

Sela.



DevAWS
Developing On Aws



college@sela.co.il

03-6176666





Developing On Aws

DevAWS - Version: 2

3 days course

Description:

Developing on AWS helps developers understand how to use the AWS SDK to develop secure and scalable cloud applications. The course provides in-depth knowledge about how to interact with AWS using code and covers key concepts, best practices, and troubleshooting tips

Intended Audience:

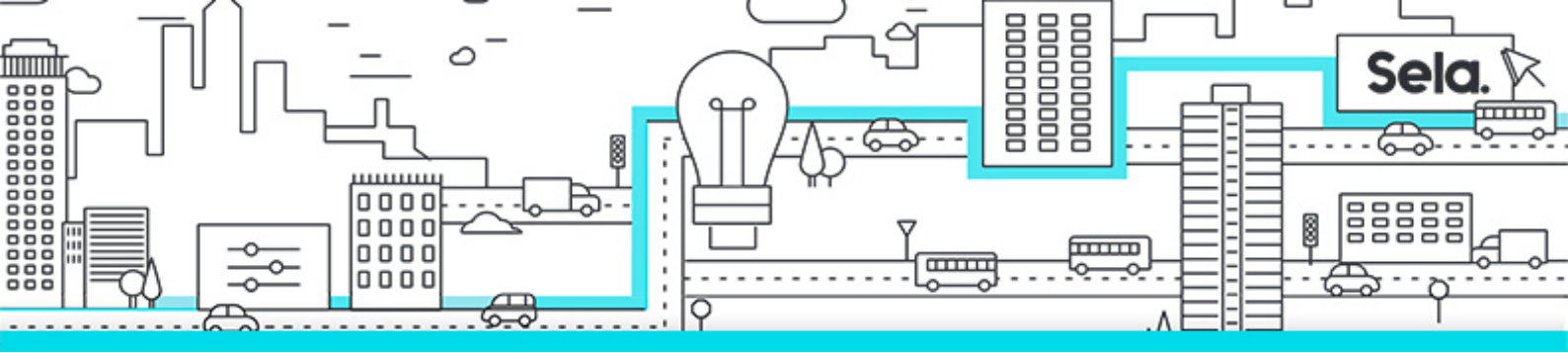
Intermediate-level software developers

Prerequisites:

- In-depth knowledge of at least one high-level programming language
- Working knowledge of core AWS services and public cloud implementation

Objectives:

- Set up the AWS SDK and developer credentials for Java, C#/.NET, and Python
- Interact with AWS services and develop solutions by using the AWS SDK
- Use AWS Identity and Access Management (IAM) for service authentication
- Use Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB as data stores
- Integrate applications and data by using AWS Lambda, Amazon API Gateway, Amazon Simple Queue Service (Amazon SQS), Amazon Simple Notification Service (Amazon SNS), and AWS Step Functions
- Use Amazon Cognito for user authentication
- Use Amazon ElastiCache to improve application scalability



- Leverage the CI/CD pipeline to deploy applications on AWS

Topics:

- **Module 1: Introduction to AWS**

- Introduction to the AWS Cloud
- Cloud scenarios
- Infrastructure overview
- Introduction to AWS foundation services

- **Module 2: Introduction to Developing on AWS**

- Introduction to Developing on AWS
- Getting started with developing on AWS
- Introduction to developer tools
- Introduction to management tools

- **Module 3: Introduction to AWS Identity and Access Management**

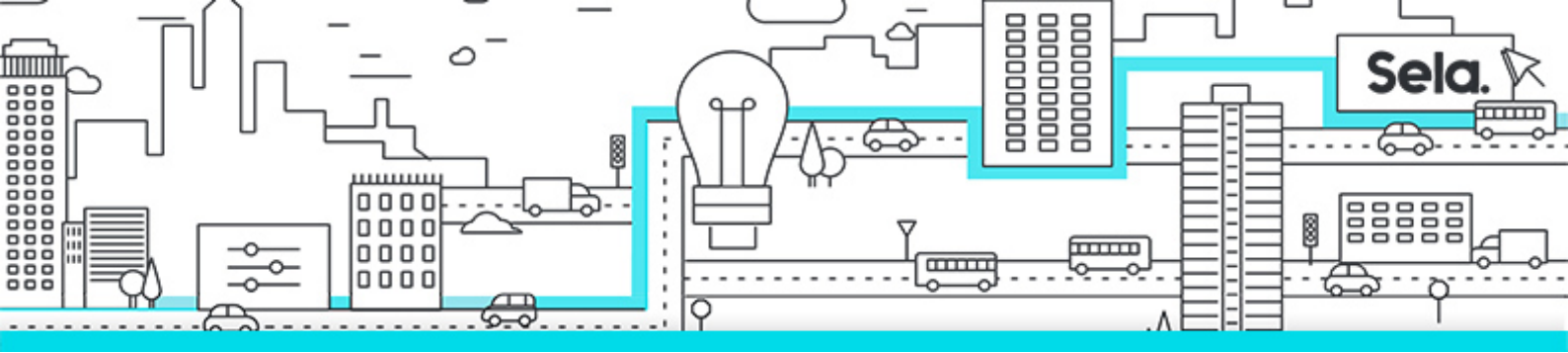
- Introduction to AWS Identity and Access Management
- Shared responsibility model
- Introduction to IAM
- Use authentication and authorization

