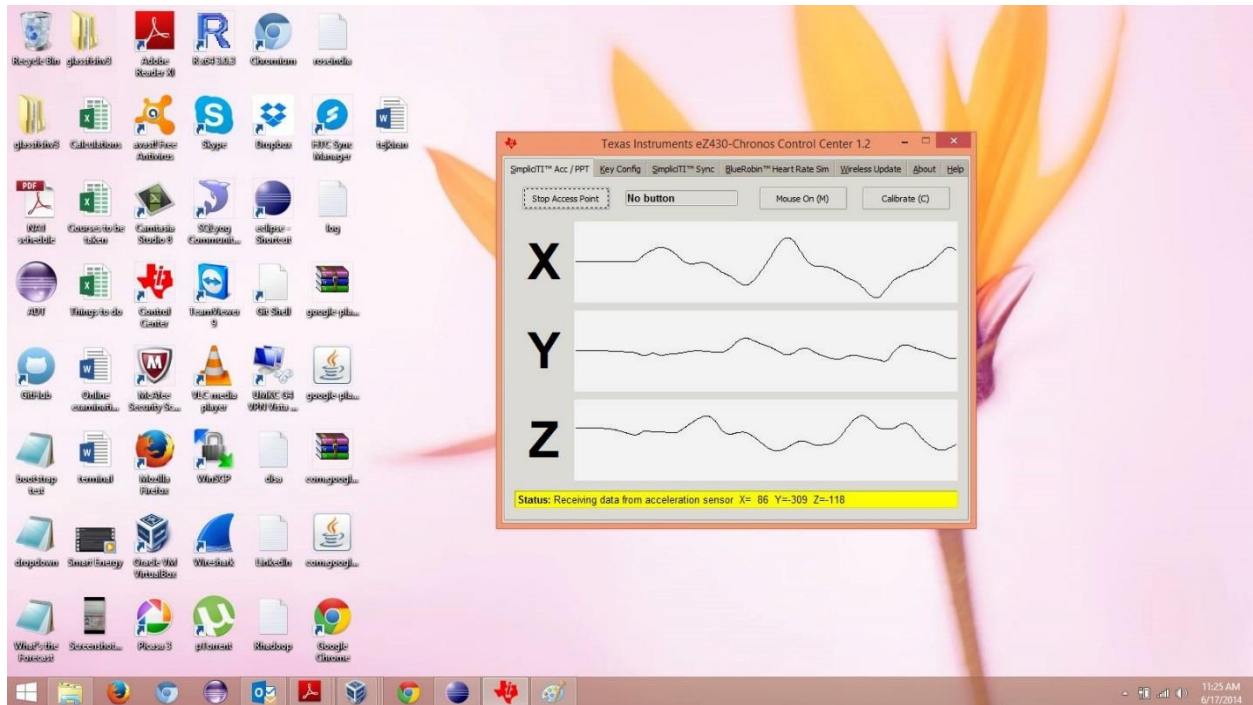
Task5: Application using chronus watch

Step 1: Install the chronus watch drivers.

Step 2: Enable ACC mode on watch.

Step 3: Click start capture on the application.

NOTE:



Part 2: Cloudera/MapReduce: Download the Cloudera Image, implement the WordCount MapReduce and run it.

Step 1: Downloading cloud image

The screenshot shows the Cloudera website's navigation bar with links for Support, Dev Center, PARTNERS, Sign In, Register, Contact Us, and Downloads. The Cloudera logo is prominently displayed with the tagline "Ask Bigger Questions". A search bar is located on the right side of the navigation bar. Below the navigation bar, a horizontal menu contains links for COMMUNITY, DOCUMENTATION, DOWNLOADS, KNOWLEDGEBASE, CASES, and SUPPORT INFO.

On the left side of the page, there is a sidebar menu with the following items: CDH, Cloudera QuickStart VM (highlighted), Previous Cloudera Manager Releases, Connectors, Components, and Cloudera Manager Download.

The main content area is titled "Cloudera QuickStart VM". It contains the following text:

This VM contains a single-node Apache Hadoop cluster along with everything you need to get started with Hadoop, including Cloudera Manager and example data, queries, and scripts.

