# Beautiful SDK Design with Java

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# Welcome!

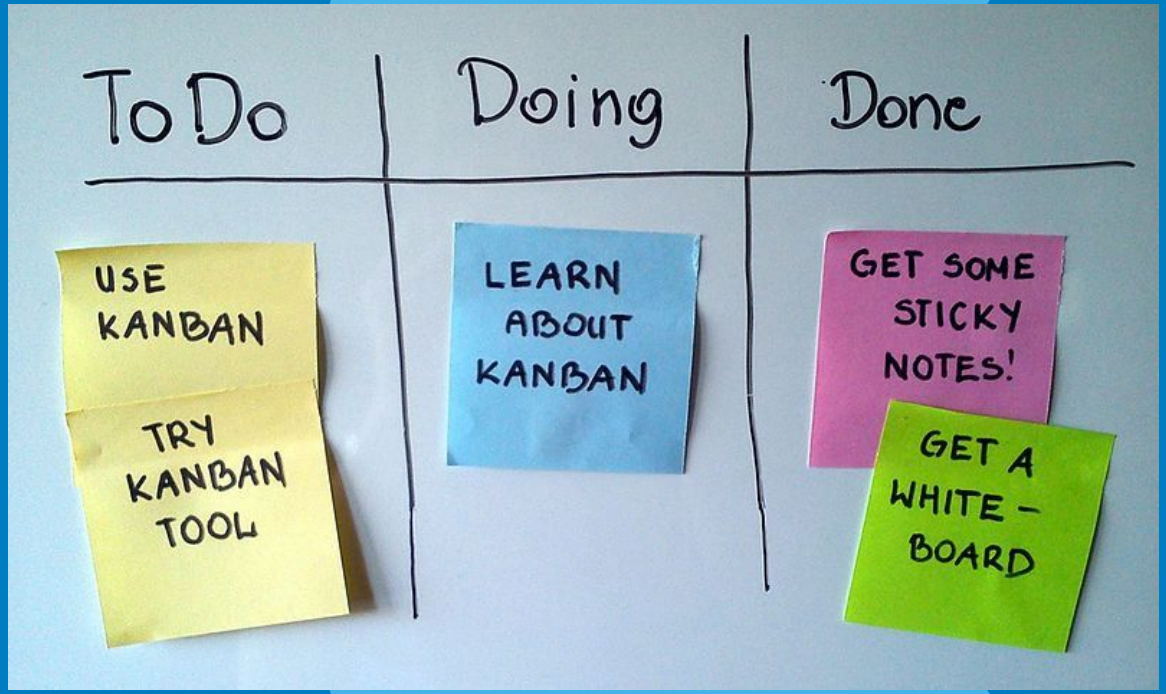
- Agenda
  - Beautiful SDK Design with Java (45 mins)
  - Okta 101 (5 mins)
  - Q&A (10 mins)

