



# 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



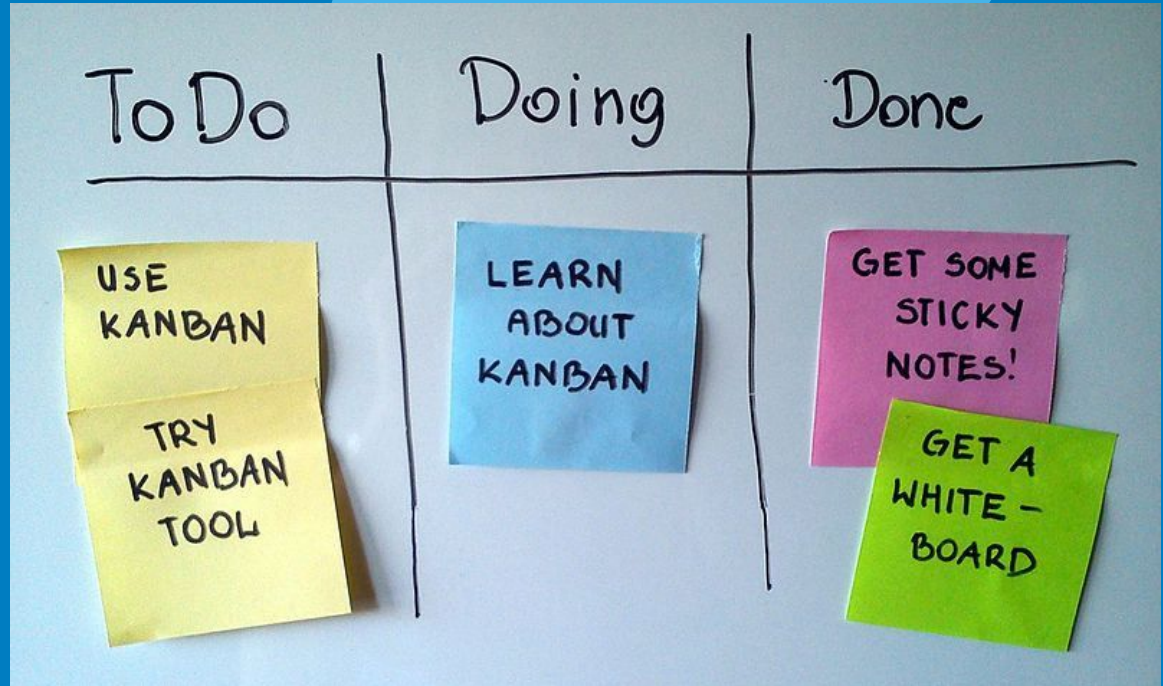
Les Hazlewood



# History



# Design Principles



# Interfaces

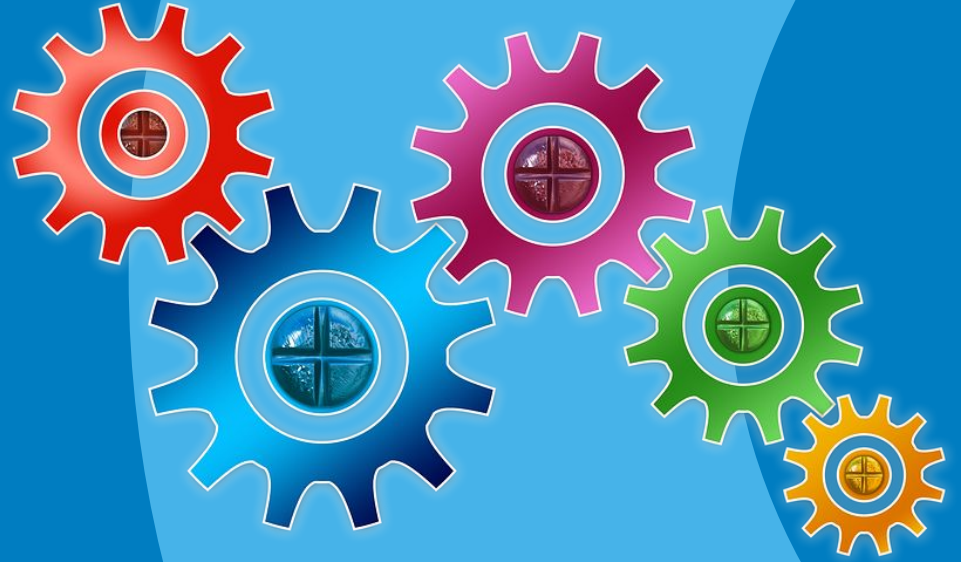


# Implementations

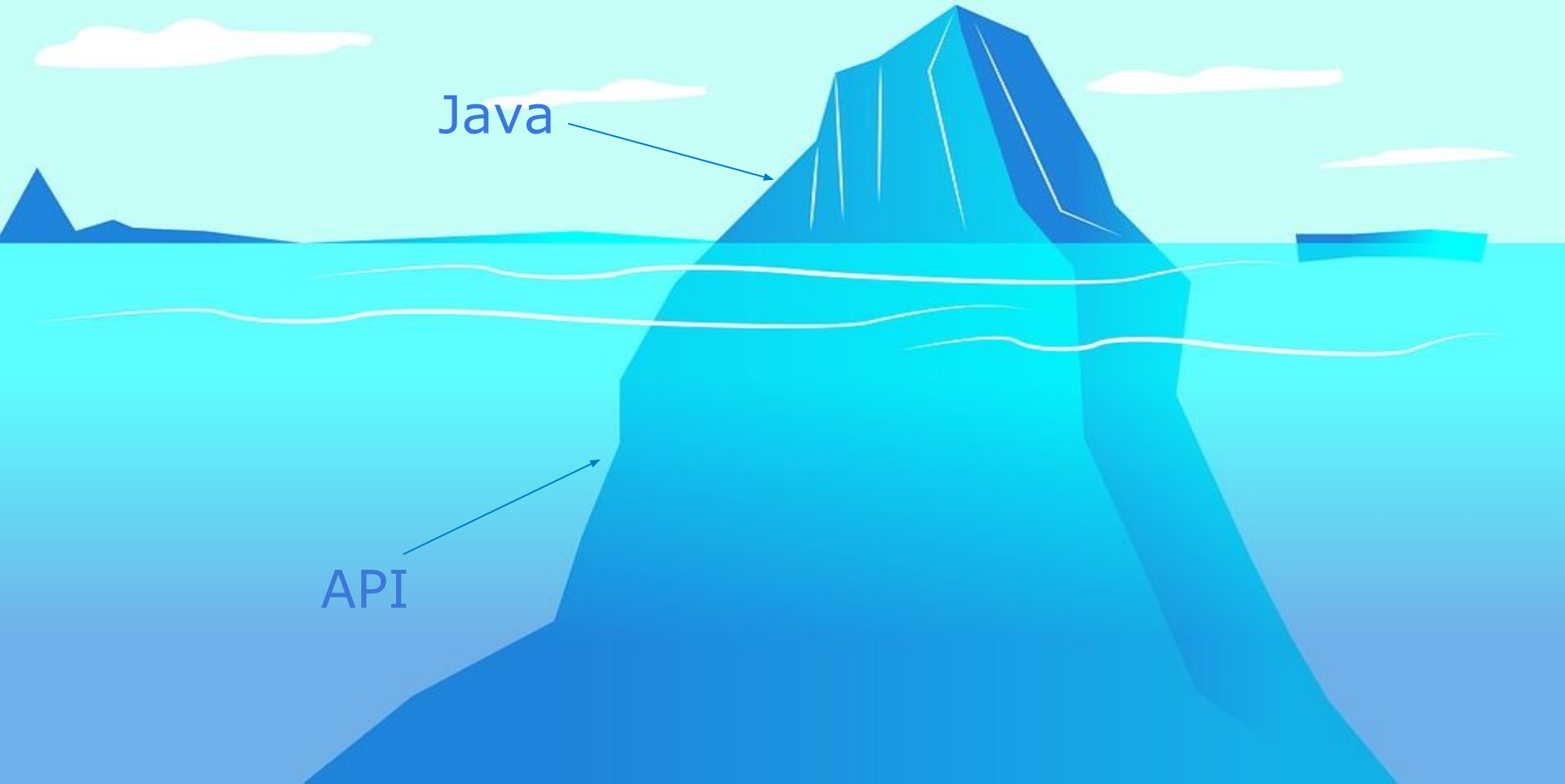


VS

# Flexible Configuration



# Hide the Details





# Cache Objects

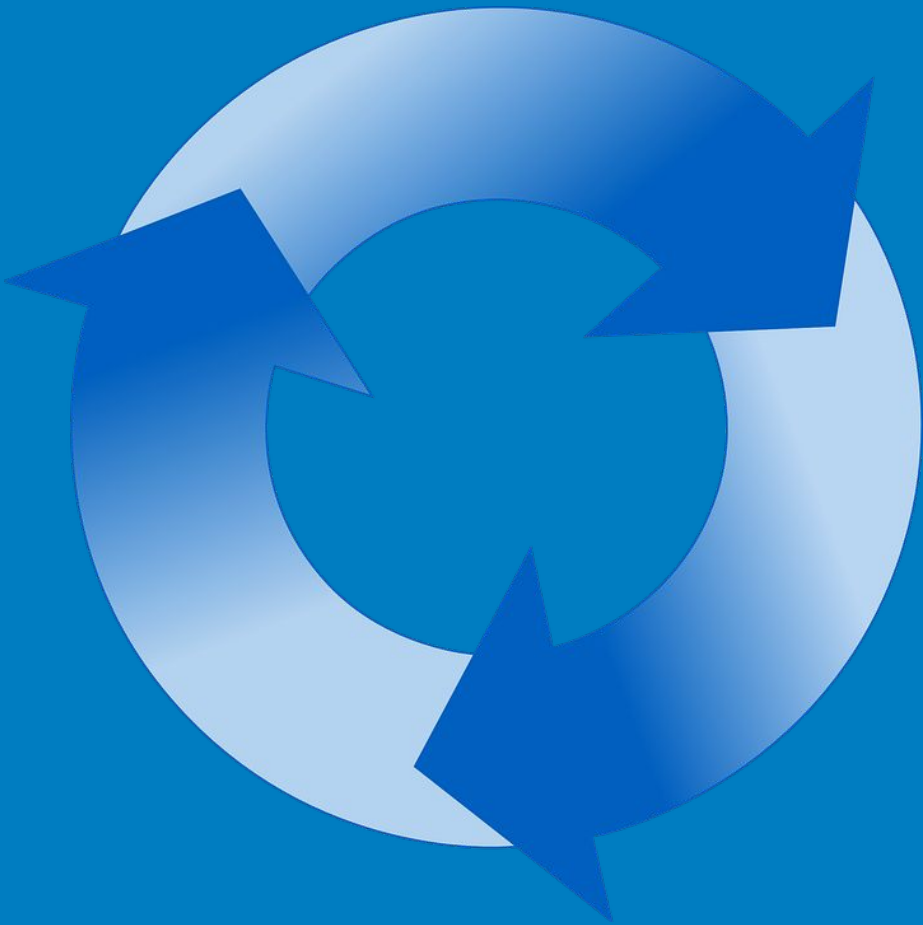