The VM from Cloudera is available in VMware, VirtualBox and KVM flavors, and all require a 64 bit host OS. This VM runs CentOS 6.2 and includes CDH 4.4, Cloudera Manager 4.7.2, Cloudera Impala 1.1.1 and Cloudera Search 1.0.

Below this text, there is a "Version:" label followed by a dropdown menu showing "VMWare".

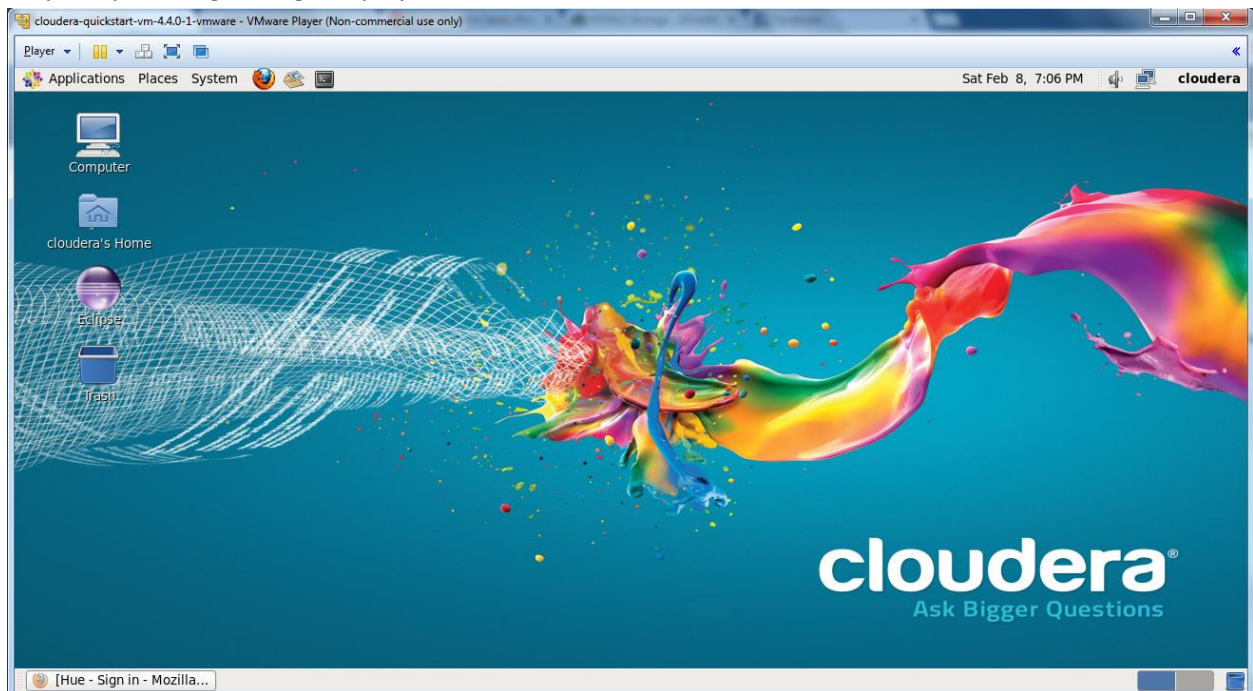
The section is titled "VMWare". To the right of this title is a link for "Administrative Information".

Below the title, it says "Last update: 10 Oct 2013" and "SHA1: d1e42b0b0d8b15e524889d398a33a8fc76dc7639".

