Serverless deployment requires serverless.yaml file. The template for user-service is provided here.

Template

```
service: user-service
frameworkVersion: '3'

package:
        patterns:
                - '!.**/**'

provider:
        name: aws
        runtime: python3.9
        region: eu-north-1
        iamManagedPolicies:
                - "arn:aws:iam::<<aws-account-
id>>:policy/UserServiceReadSecrets"

functions:
        registration:
                handler:
src.integration.user_controller.registration_handler
                events:
                        - http:
                                path: user/register
                                method: post
                                integration: lambda-proxy
                                cors: true
plugins:
        - serverless-wsgi
        - serverless-python-requirements
```

Install npm on your machine

```
brew install npm
```

Install serverless framework

```
npm —g install serverless
```

Configure AWS CLI on your machine

https://docs.aws.amazon.com/cli/latest/userguide/getting-started-quickstart.html

Extract python dependencies

Every dependency your python project needs, must be installed using pip/pip3 inside your .venv directory

Navigate to your virtual environment directory:

```
cd .venv
```

Install Serverless requirement package manager

```
serverless—python—requirements
```

Extract dependencies:

```
pip freeze > requirements.txt
```
This creates a requirements.tx file in your project root.

Deploy Lambda Function

```
serverless deploy
```
You can continue doing any changes to your code base and deploy again using `serverless deploy`.
If any dependency is to be added, then follow below steps:

Install new dependency

In your .venv install new dependency, suing pip/pip3:
```
pip3 install <<new library>>
```

Update requirements.txt

Execute in your .venv:
`pip freeze > requirements.txt

Deploy Lambda again

```
serverless deploy
```

Head over to https://eu-north-1.console.aws.amazon.com/lambda/home?region=eu-north-1#/functions to see your Lambda function deployed.

Destroy Lambda Function

Do not delete your lambda functions directly from AWS Console, please use Serverless to delete the complete resources for you.

```
serverless remove
```