**Project2 Report2**

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Time to complete Task: **2hrs**

**Time Tracking Information:**

**1st day:** 10:00pm-11:50pm

**Base System: Cloud9**

Lately this semester I have been working a great deal in Cloud9 ([c9.io](https://c9.io/)). Cloud9 is a web-based platform that gives you free access to a virtual machine on which you can create projects, run Unix terminal commands, and run programs on a virtual local network. Thus, Cloud9 is more of an IaaS whereas Heroku is a PaaS. One of my team projects in another class involves building a Ruby web application in Cloud9; I have used this application for the Heroku usability task.

**Note:**

I had actually worked with Heroku (minimally) in the past, meaning that this process wasn’t brand new to me; however, I did learn how to link a Cloud9 account with Heroku so that deployment was as simple as pushing to a master Heroku repository

**Going Through Heroku Tutorial**

I followed this tutorial for Heroku with Ruby:

<https://devcenter.heroku.com/articles/getting-started-with-ruby#introduction>

The first step of the process was to install the Bundler gem, which I had already done for this application (Bundler has a lot of useful packages). After confirming the existence of Bundler, I needed to install the Heroku CLI (command line interface), which as simple as just copying the install command from the tutorial into my Cloud9 terminal. By this point, I needed to log into my Heroku account and create an app under Dashboard > Personal apps. Then I had to clone this app over to my Cloud9 application folder, organize the files, run heroku create, and do git push heroku master to link the Heroku app with my repo. At this point, I was basically done with the setup.

**Difficulties**

After fiddling around with Heroku, I decided that I wanted change my app’s name from the random one generated by Heroku when I created the app. However, after changing the App name, I couldn’t get Cloud9 to commit to the Heroku repository, and had to follow their online guide to correct the local repository name before they were properly re-linked. Also, Heroku was running a newer version of Ruby than my App and I couldn’t figure out how to downgrade Heroku to the right version because I kept getting build errors. In the end I found Cedar-14 (<https://blog.heroku.com/cedar-14-public-beta>), a Heroku mod that seemed to fix my build errors and run the older version of Ruby once I set it as the default for my Heroku app.

**My Impression**

Having set up lots of local/hosted servers and websites before, I don’t think I have a huge need of Heroku, but I can definitely vouch for its easiness to learn, especially for someone new to website hosting who doesn’t want to have to deal with setting up dedicated servers with port-forwarding, expensive online hosting options (like Wordpress), or free online hosting options with severely limited control (like Google sites). The free version of Heroku is pretty fast from what I can tell, so for smaller website without a ton of database info it should work fine. From what I’ve read online, paid versions of Heroku scale well to balanced the load of heavy traffic and provide unlimited bandwidth, but do not scale cheaply for storage and don’t have good enterprise-level discounts on anything. Still, I would definitely recommend Heroku as a cheap, easy way to get started for small or new businesses that needs full control over its website/application.

My team’s app on Heroku:

<https://boat-rental-iter1.herokuapp.com/>