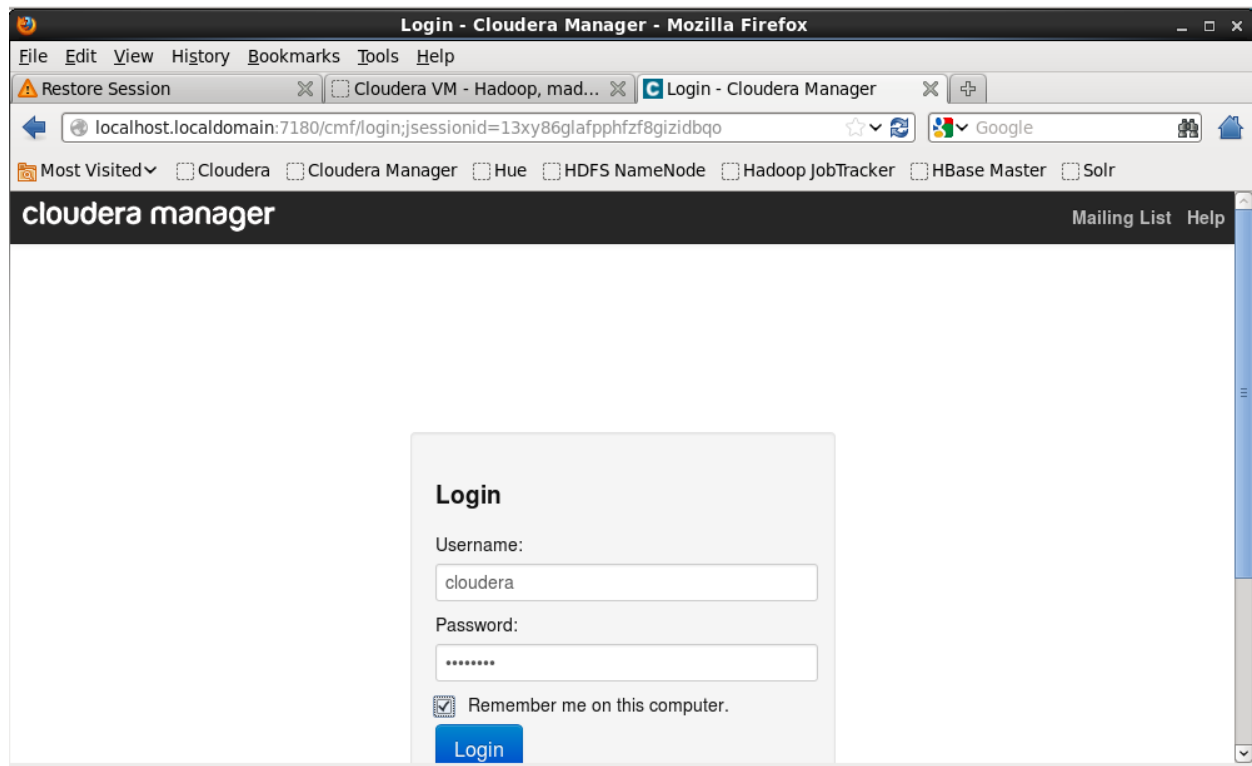
A green "Download" button with a right-pointing arrow is highlighted with a yellow circle.

At the bottom, there is a "Notice" section with a bullet point: "This is a 64-bit VM, and requires a 64-bit host OS and a virtualization product that can support a 64-bit guest OS."


Step 2: open image using VM player






Step 3: open cloudera manager entering the credentials.



Step 4 : Downloading Word Count file and running using terminal. Download Page:



[Log in](#)
[Register](#)

[About](#)
[Support](#)
[Community](#)
[Projects](#)

Hadoop WordCount

[View](#)
[What links here](#)

Number:
 Author: Tak-Lon Stephen Wu
 Improvements:
 Version: 1.0
 Date: 2013-07-02

Hadoop WordCount

WordCount is a simple program which counts the number of occurrences of each word in a given text input data set. WordCount fits very well with the **MapReduce** programming model making it a great example to understand the Hadoop Map/Reduce programming style. You can download the **WordCount source code** from [Big Data for Science tutorial](#).

Acknowledge

This page was originally designed by SalsaHPC group for [Big Data for Science Workshop](#); you can see the original pages [here](#).

