

AWS serverless portfolio

Compute



AWS Lambda



AWS Fargate

API proxy



Amazon API
Gateway

Storage



Amazon Simple
Storage Service
(Amazon S3)

Database

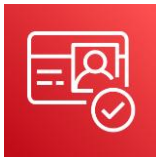


Amazon
DynamoDB



Amazon
Aurora
Serverless

Authentication



Amazon Cognito

Interprocess messaging



Amazon Simple
Notification Service
(Amazon SNS)



Amazon Simple
Queue Service
(Amazon SQS)

Orchestration



AWS Step Functions

Analytics



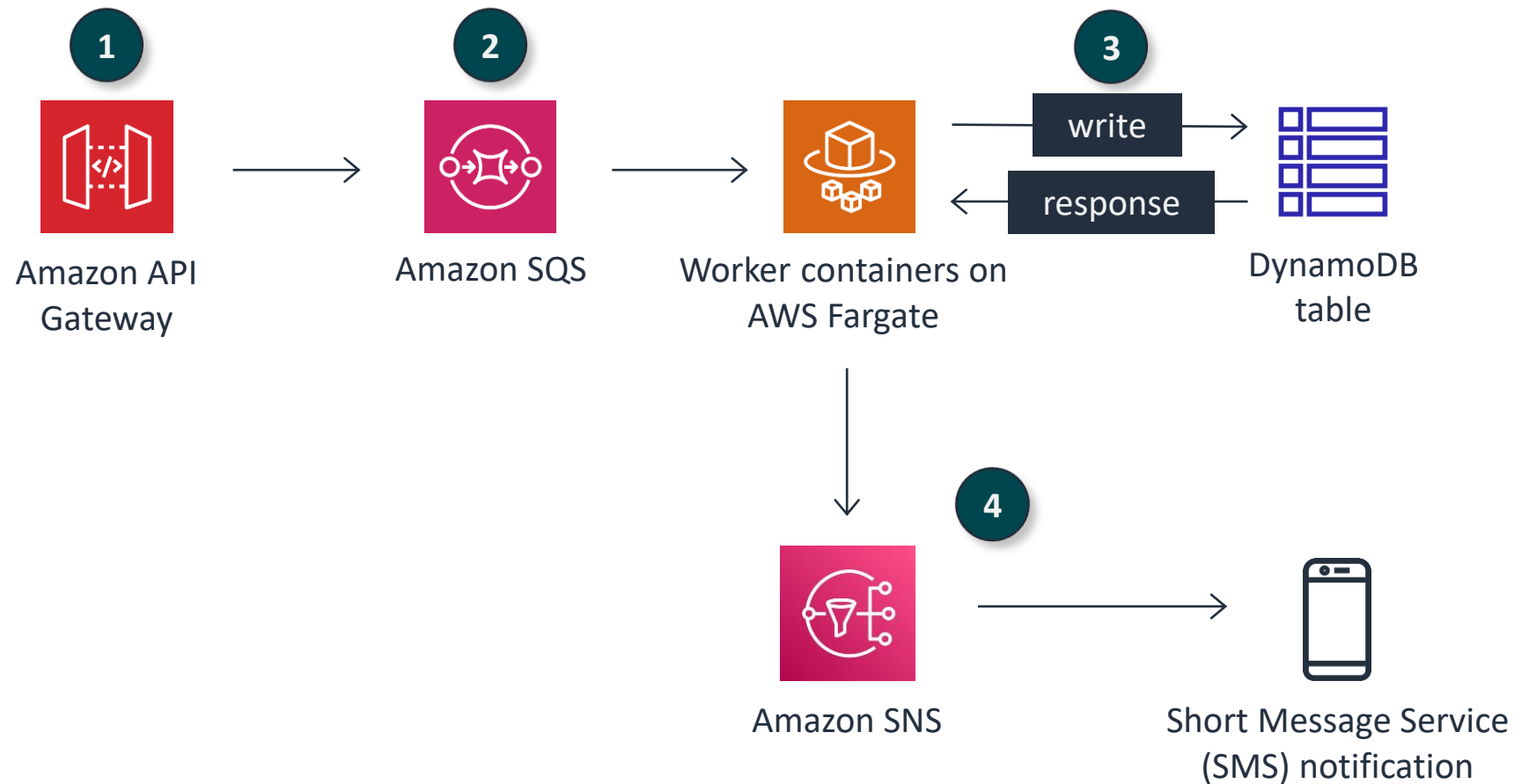
Amazon
Kinesis



Amazon
Athena

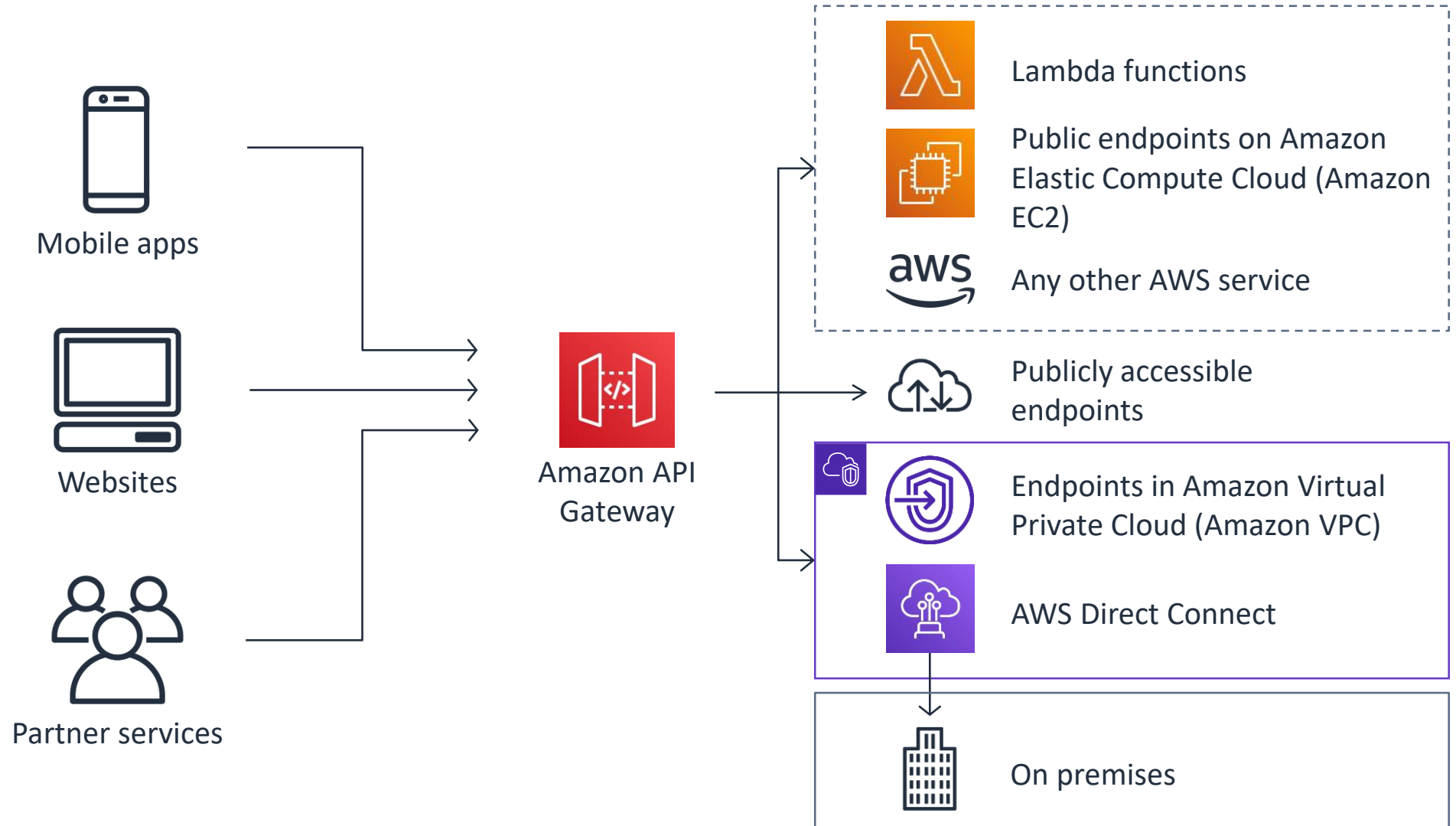
Example serverless architecture

1. POST request received
2. Request goes to a message queue to await processing by a worker service
3. Worker service processes message and writes it to Amazon DynamoDB
4. Worker service prompts the notification service to send an SMS notice to subscribed users

