Condo Daily Report 8-24-21

Monday

* Delve straight into cloud formation
  + Began with yaml basics and json basics
  + Learned how to convert between the two in the context of CloudFormation
  + Began learning how to develop CloudFormation templates
    - Learned the basic structure of the template
      * TemplateFormatVersion
        + This value is always the same “2010-09-09” it states the current valid version of the template
      * Description
        + This field describes the functionality of the template

If included it must be placed after the TemplateFormatVersion

* + - * Metadata
        + Allows inclusion of arbitrary JSON or YAML objects that provide details about the template
      * Parameters
        + Allow you to pass values into your template when creating the stack
      * Mappings
        + Mapps keys to corresponding values
      * Conditions
        + These are statements that allow reusable templates

This is useful when you have similar templates but slightly different configurations such as ec2 setup in production vs development environments

* + - * Transforms
        + These are used for serverless templates or templates that include other yaml objects “::include”
      * Resource
        + This is the only essential field all the rest are opposite. This field is used in order to tell CloudFormation what AWS services you will be utilizing in your stack
      * Output
        + This simply outputs specified information on creation of the stack

Such as server url, local ip, etc.

* + - Learned about intrinsic function and how they are used to traverse templates, and allow less code coupling, and redundancy
    - Learned about pseudo parameters, and why they are able to reference aws environment information without specified parameters
    - Learned conditional functions as mentioned above
      * These come in handy with versioning
  + Pulled and commented through a yaml template file that creates an ec2 instance
    - url: [CloudFormation-YAML-Scripts/Template\_Anatomy.yaml at main · condosr/CloudFormation-YAML-Scripts (github.com)](https://github.com/condosr/CloudFormation-YAML-Scripts/blob/main/Template_Anatomy.yaml)
      * I used yaml because it is easier to read, and allows for in line commenting which is useful for peer coding
  + Perceptivity Portal went down
    - I looked at the ec2 instance
      * It showed that one of the alarms that I set was being set off
        + I went to cloudwatch to see the inbound traffic was spiking which temporarily disabled the portal
        + I went to cloudwatch insights, and made a query that shows highest spikes in incoming network traffic to the perceptivity portal, and I was able to track where the call came from and was able to monitor requests from the sending IP address