Requirements

1. [Log in to FutureGrid Cluster](#) and obtain compute nodes. (HPC / Eucalyptus)
2. [Start SalsaHadoop/Hadoop on compute nodes.](#) (SalsaHadoop Tutorial)

Step 5: Extracting the files

```

cloudera@localhost:~/Downloads/Hadoo
File Edit View Search Terminal Help
[cloudera@localhost ~]$ dir
datasets Documents eclipse Music Public Videos
Desktop Downloads lib Pictures Templates workspace
[cloudera@localhost ~]$ cd Downloads
[cloudera@localhost Downloads]$ dir
hadoop-0.20.203.0-customized.tar.gz Hadoop-WordCount Hadoop-WordCount.zip
[cloudera@localhost Downloads]$ cd Hadoop-WordCount
  
```

Step 5: Input text folder to processing folder

```
cloudera@localhost:~/Downloads/Hadoop-WordCount
File Edit View Search Terminal Help
[cloudera@localhost ~]$ cd Downloads/
[cloudera@localhost Downloads]$ cd Hadoop-WordCount
[cloudera@localhost Hadoop-WordCount]$ ls
build.sh classes clean.sh input wordcount.jar WordCount.java
[cloudera@localhost Hadoop-WordCount]$ hadoop fs -put input/Word_Count_input.txt
input2
put: `input2': File exists
[cloudera@localhost Hadoop-WordCount]$ hadoop fs -put input/Word_Count_input.txt
input5
[cloudera@localhost Hadoop-WordCount]$ hadoop jar wordcount.jar WordCount input5
output5
14/02/13 10:10:33 WARN mapred.JobClient: Use GenericOptionsParser for parsing th
e arguments. Applications should implement Tool for the same.
14/02/13 10:10:35 INFO input.FileInputFormat: Total input paths to process : 1
14/02/13 10:10:43 INFO mapred.JobClient: Running job: job_201402121956_0001
14/02/13 10:10:44 INFO mapred.JobClient: map 0% reduce 0%
```

Step 6: now running the word count


```
cloudera@localhost:~/Downloads/Hadoop-WordCount
File Edit View Search Terminal Help
14/02/13 10:11:32 INFO mapred.JobClient: Total time spent by all maps in occupied slots (ms)=30503
14/02/13 10:11:32 INFO mapred.JobClient: Total time spent by all reduces in occupied slots (ms)=9825
14/02/13 10:11:32 INFO mapred.JobClient: Total time spent by all maps waiting after reserving slots (ms)=0
14/02/13 10:11:32 INFO mapred.JobClient: Total time spent by all reduces waiting after reserving slots (ms)=0
14/02/13 10:11:32 INFO mapred.JobClient: Map-Reduce Framework
14/02/13 10:11:32 INFO mapred.JobClient: Map input records=9488
14/02/13 10:11:32 INFO mapred.JobClient: Map output records=67825
14/02/13 10:11:32 INFO mapred.JobClient: Map output bytes=643386
14/02/13 10:11:32 INFO mapred.JobClient: Input split bytes=119
14/02/13 10:11:32 INFO mapred.JobClient: Combine input records=67825
14/02/13 10:11:32 INFO mapred.JobClient: Combine output records=11900
14/02/13 10:11:32 INFO mapred.JobClient: Reduce input groups=11900
14/02/13 10:11:32 INFO mapred.JobClient: Reduce shuffle bytes=86987
14/02/13 10:11:32 INFO mapred.JobClient: Reduce input records=11900
14/02/13 10:11:32 INFO mapred.JobClient: Reduce output records=11900
14/02/13 10:11:32 INFO mapred.JobClient: Spilled Records=23800
14/02/13 10:11:32 INFO mapred.JobClient: CPU time spent (ms)=5380
14/02/13 10:11:32 INFO mapred.JobClient: Physical memory (bytes) snapshot=240623616
14/02/13 10:11:32 INFO mapred.JobClient: Virtual memory (bytes) snapshot=1336045568
14/02/13 10:11:32 INFO mapred.JobClient: Total committed heap usage (bytes)=171315200
[cloudera@localhost Hadoop-WordCount]$
```

Step 7: output file



A terminal window titled "cloudera@localhost:~" with a menu bar (File, Edit, View, Search, Terminal, Help). The window displays the output of a word frequency analysis. The output lists words and their corresponding counts, with some words having multiple counts. The words are listed in ascending order of their total count. The terminal shows a cursor at the end of the last line, indicating it is ready for input.

```
you.      14
you."     15
you;      1
you?      2
you?"     23
young     42
young,    7
young.    2
young."   1
younger   1
youngest      3
your      74
yours,"    1
yours?"    1
yourself    5
yourself,   1
yourself.   1
yourself."  1
yourself;   1
youth      7
youth,     1
youth.     1
youthful    1
[cloudera@localhost ~]$
```

Part 3: Task1 – ScrumDo :

Step1: Signing up into ScrumDo by providing required details.



