AWS-Serverless-typescript-dynamodb

This is a project using serverless to deploy lambda to AWS to save employee details with DynamoDb.

Installation

Clone the git repo

Use the node package manager to install the dependencies.

```
npm i
```

Usage

Create AWS user with the appropriate permissions to be able to create the cloud formation stack

To deploy the lambda to AWS.

```
npm run deploy
```

Once the lambda is deployed. Copy the API key to consume the API. The API key needs to be added to the headers for authorization as X-API-KEY while making a call to the URL in the service information.

```
Service Information
service: employees
stage: dev
region: eu-west-2
stack: employees-dev
resources: 22
api keys:
  first_dev_key: dhq0IQ5FfO3UwarotoCsa8p962uJJthK3IYb0VA2
  second_dev_key: gywXlevQrY4MI7MrcSZ8e2Mm6cDEKCjf3bLYT3DC
endpoints:
  POST - https://jq1h3y4qh3.execute-api.eu-west-2.amazonaws.com/dev/employee
functions:
  addEmployee: employees-dev-addEmployee
```

To remove the lambda from AWS

```
npm run remove
```

Test options

Running Tests

```
npm run test
```

Running Tests with coverage

```
npm run coverage
```

Customization

The table structure, name and lambda permissions can all be updated in the serverless.yml

Request Payload

The lambda can handle both single or multiple objects in the request body

Single object

```
{
"id": "UID-123",
"name": "robert",
"vat-number": "DE123456",
"user-id": "gid:robert"
}
```

multiple objects

```
    [{
        "id": "UID-127",
        "name": "kartik",
        "vat-number": "DE3456",
        "user-id": "kartik"
    },
    {
        "id": "UID-124",
        "name": "john",
        "vat-number": "DE123456",
        "user-id": "gid:john"
    }]
```

Logs

Logs are available in cloud watch and x-ray

HTTP Response codes

```
200 success
400 bad request
500 internal server error
```

TODOs

```
Integration test to be added
Request JSON to be validated using a schema validator
Security to be increases using cognito
Third party logging libraries to be used to improve the logging
```