Section 1: Hands on with key Serverless components

***Section Description (from the outline):*** The first section of this course will focus on bringing you into the world of serverless architecture. Explaining the main concepts of AWS and the many services you’ll be learning throughout this course, we will also touch upon the Serverless framework and all accompanying tools that help

us in the development process.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Video Number** | **Video Title** | **Problem / Solution (Not more than 50 words)** | **Step 1 (Not more than 10 words)** | **Step 2(Not more than 10 words)** | **Step 3(Not more than 10 words)** |
| 1.1 | Introducing the Serverless framework. | Go through the basics of Serverless architecture and touch upon the tools used in the remainder of the course. | Understanding Serverless Architecture | Understanding the AWS infrastructure | Installing the Serverless framework |
| 1.2 | Creating an IAM user for your serverless installation | Create an IAM user to connect an AWS account to the Serverless installation. | Access the AWS console | Create an IAM user | Store the user keys somewhere safe |
| 1.3 | Configuring Serverless to work with your AWS Account | Configuring the Serverless installation to work with an AWS account | Access the file where the keys are stored | Run the configure command | Ready to deploy an app |
| 1.4 | Creating your first service | Creating a service and configuring functions and events | Using the create command to create a service | Configuring functions and events in the serverless.yml | Understand the function parameters |
| 1.5 | Deploying your functions | Understanding how to deploy a service, and what Serverless does behind the scenes. Steps to remove a service. | Deploying a service | Understanding CloudFormation | Removing deployments |
| 1.6 | Testing and monitoring | Using the Serverless framework to test and monitor functions. Showing logs in the AWS console through CloudWatch. | Invoking the functions with the invoke command | Viewing logs on CloudWatch | Invoking functions locally |
| 1.7 | Installing Serverless Offline and running the application locally | Using Serverless Offline to emulate the environment locally. Enables proper testing on a local machine before deployment. | Installing and configuring Serverless Offline | Running Serverless Offline | Using Serverless Offline to do offline testing before deplyoment |
| 1.8 | Using large scale monitoring and error reporting tools | Learning about third-party tools to help you monitor a Serverless application in production | Take a look at available monitoring and error reporting services | Why do you need something like this? | Using an error reporting and monitoring tool |