5,369,887 Stories Completed

The screenshot shows the ScrumDo Sign Up page. The header includes the ScrumDo logo and navigation links for Login and Sign Up. The main content area is divided into two sections: 'Sign Up' and 'Step 1'. The 'Sign Up' section contains a form with the following fields: Username* (filled with 'Mahesh-Venkata'), Password* (filled with '*****'), Password (again)* (filled with '*****'), and Email* (filled with 'mvjkt@gmail.com'). A 'Create Account' button is at the bottom. The 'Step 1' section contains the text: 'Create a personal ScrumDo account for yourself. You can join or create multiple companies or organizations with this account. Do you already have an account? Log in'.

ScrumDo Manish Vardha



Now create stories as backlog.

The listed stories can be seen in group in the backlog.

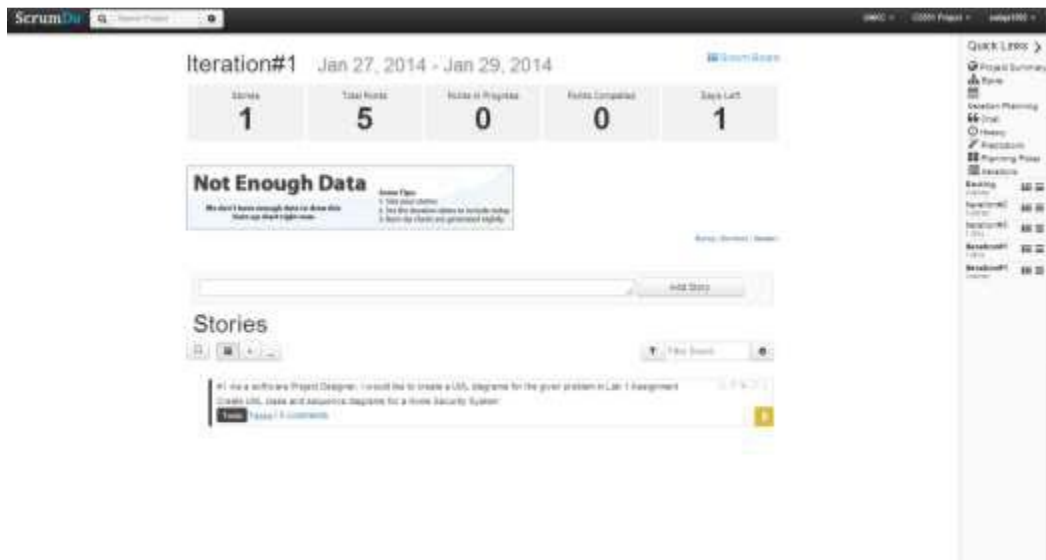
The screenshot displays a Jira Backlog for the 'Security Project'. At the top, there are four summary boxes: 'To Do' with a count of 2, 'Total' with a count of 5, 'Points in Progress' with a count of 0, and 'Points Completed' with a count of 0. Below these, the 'Stories' section lists two items. The first story, 'As a Software Project Designer, I would like to create a DSS diagram for the given incident in Lab 1 Assignment', is marked as 'To Do' with a high priority and has one comment. The second story, 'As a Designer, I would like to install Microsoft Visio so that I can draw the DSS diagram', is also marked as 'To Do' with a high priority and has one comment. The right sidebar contains a 'Quick Links' menu with various navigation options.

Add iterations

The screenshot shows the 'New Iteration' form in the ScrumDo application. The form includes the following fields:

- Name:** Iteration#1
- Start date:** 2014-01-27
- End date:** 2014-01-29
- Include in Velocity Calculations:** ☒

A blue 'Add Iteration' button is located at the bottom right of the form. A light blue banner at the bottom of the page reads: 'Remember! Tip: Use the Dashboard with a good browser.' The right sidebar contains a 'Quick Links' menu with options like Project Summary, Sprints, Iteration Planning, and others.



Now create team and add team members

Task2-Github:

Step1: Goto github.com and create github account.

