Project 1 — Virtualization

Overview

This project will give you hands-on experience building a platform suitable for a development environment of software and documentation design.

In this project, you will build one sandbox suitable for a development effort and come away with a set of instructions that will allow someone to create the number of identical virtual machines needed for the effort.

You may be familiar with commercially available platforms like:
- SAP Cloud
- Microsoft Azure
- Heroku
- AWS Lambda
- Dokku
- IBM Cloud
- Oracle Cloud

And many, many more!

Project Objectives:

You will be able to:
- **Show** your understanding of building a virtual machine.
- **Develop a guide** for repeatable platforms for an organization.

Instructions:

1. This is an individual project; you must turn in your own work.
2. Collaboration for ideas is acceptable, but duplication of work is not.
3. Use the AWS Lightsail platform for your VPN and gain access to the virtual machine you will configure. This should be available on the free tier, but be careful not to do things that cost unless you are willing to pay for them.
4. Configure your machine as a Microsoft Windows machine and to have at least one of each of the following:

- o Code editor
- o Compiler
- o IDE
- o Document editor
- o PDF Viewer
5. Document the process to create this environment
6. Document the process to use this environment
7. Demo the environment in class

Deliverables:

All deliverables must be at least a minimum viable solution to the problem assigned. No attempt at grading will be made for nonsubstantial submissions.

All deliverables should have branding (create a logo or heading) and should look professional, ready to give to a customer. Internal documentation should have branding as well.

1. Create a document that would allow IT personnel to recreate your environment as many times as needed. (cloning an instance)
2. Create a document that would allow a new user (Intern, new employee, student, etc.) to know how to gain access to and use the environment
3. Demonstration of usability.

Grading:

This project is worth 100 points.

Documentation 60%
Demonstration 40%