Going Serverless with Chalice

A Python Serverless Microframework

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Agenda

1. We are going to build an app

2. How going serverless can help

3. How chalice fits in the puzzle

4. Getting started with chalice

1. We are going to build a web app!

Core Requirements

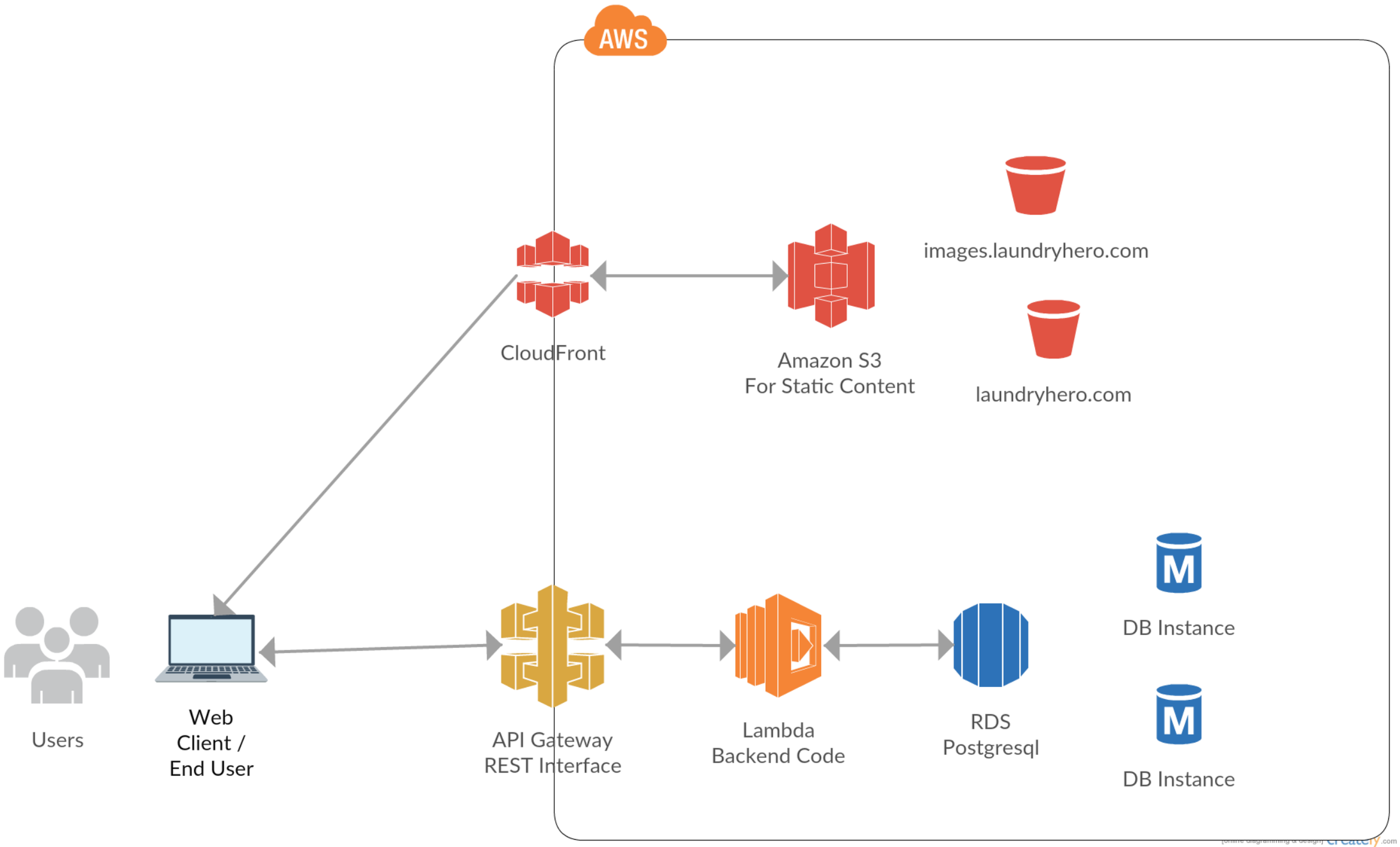
- Early Feedback
- Budget
- Scaling & Performance