# API Focused

```
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

what doesn't kill you  
will likely try again.

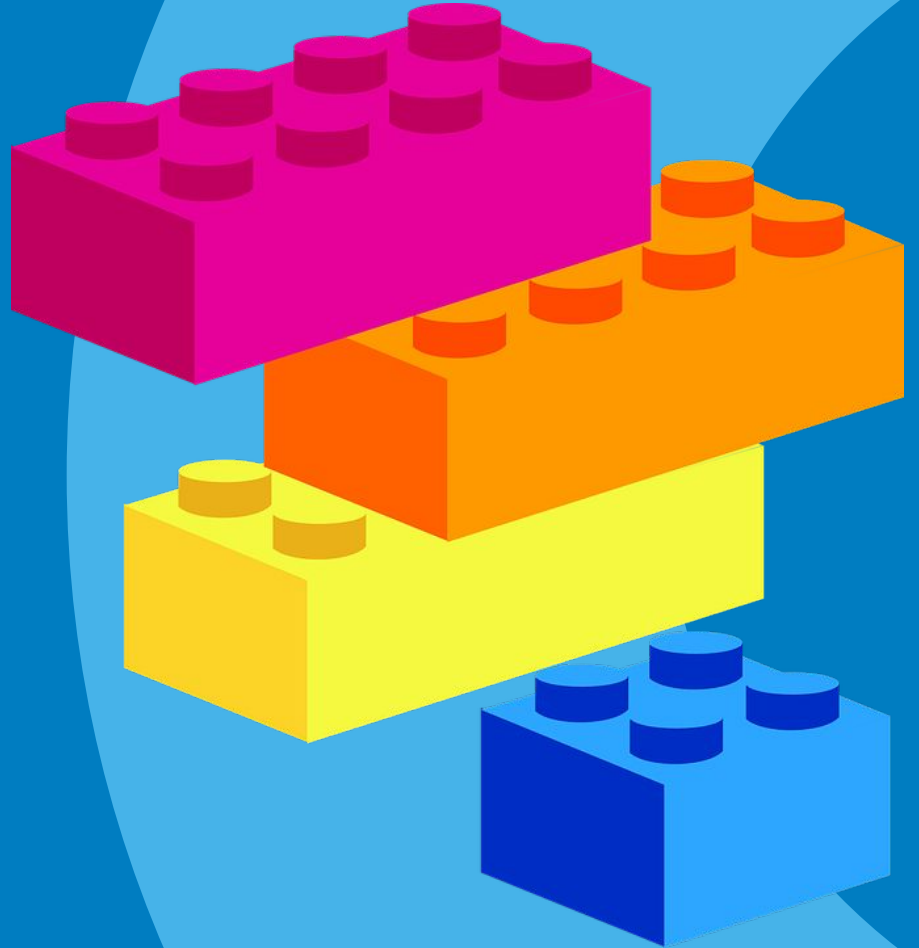
# Automatic Retry



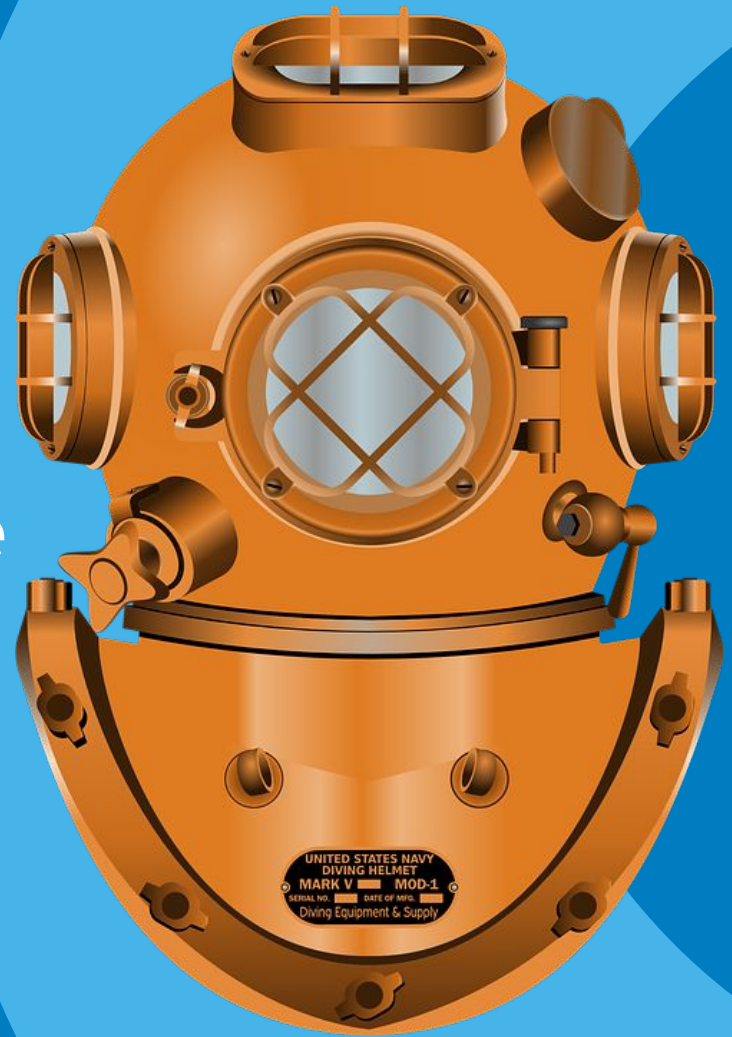
Demo Time!



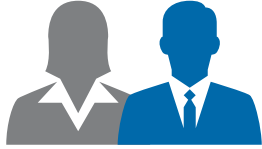