The screenshot shows the GitHub homepage with the sign-up form. Red numbers 1 through 4 are placed to the left of the form fields to indicate the steps: 1 for the username field, 2 for the email field, 3 for the password field, and 4 for the 'Sign up for GitHub' button. The button is also circled in red.

Build software better, together.

Powerful collaboration, code review, and code management for open source and private projects. Need private repositories? Upgraded plans start at \$7/mo.

1. Username: Mahesh-Vemul ✓

2. Email: vemul.mahesh@gmail.com ✓

3. Password: •••••••• ✓
Use at least one lowercase letter, one numeral, and seven characters.


4. **Sign up for GitHub**


By clicking "Sign up for GitHub", you agree to our [terms of service](#) and [privacy policy](#).


Step 2: Select your plan and click finish

Welcome to GitHub

You've taken your first step into a larger world, @Mahesh-Vemul.

 **Completed**
Set up a personal account

 **Step 2:**
Choose your plan

 **Step 3:**
Go to your dashboard

Choose your personal plan

| Plan | Cost | Private repos | |
|--------|------------|---------------|-------------------------|
| Large | \$50/month | 50 | <button>Choose</button> |
| Medium | \$22/month | 20 | <button>Choose</button> |
| Small | \$12/month | 10 | <button>Choose</button> |
| Micro | \$7/month | 5 | <button>Choose</button> |
| Free | \$0/month | 0 | <button>Chosen</button> |

Each plan includes:

Unlimited collaborators
Unlimited public repositories

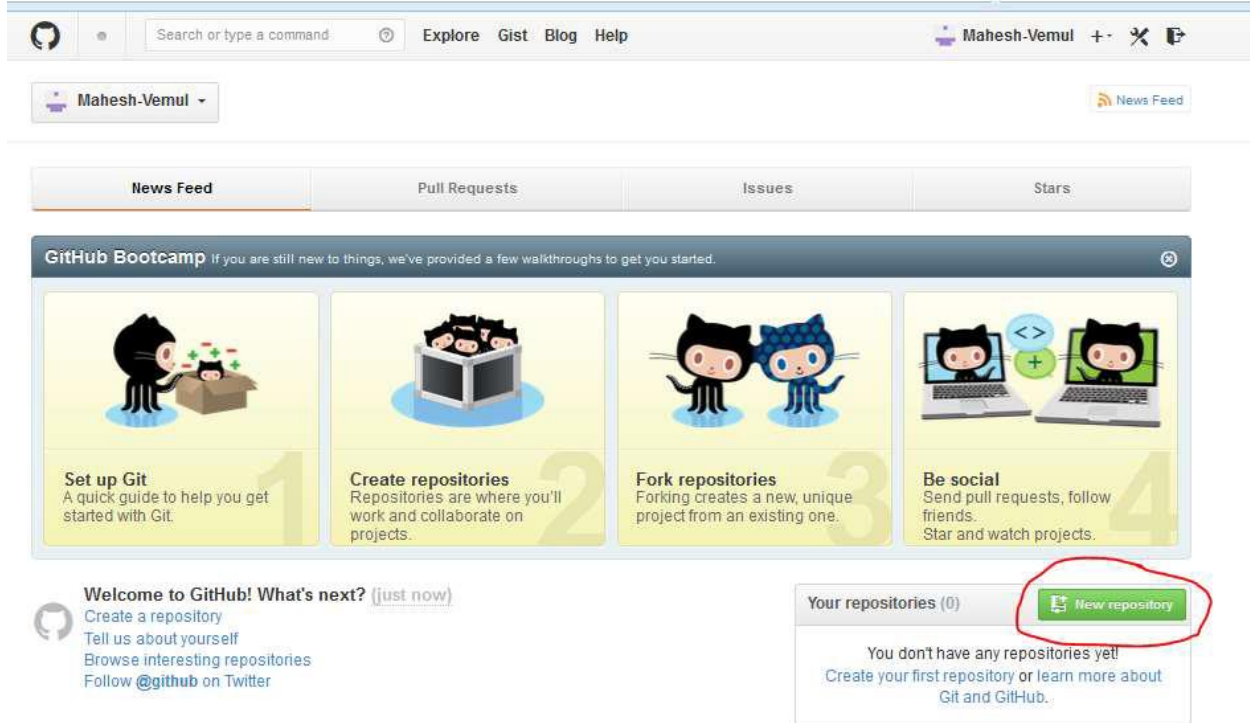
- ✓ Free setup
- ✓ SSL Protection
- ✓ Email support
- ✓ Wikis, Issues, Pages, & more

Don't worry, you can cancel or upgrade at any time.