# Common Side Effects of Designing Beautiful Java SDKs

Les Hazlewood

# History

# Design Principles

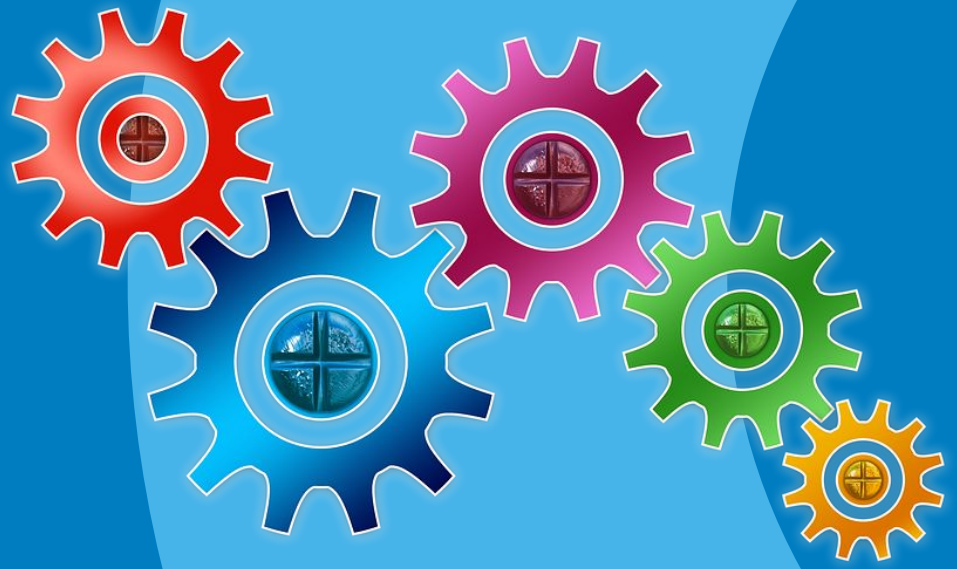


# Interfaces

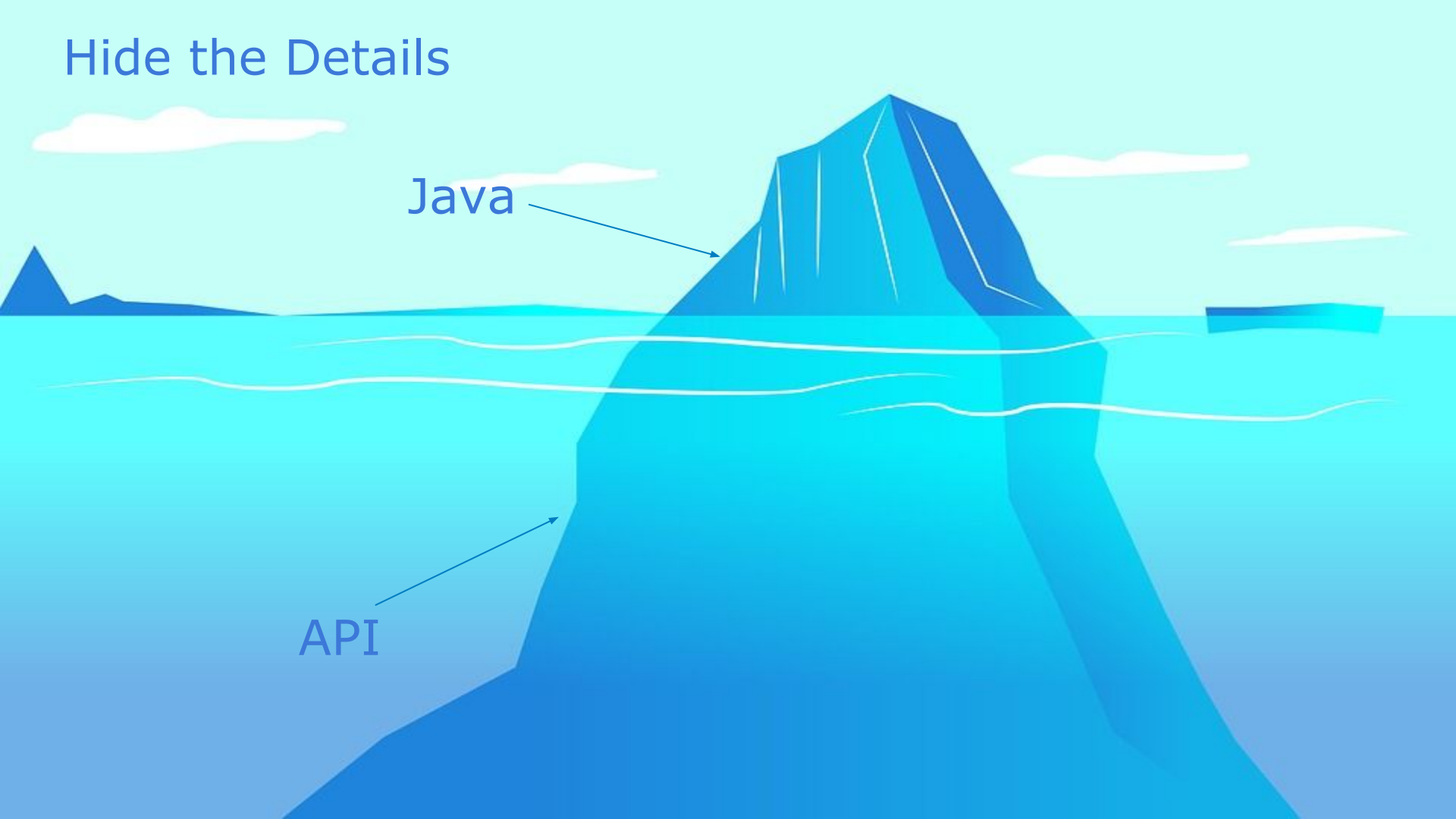
vs

# Implementations

# Flexible Configuration



# Hide the Details



# Cache Objects

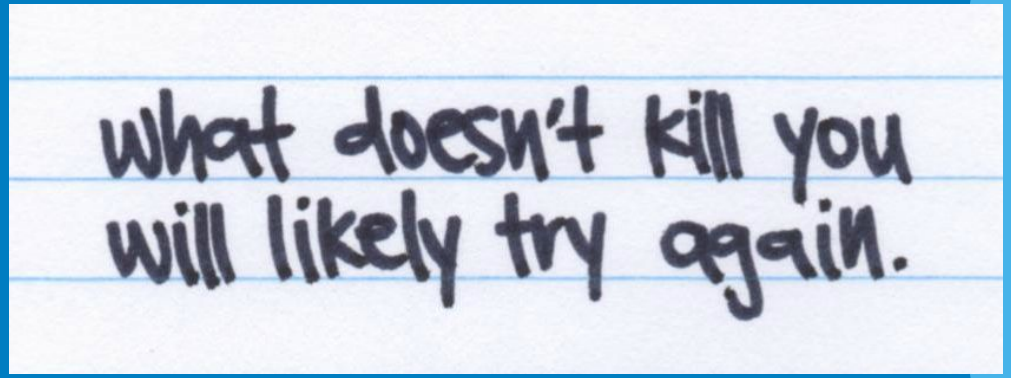
# API Focused

```
 1 final ListObjectsV2Request request =
 2     new ListObjectsV2Request().withBucketName(bucketName);
 3 ListObjectsV2Result result;
 4 do {
 5    result = s3client.listObjectsV2(request);
 6
 7    for (S3ObjectSummary objectSummary : result.getObjectSummaries()) {
 8        ...
 9    }
10    ...
11    request.setContinuationToken(result.getNextContinuationToken());
12 } while(result.isTruncated() == true);
```

# Java Focused

```
1 final ListObjectsV2Request request =
2     new ListObjectsV2Request().withBucketName(bucketName);
3 ListObjectsV2Result result = s3client.listObjectsV2(request);
4 for (S3ObjectSummary objectSummary : result.getObjectSummaries()) {
5     ...
6 }
```