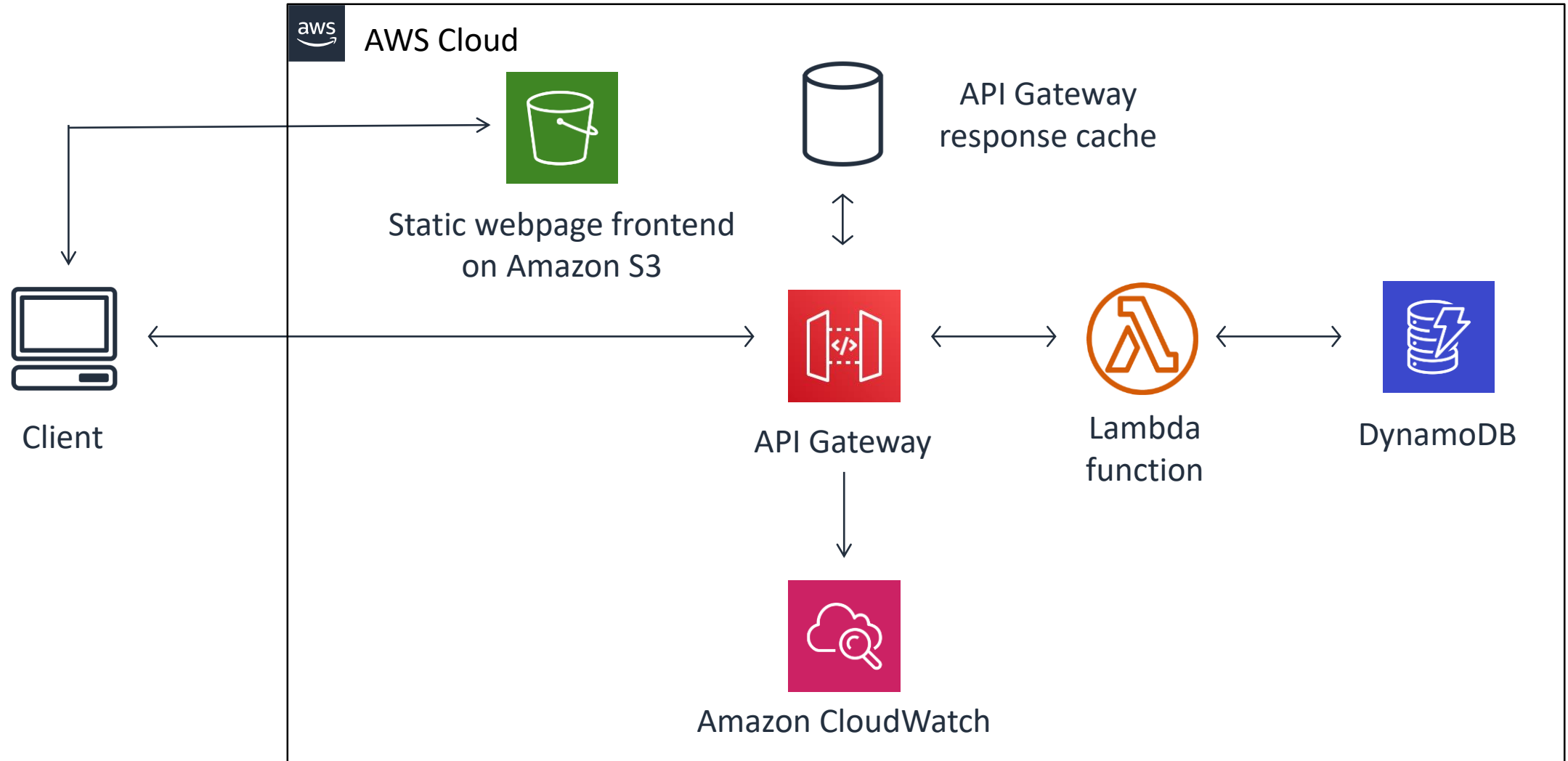


API Gateway

- Create an entry point for your applications.
- Process thousands of concurrent API calls.
- Choose internet-facing or internal only.

