MIBURA

Mibura Boot Camp 2017

Week 0: Introduction/Overview
Week 1-3: Introduction to advanced Linux administration
Week 4-5: AWS DevOps Deploy & Management
Week 6-8: Java Script
Week: 9-12: Python
Week 13-14: Ruby
Week:15-16: Hackathon

Rough Outline:

1. Advanced Linux Administration: Weeks 1-3

http://www.nongnu.org/lpi-manuals/manual/pdf/GNU-FDL-OO-LPI-201-0.1.pdf
http://linux-training.be/linuxsys.pdf
https://linuxacademy.com/

1. The Linux Kernel
2. System Start Up
3. The Linux File system
4. Hardware and Software Configuration
5. File and Service Sharing
6. System Maintenance
7. System Automation
8. Linux Shell Scripting
9. Linux Sys Admin
10. Monitoring and Self Healing
11. Infrastructure Automation

2. AWS DevOps Deploy & Management: Weeks 4-5

https://d0.awsstatic.com/whitepapers/AWS_DevOps.pdf

1. Introduction
2. Infrastructure as Code
    a. AWS Cloud Formation
    b. AWS AMI(Amazon Machine Page)
3. Continuous Deployment
    a. AWS Code Deploy
    b. AWS Code Pipeline
    c. AWS Code Commit
    d. AWS Elastic Beanstalk and AWS OpsWorks
    e. Blue-Green Deployment

4. Automation
    a. AWS Elastic Beanstalk
    b. AWS OpsWorks
5. Monitoring
    a. Amazon Cloud Watch
    b. AWS Cloud Trail
6. Security
    a. Identity and Access Management (IAM)

3. Python, Ruby, Java

http://tdc-www.harvard.edu/Python.pdf
http://python.berkeley.edu/
http://python.berkeley.edu/resources/
https://www.codecademy.com/learn/python

a) Java Script: Weeks: 6-8

https://www.codecademy.com/learn/javascript

1. Introduction to JavaScript
2. Functions
3. 'For' Loops in JavaScript
4. 'While' Loops in JavaScript
5. Control Flow
6. Data Structures
7. Objects I
8. Objects II
9. JavaScript Final Project

b) Python: Weeks: 9-12

https://www.codecademy.com/learn/python
https://www.tutorialspoint.com/ruby/ruby_tutorial.pdf

1. Python Syntax
2. Strings and Console Output
3. Conditionals and Control Flow
4. Functions
5. Lists & Dictionaries
6. Student Becomes Teacher (optional)
7. List & Functions
8. Loops

9. Exam Statistics
10. Advanced Topics in Python
11. Introduction to Classes
12. File input and output
13. Python Final Project

c) **Ruby: Weeks: 13-14**

https://www.codecademy.com/learn/ruby

1. Introduction to Ruby
2. Control Flow in Ruby
3. Looping with Ruby
4. Arrays and Hashes
5. Blocks and Sorting
6. Hashes and Symbols
7. Refactoring
8. Blocks, Procs, and Lambdas
9. Object-Oriented Programming, Part I
10. Object-Oriented Programming, Part II
11. Ruby Final Project

4. Hackathon: Week 15-16

Qualified members of the hackathon will be able to build an app, a website, a game, or a slackbot/chatbot(recommended). The possibilities are limitless so use your imagination and creativity to build out something that could be an asset for our organization. Winners of the hackathon will be rewarded with a prize (tbd) or an opportunity to intern here at Mibura in the Summer of 2017.