

# Serverless Home Challenge

## Objective

The candidate will use the Serverless Framework to create a RESTful API for managing a todo list. The API will include endpoints for creating, retrieving, updating, and deleting todo items.

## Instructions

### Specifications

- Use the Serverless Framework to define and deploy AWS Lambda functions.
- Set up an API Gateway to route HTTP requests to the Lambda functions.
- Create a DynamoDB table called Todos with the following schema:
  - `id`
  - `title`
  - `completed`
  - `metadata`

### Requirements

- **Todos CRUD:** Implement a set of functions to create, update, read and delete a *todo* item. Only rule here is: Deletion will only work if Todo is completed.
- **Endpoints:** Create the necessary endpoints to be called through the Gateway service.
- **Serverless definition:** create a `serverless.yml` file to define the Serverless Framework configuration for the todo API.
- **Unit Tests:** add a set of unit tests to ensure the correct functionality of the implemented methods.

### Validation

- Ensure the Lambda functions properly handle different HTTP methods and routes them to the appropriate CRUD operations.
- Validate input data to ensure it meets the required schema before performing any operations.
- Implement proper error handling and return appropriate HTTP status codes.

### Big Plus

- Add some role definitions
- Use `serverless-offline` plugin
- Document the project, adding a detailed setup guide and the necessary steps to test your API.