☐ **Help me set up an organization next**
Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.
[Learn more about organizations.](#)

Finish sign up

Step 3: Now we have online repository. Create a new repository in it. Click on new repository



GitHub Bootcamp If you are still new to things, we've provided a few walkthroughs to get you started.

- Set up Git**
A quick guide to help you get started with Git.
- Create repositories**
Repositories are where you'll work and collaborate on projects.
- Fork repositories**
Forking creates a new, unique project from an existing one.
- Be social**
Send pull requests, follow friends. Star and watch projects.

Welcome to GitHub! What's next? (just now)

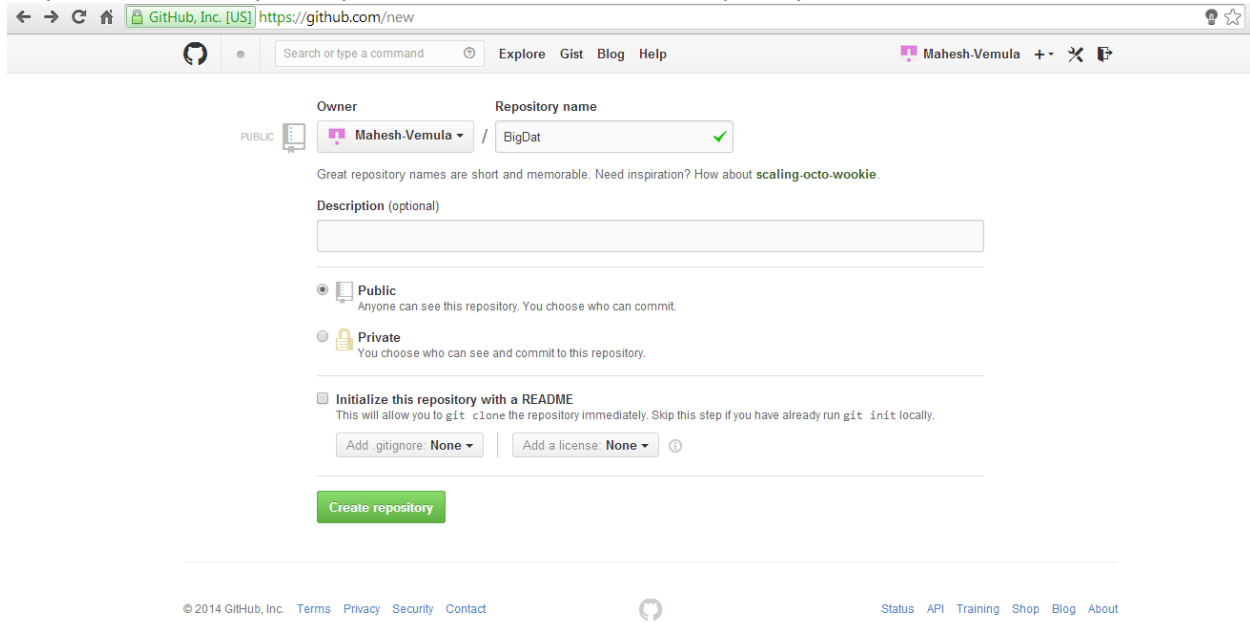
- Create a repository
- Tell us about yourself
- Browse interesting repositories
- Follow @github on Twitter

Your repositories (0)

[New repository](#)

You don't have any repositories yet!
Create your first repository or learn more about Git and GitHub.

Step 4: Now enter repository folder name and select access privacy



← → ↺ 🔍 GitHub, Inc. [US] https://github.com/new

Search or type a command Explore Gist Blog Help Mahesh-Vemula

Owner PUBLIC Mahesh-Vemula / **Repository name** BigDat

Great repository names are short and memorable. Need inspiration? How about [scaling-octo-wookie](#).

