**Name of Microservice**

Netflix is the software that will be researched. It is a product that provides video streaming services to millions of customers worldwide.

**Why is Microservice Architecture used?**

When Netflix pivoted towards streaming services as opposed to DVD rentals, scaling became an important issue. The microservice architecture, as opposed to the previously used monolithic, in-house architecture, ensures there is no single point of failure that can crash everything which is very important with its growing customer base. It is also more scalable to support the increasing service requestsand if a piece of software (microservice) within the architecture is slowing down the services, engineers can isolate the service and fix the issue.

**How does the Microservices communicate?**

1. Open Connect, the in-house network of servers send health statuses to AWS EC2 so EC2 knows which servers are available if a request comes in
2. Play request from client (user’s browser) sends playback request to Netflix’s AWS EC2 instance to fetch URL’s of the video
3. EC2 service validates the user and all their credentials and finds the best server within Open Connect (Netflix’s in house microservice that is a network of servers) to use dependent on user’s IP address, requested video, etc.
4. After the server is decided, it is sent back to EC2 to then be sent back to the client the requested content.

**What are some examples of the microservices?**

* AWS, the public cloud for hosting all of its data. Netflix used to have a monolithic structure that housed all of its own data. That changed when customer base moved towards streaming as opposed to DVD. Examples:
  + AWS EC2 – Computing instances
  + AWS S3 - scalable storage
  + AWS DynamoDB – scalable database
* Open Connect, an in house microservice that serves the requests and delivers the content. A network, of servers used for streaming and storing videos