Amazon Web Services

Caveat Lector:

AWS[1] provides many computing "products" as a service. Examples are servers, databases, and various application services as well. Each of these services has a fee associated with it based on the customer's use.

For the purpose of this class, we'll only make use of services that are provided as part of **AWS Free Usage Tier**[2]. Not following directions could lead to your credit card being charged by AWS. Even with the Free Usage Tier, some users have reported insignificant charges due to data transfers. These reports seem to be on the order of a few cents, though.

By engaging in the exercises, you must be willing to take responsibility for any charges that are billed to you.

Getting Started:

1. Sign up for a AWS account at http://aws.amazon.com/. Look for the big "Sign Up Now" button. Signing up for an account is free, but you will have to enter a credit card number.
2. EC2 is Amazon's virtual server offering. Follow the directions at http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-launch-instance_linux.html to launch an EC2 Instance.

   Note the following before you begin:
   A) In **Step 5**, make sure you **create a new key pair** and **Download it.** If you don't do this, you won't be able to access your server.
   B) In **Step 6**, when asked to choose a server, choose **an Ubuntu version.** (Make sure it has a Gold Star next to it indicating that it is eligible for the free usage tier.

Set up LAMP.

3. Make sure that SSH is enabled for the security group associated with your instance. (see step 6 below for how to add something to your security group).
4. Connect to your EC2 instance from a terminal. If you're on Windows, use PuTTY (google it for downloading. You'll need to set up the key file you downloaded when creating your instance to use with SSH.)
5. Set-up up your EC2 instance as a LAMP server. Execute the command **sudo apt-get install lamp-server^** just as you did on your local development VM.
6. Set up the AWS Security Group associated with your EC2 instance to allow HTTP Traffic.
   A) Log in to AWS EC2 management console.
   B) Click on your EC2 instance in the upper part of the window.
   C) In the lower part of the window (Description Tab), make note of which **security group** is associated with your instance.

1 For an overview of AWS, see http://aws.amazon.com/what-is-aws/.
2 For more information about what is included in the Free Usage Tier of AWS, see http://aws.amazon.com/free/.

D) Click on Security Groups on the left-side menu (under Network and Security)
E) Click on the Security Group associated with your EC2 instance noted from step C above.
F) In the bottom of the screen below, click on the Inbound Tab.
G) In the Create New Rule dropdown box, choose HTTP.
H) Click the **Add Rule** Button.
I) Click **Apply Rule Changes** button below.

7. Connect to Apache HTTP Server running on your EC2 instance from your browser.
   A) Click on Instances on the left side of the screen.
   B) Under the Description Tab on the bottom of the window, copy the **Public DNS** to the clipboard.
   C) Open your browser, paste the link you just copied in to the address bar, and hit enter
   D) You should see something that says:
   It works!