1. We are going to build a web app!

Product Components

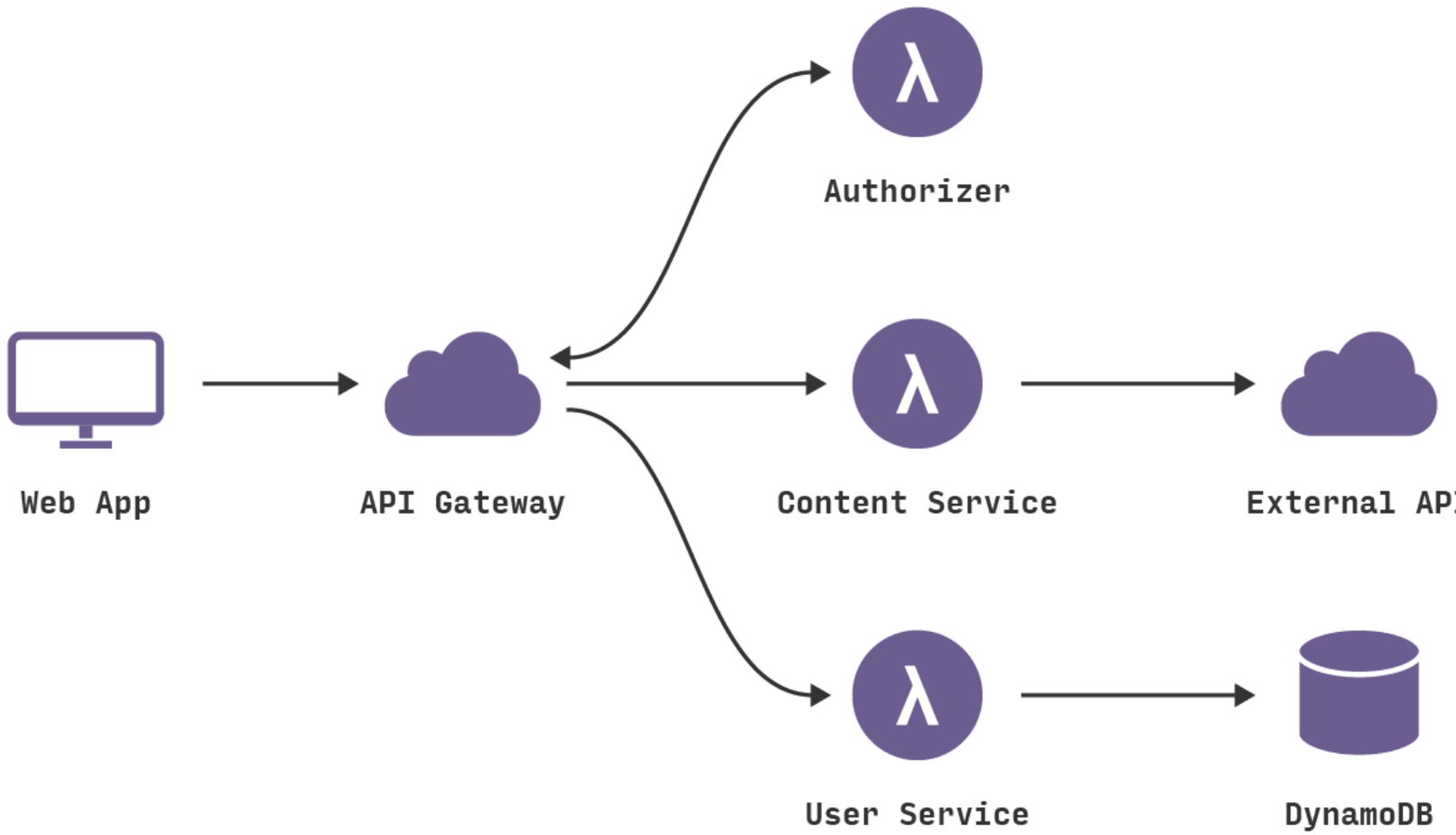
- API Backend
- Web Application
- *Mobile Application

2. How going serverless can help



The High-level Architecture

2. How going serverless can help



Source: https://blog.fugue.co/2016-05-05-architecting-a-serverless-web-application-in-aws.html

2. How going serverless can help

API Gateway

AWS Lambda

2. How going serverless can help

How does this help us?

★ Budget

★ Scaling & Performance

★ Early Feedback

Demo

Easy! Let’s try to do the API backend then!

swagger http://petstore.swagger.io/v2/swagger.json Authorize Explore

Swagger Petstore

This is a sample server Petstore server. You can find out more about Swagger at http://swagger.io or on irc.freenode.net, #swagger. For this sample, you can use the api key `special-key` to test the authorization filters.

Find out more about Swagger

http://swagger.io
Contact the developer
Apache 2.0

pet : Everything about your Pets

Show/Hide | List Operations | Expand Operations

POST	/pet	Add a new pet to the store
PUT	/pet	Update an existing pet
GET	/pet/findByStatus	Finds Pets by status
GET	~~/pet/findByTags~~	Finds Pets by tags
DELETE	/pet/{petId}	Deletes a pet
GET	/pet/{petId}	Find pet by ID
POST	/pet/{petId}	Updates a pet in the store with form data
POST	/pet/{petId}/uploadImage	uploads an image

Easy? What if…

3. How chalice fits in the puzzle

"The python serverless microframework for AWS, it allows you to quickly create and deploy applications that use Amazon API Gateway and AWS Lambda"

–awslabs

3. How chalice fits in the puzzle

It provides:

- A command line tool for creating, deploying, and managing your app
- A familiar and easy to use API for declaring views in python code
- Automatic IAM policy generation

Demo

4. Getting started with chalice

Summary

- Amazon Ecosystem (API Gateway & Lambda)
- Basic Serverless Architecture
- Python tool - Chalice
- Opportunities vs Cost
- Alternatives

Questions?

Thank you for your time!
Slides and demo available at http://bit.ly/2my06hQ