

Appendix 1: Instruction guide for deploying the Web Portal on AWS

Cloud Deployment

For the website to be accessible through internet we have chosen the portal to be deployed on AWS cloud base system. It is the economically the best option available and also, they have good support and multiple options available.

To deploy the web page on follow the steps from this URL provided by AWS:

<https://aws-amplify.github.io/docs/js/start?ref=amplify-js-btn&platform=purejs>

Steps from the link are explained below.

Steps to deploy the portal on AWS:

Prerequisites:

- 1) Create an AWS account.
- 2) Install Node.JS and npm if they are not already on your machine.
- 3) Verify that you are running at least Node.js version 8.x or greater and npm version 5.x or greater by running `node -v` and `npm -v` in a terminal/console window.
- 4) Run the command `npm install -g @aws-amplify/cli`
- 5) Run the command `amplify configure`

Configure the amplify with your AWS account in the last step by following the steps provided by running the command.

Steps for above can be found from the URL: <https://aws-amplify.github.io/docs/>

After completing the prerequisites do the steps below:

Step 1. Create a new app:

1. Run the following commands:
 - 1) `mkdir -p appName/src && cd appName`
 - 2) `touch package.json index.html webpack.config.js src/app.js`

The app directory structure should be:

```
- amplify-js-app
  - index.html
  - package.json
  - webpack.config.js
  - /src
    |- app.js
```

2. Add the following to package.json:

```
{
  "name": "amplify-js-app",
  "version": "1.0.0",
  "description": "Amplify JavaScript Example",
  "dependencies": {
    "@aws-amplify/api": "latest",
    "@aws-amplify/pubsub": "latest"
  },
  "devDependencies": {
    "webpack": "^4.17.1",
    "webpack-cli": "^3.1.0",
    "copy-webpack-plugin": "^4.5.2",
    "webpack-dev-server": "^3.1.5"
  },
  "scripts": {
    "start": "webpack && webpack-dev-server --mode development",
    "build": "webpack"
  }
}
```

The above code can be found in the URL: <https://aws-amplify.github.io/docs/js/start?ref=amplify-js-btn&platform=purejs>

3. Install local development dependencies, run the command `npm install`.

4. Add your code (webpage) to index.html file.

5. Add the following to the webpack.config.js file:

```
const CopyWebpackPlugin = require('copy-webpack-plugin');

const webpack = require('webpack');

const path = require('path');

module.exports = {
  mode: 'development',
  entry: './src/app.js',
  output: {
    filename: '[name].bundle.js',
    path: path.resolve(__dirname, 'dist')
  },
  module: {
    rules: [
      {
        test: /\.js$/,
        exclude: /node_modules/
      }
    ]
  },
  devServer: {
    contentBase: './dist',
    overlay: true,
    hot: true
  },
  plugins: [
    new CopyWebpackPlugin(['index.html']),
    new webpack.HotModuleReplacementPlugin()
```

```
]
};
```

6. **Now run the app** using the command `npm start`.

If you are able to see your work in a good shape at URL <http://localhost:8080> they you can procees to step 2.

Step 2: Set Up Your Backend

Run the commands below

- 1) `amplify init`
Accept the defaults the command suggests for
- 2) `amplify add hosting`
- 3) `amplify publish`

Once the steps are completed successfully the console will throw a URL where your website is being hosted.