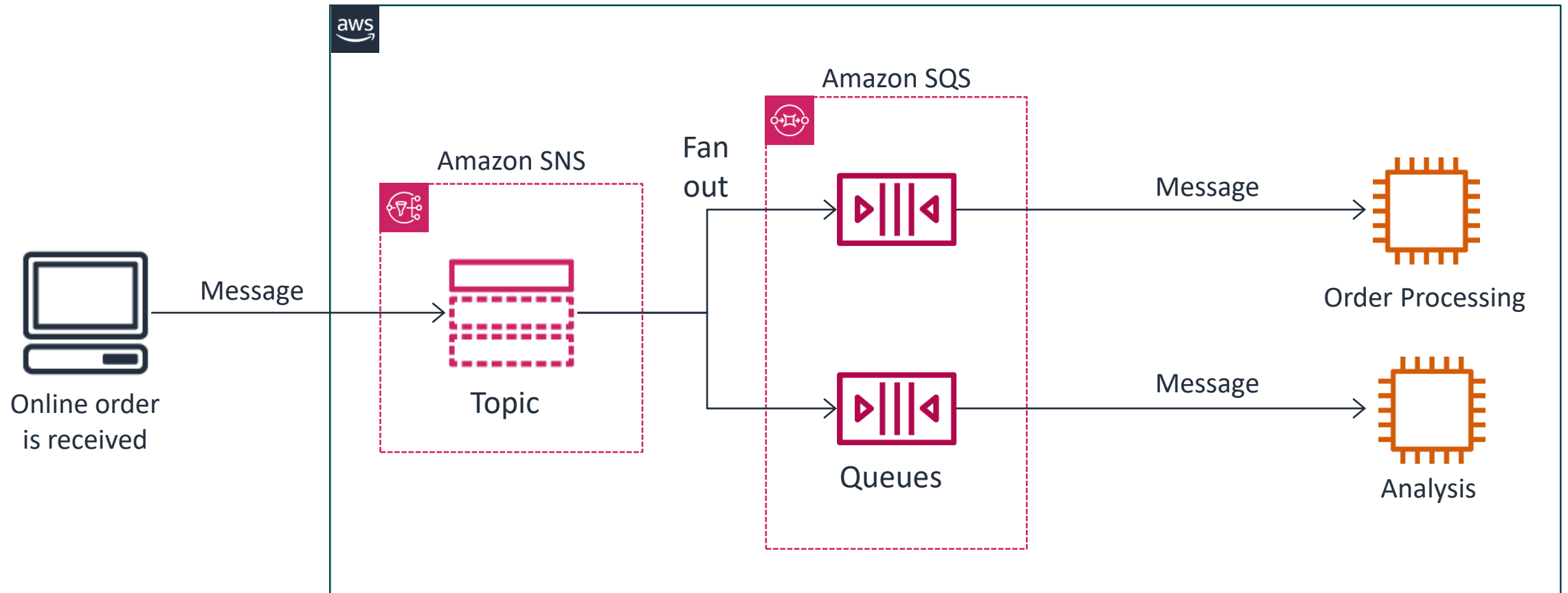


API Gateway sample architecture



Amazon SNS publish to multiple SQS queues

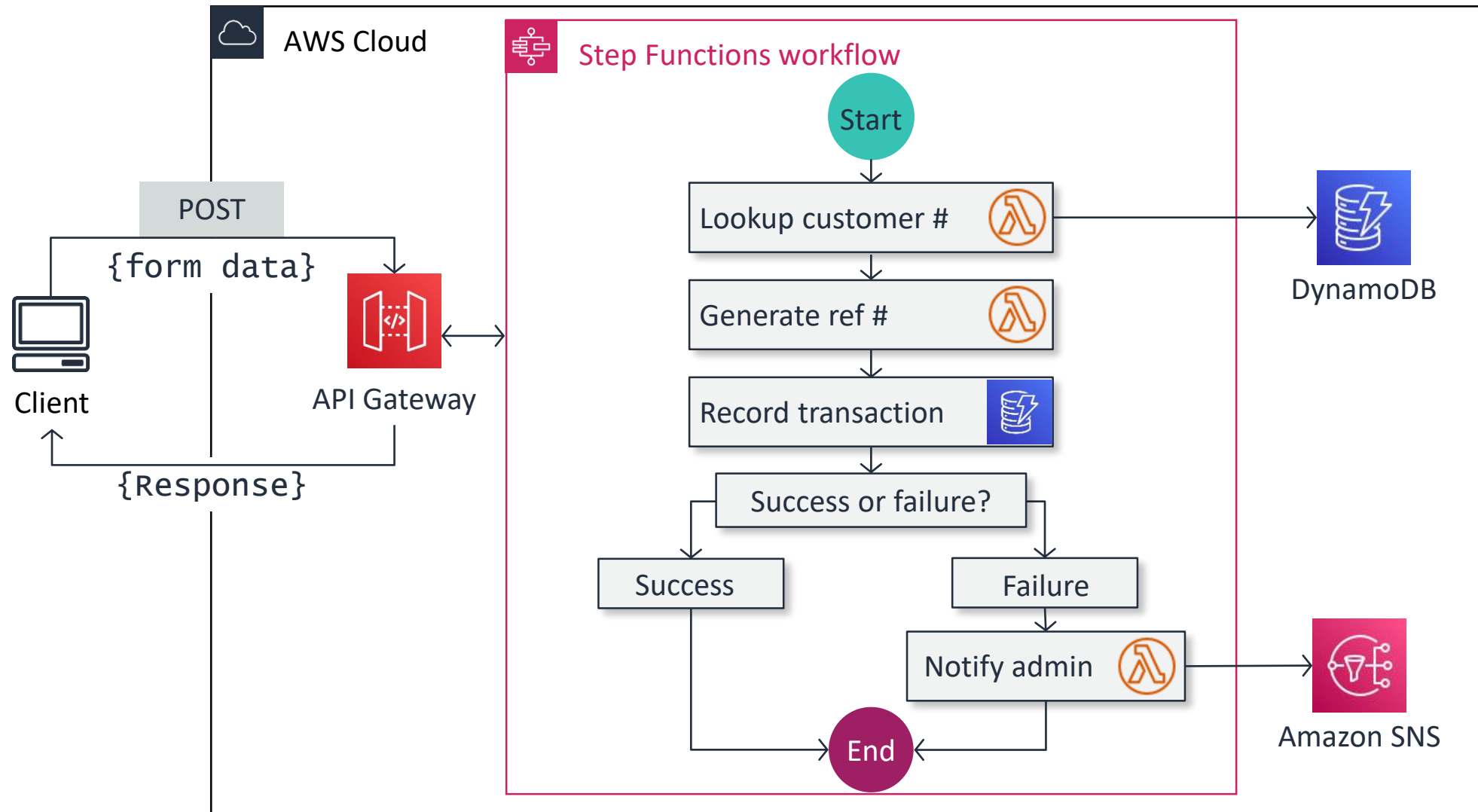
Architecture example



Orchestration of complex distributed workflows

Step Functions supports the following state types:

- Task
- Choice
- Fail or Succeed
- Pass
- Wait
- Parallel
- Map



Lab 5 diagram