- **Module 4: Introduction to the Lab Environment**

- Introduction to the Lab Environment

- **Module 5: Developing Storage Solutions with Amazon Simple Storage Service**

- Overview of AWS storage options
- Amazon S3 key concepts .
- Best practices
- Troubleshooting
- Scenario: Building a complete application



- **Module 6: Developing Flexible NoSQL Solutions with Amazon DynamoDB**

- Introduction to AWS database options
- Introduction to Amazon DynamoDB
- Developing with DynamoDB
- Best practices
- Troubleshooting
- Scenario: Building an end-to-end app

- **Module 7: Developing Event-Driven Solutions with AWS Lambda**

- What is serverless computing? .
- Introduction to AWS Lambda
- Key concepts
- How Lambda works
- Use cases
- Best practices
- Scenario: Build an end-to-end app

- **Module 8: Developing Solutions with Amazon API Gateway**

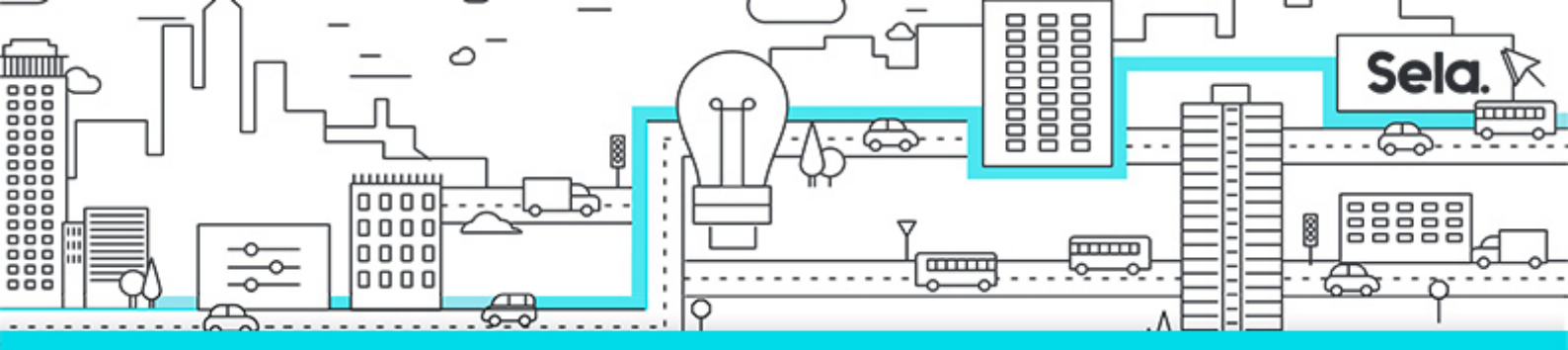
- Introduction to Amazon API Gateway
- Developing with API Gateway
- Best practices
- Introduction to AWS Serverless Application Model
- Scenario: Building an end-to-end app

- **Module 9: Developing Solutions with AWS Step Functions**

- Understanding the need for Step Functions
- Introduction to AWS Step Functions
- Use cases

- **Module 10: Developing Solutions with Amazon Simple Queue Service and Amazon SNS**

- Why use a queueing service?



- Developing with Amazon Simple Queue Service
 - Developing with Amazon Simple Notification Service
 - Developing with Amazon MQ
- **Module 11: Caching Information with Amazon ElastiCache**
 - Caching overview
 - Caching with Amazon ElastiCache
 - Caching strategies
 - **Module 12: Developing Secure Applications**
 - Securing your applications
 - Authenticating your applications to AWS
 - Authenticating your customers
 - Scenario: Building an end-to-end app
 - **Module 13: Deploying Applications**
 - Introduction to DevOps
 - Introduction to deployment and testing strategies
 - Deploying applications with AWS Elastic Beanstalk
 - Scenario: Building an end-to-end app