Description (optional)

☐ **Public**
Anyone can see this repository. You choose who can commit.

☐ **Private**
You choose who can see and commit to this repository.

☒ **Initialize this repository with a README**
This will allow you to `git clone` the repository immediately. Skip this step if you have already run `git init` locally.

Add .gitignore **None** Add a license **None**

[Create repository](#)

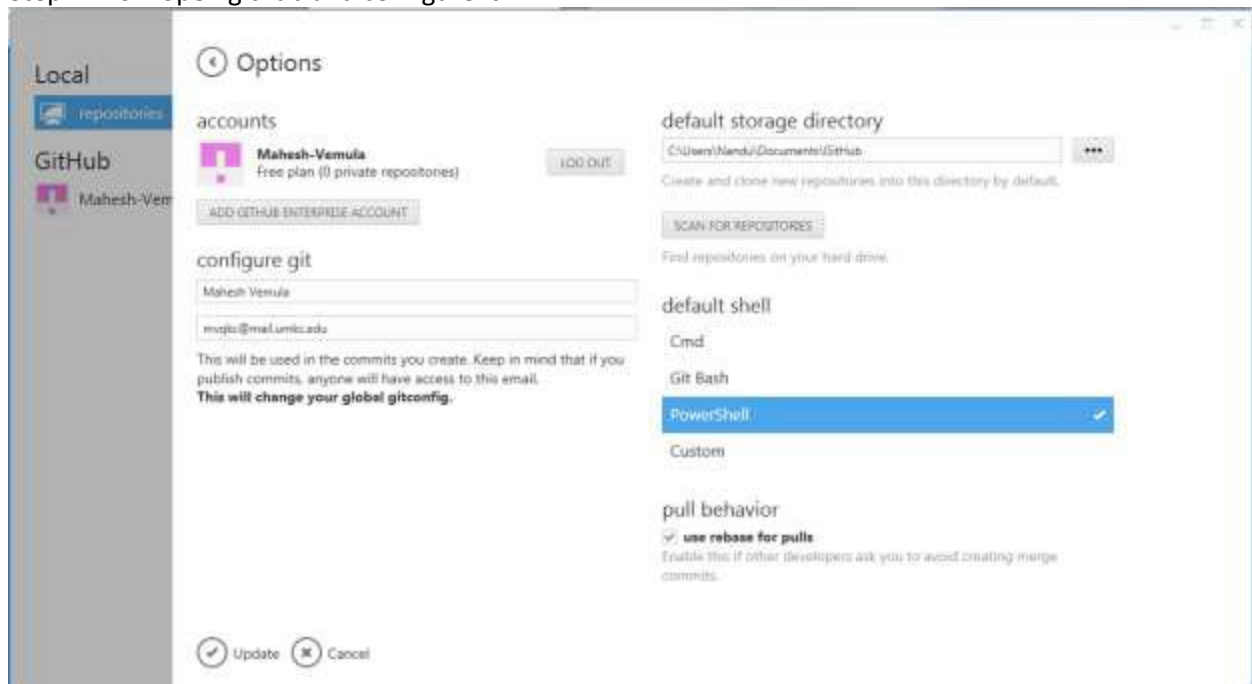
© 2014 GitHub, Inc. Terms Privacy Security Contact Status API Training Shop Blog About

Step 5: Now download github for local computer. Goto windows.github.com and download

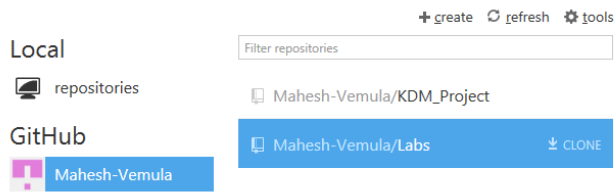


Step 6: After downloading install github.

Step 7: Now open github and configure it

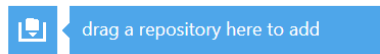


Step 8: Github repository is now ready to sync.



no readme

This repository doesn't have a README. READMEs are a great place to describe your project or add some documentation such as how to install or use your project. Why not add one?



END of REPORT