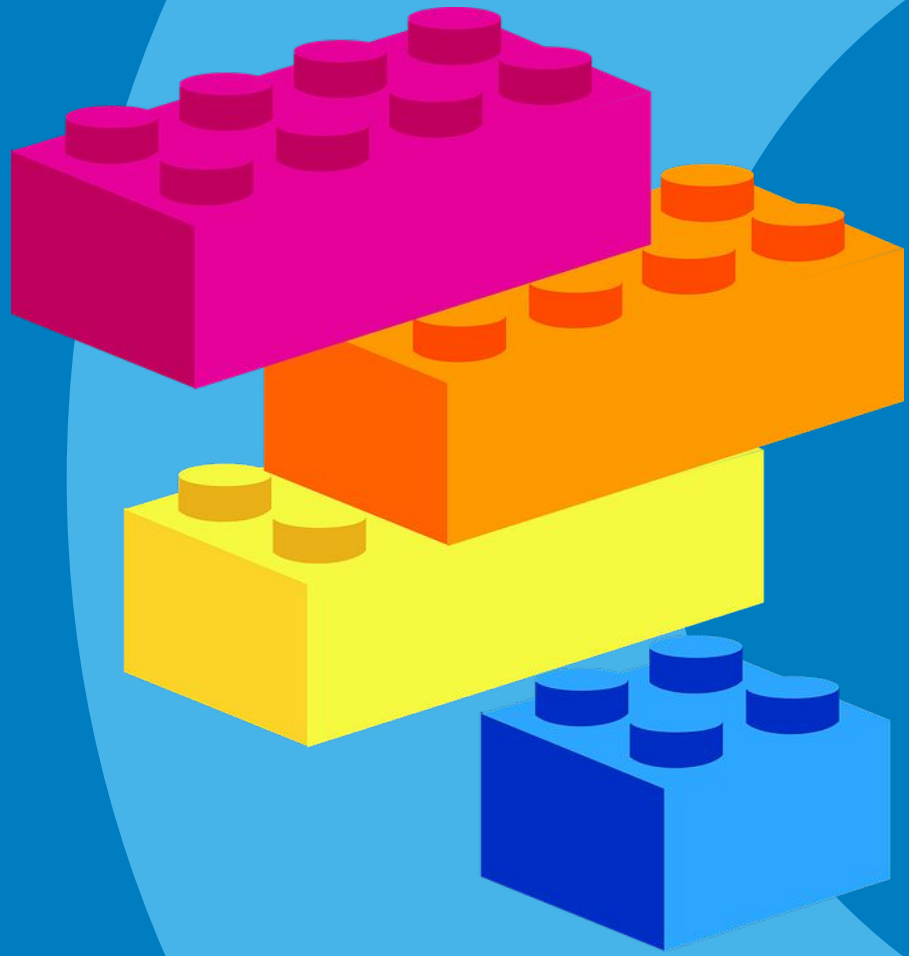
# Automatic Retry



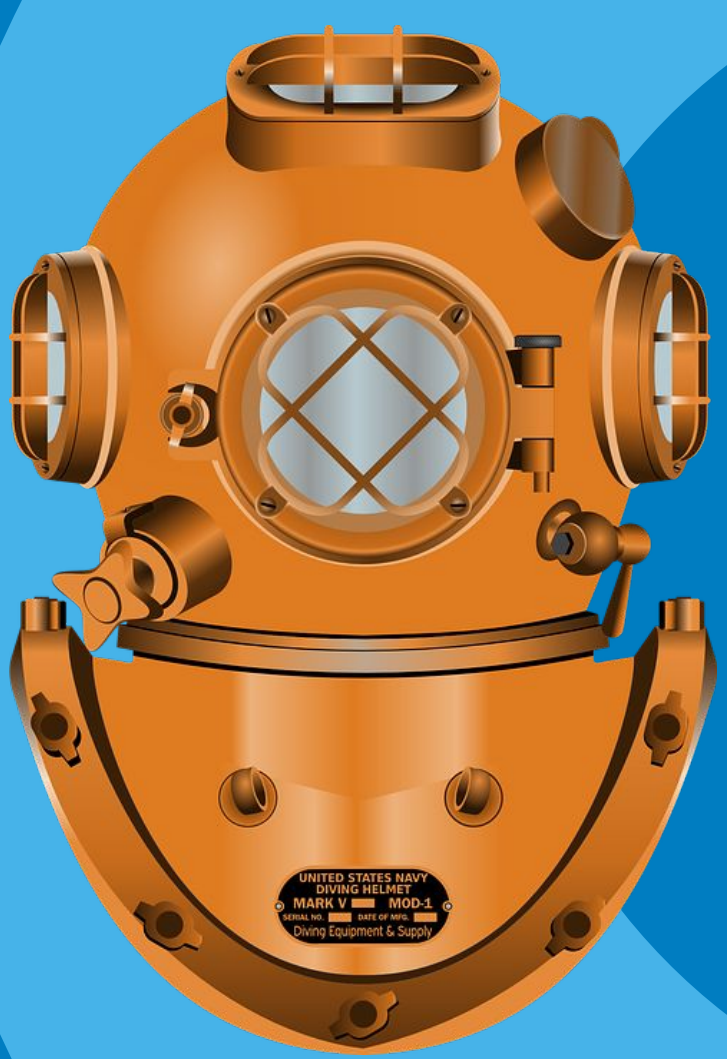

# Automatic Retry

# Demo Time!

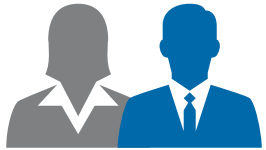
# Key Building Blocks



# Challenges: API Deep Dive



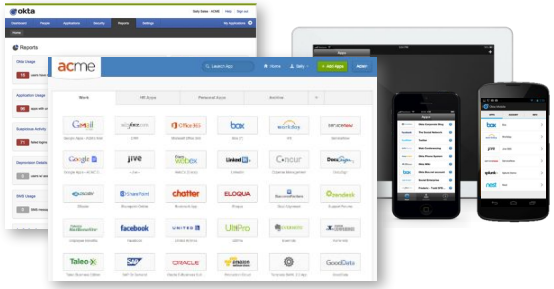
# Okta Enables Companies to Do Both IT & API

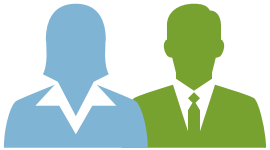


Employees,
Contractors

okta

**Identity & Mobility Service:**
Identity Management
Mobility Management
Strong Authentication

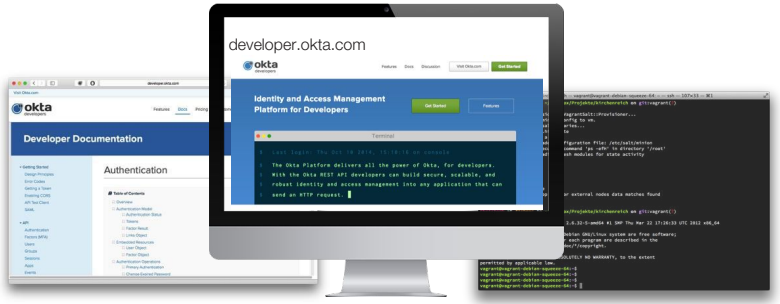


Partners,
Customers

okta

**Identity API Products:**
Identity API for Any App
Developer Tools
and Community



# Resources

- Digital Ocean API
  - https://developers.digitalocean.com/documentation/v2
- HTTPie
  - https://github.com/jkbrzt/httpie
- Free Okta Org for Developers
  - https://developer.okta.com
- Okta Java SDK
  - https://github.com/okta/okta-sdk-java
- Okta Training
  - https://www.okta.com/services/training/
- @afitnerd @OktaDev

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Thank You