# Key Building Blocks



# Challenges: API Deep Dive



# Okta Enables Companies to Do Both IT & API

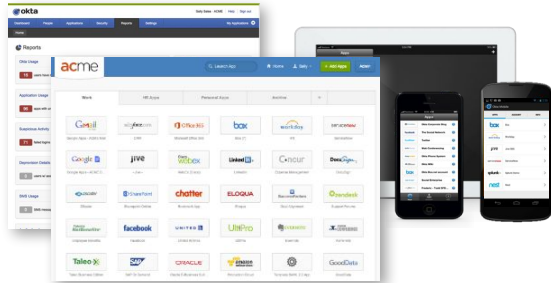


Employees,  
Contractors

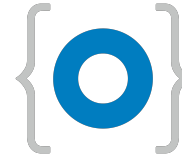


## Identity & Mobility Service:

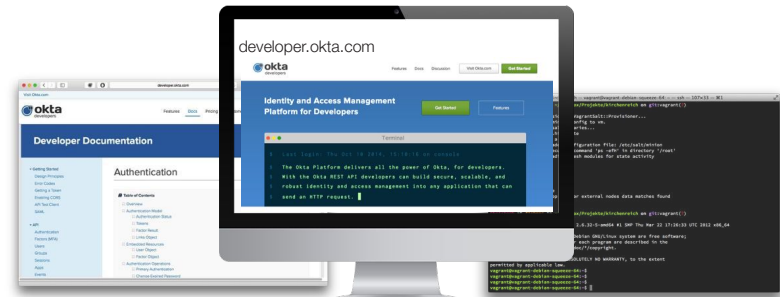
Identity Management  
Mobility Management  
Strong Authentication



Partners,  
Customers



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



The background is a vibrant blue with a dynamic, radial pattern of light streaks emanating from the center. Overlaid on this are several semi-transparent, concentric circles of varying sizes, creating a sense of depth and movement. The Okta logo is centered in the upper half of the image.

# okta

Thank You