

# Scheduling System Deployment Documentation

## Prerequisites

1. Create an Amazon Web Services (AWS) account and set up IAM users
2. Use the Ohio Region for all AWS Setup
3. Obtain a copy of the Deployment Files

## Deployment

### S3 Setup

1. Create a bucket in s3. The bucket name should be exactly the same as your desired domain name
2. Enable Versioning and Static Web Hosting on your bucket
3. Copy the S3 Policy from the install files and paste it into bucket policies. This will make the bucket publicly accessible
4. Purchase the domain name in AWS Route 53
5. Upload all the files from the folder "S3Files" in the deployment files

### Lambda setup

1. Create an IAM role called SSLambdaRole, Attach the policies:
  - a. SSLambdaInvokeRead
  - b. AWSLambdaBasicExecutionRole
  - c. lambdaSESSend
  - d. AWSLambdaMicroserviceExecutionRole
  - e. AmazonCognitoPowerUser

(Note: If these policies do not exist, create the policies from the JSON files provided in the Deployment Files)

2. In the "LambdaFunctions" folder of the deployment files, select a zip file
3. Create a lambda function with the same name as the zip selected
4. Select the policy: SSLambdaRole
5. In the code editor select upload, and upload the selected zip.
6. Repeat steps 2-7 for all the zips in the deployment files

### API Gateway Setup

1. In API Gateway, select Import from Swagger
2. Select 'select swagger file'
3. Browse to the 'APISwagger' folder and select one of the swagger files
4. Select Import
5. Repeat for each swagger file

### SES Setup

1. Create an email account to use as your notification mailbox
2. Verify the Account with SES

3. Place a request to be removed from SES sandbox

### Cognito Setup

1. Create a Cognito User Pool called SSUsers
2. Add custom attributes:
  - a. Type: String, Name: userLevel, Min. Length 1, Max. Length: 256
  - b. Type, String Name: ysuld
3. Create an Application Client named SSApplication
4. Select Defaults for all other options
5. Create an AWS Cognito Identity Pool called SSIdentity
6. Select Cognito as the Auth provider and enter your user pool Id and app client id

### DynamoDB Setup

1. Create the tables:
  - a. SS\_Requests
  - b. SS\_Room
  - c. SS\_Statistics
  - d. SS\_timeBlock
  - e. Tutor\_TimeBlocks
  - f. Tutor\_Tutors