

# Assignment 2 Specification

Assignment II  
Specification



Concept, detail and grading  
spectrum for Assignment 2

## Point of Interest

A point of interest, or POI, is a specific point location that someone may find useful or interesting.



*"A “point of interest” (POI) is a location for which information is available. A POI can be as simple as a set of coordinates, a name, and a unique identifier, or more complex such as a three-dimensional model of a building with names in multiple languages, information about opening and closing hours, and a civic address. POI data has many applications, including augmented reality browsers, location-based social networking games, geocaching, mapping and navigation systems."*

<http://www.opengeospatial.org/projects/groups/poiswg>

[https://en.wikipedia.org/wiki/Point\\_of\\_interest](https://en.wikipedia.org/wiki/Point_of_interest)

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# POI Examples

- Landscape feature
- National monument
- Walk
- Bridge
- Tree
- Venue
- Ringfort
- Dolmen
- River
- Bog
- Island
- Forest

Essential Data  
Structure & Support  
Service

Richer Media  
Experience + User  
Management

POI Sharing /  
Community Features

## POI Outline

### POI Core

### POI Enhanced

### POI Community

# POI Core

## POI Characteristics

- Name
- Category
- Description

## Service Features

- Sign up / log in to service
- Create, Read, Update, Delete
- Query
- Group into Categories

# POI Enhanced

## POI Characteristics

- Photos
- Location
- ???

## Service Features

- Show POI Photo(s)
- Show All POI on Map
- Admin Interface
  - Admin user
  - Admin dashboard

# POI Social

## POI Characteristics

- Creator / Editor
- Rating
- Reviews
- Discussion
- Now

## App Features

- Share
- Review & Rate
- Notice Board
- Live Updates

# POI Roadmap

Assignment 1

POI Web Application

Assignment 2

POI Web Service

POI SPA Application

Assignment

POI React

Skills Studio 2

Assignment 1

POI Mobile V1

Mobile  
App  
Development

Assignment 2

POI Mobile V2

Enterprise  
Web  
Development

Implement POI Core + selected features of POI Enhanced

Support the following User Management Features:

## Assignment 1

- Sign up / Login in / Delete Account
- Simple User Admin Dashboard

Support the following POI Characteristics:

- Name, Description, Category, Location, Image

Support the following app features:

- Create, Read, Update & Delete POIs
- Organise POIs into categories
- Manage POI Images

POI Web Application V1



Front End

Components

Back End

Infrastructure

# Enterprise Web Dev Technology Stack

Front End

handlebars

semantic-ui

jquery

boom

dotenv

cloudinary

mongoose

mais-mongoose-  
seeder

hapi

joi

vision

inert

node

mongodb

cloudinary

heroku

mongo atlas

glitch

Stack I

Back End

Infrastructure

# Implement POI as an API

## Assignment 2

POI Core

POI Enhanced

POI Social

POI Web Service

Evolve the API using TDD, devising a suit of comprehensive unit tests

Build a new client application of the POI API, supporting

POI Core

POI Enhanced

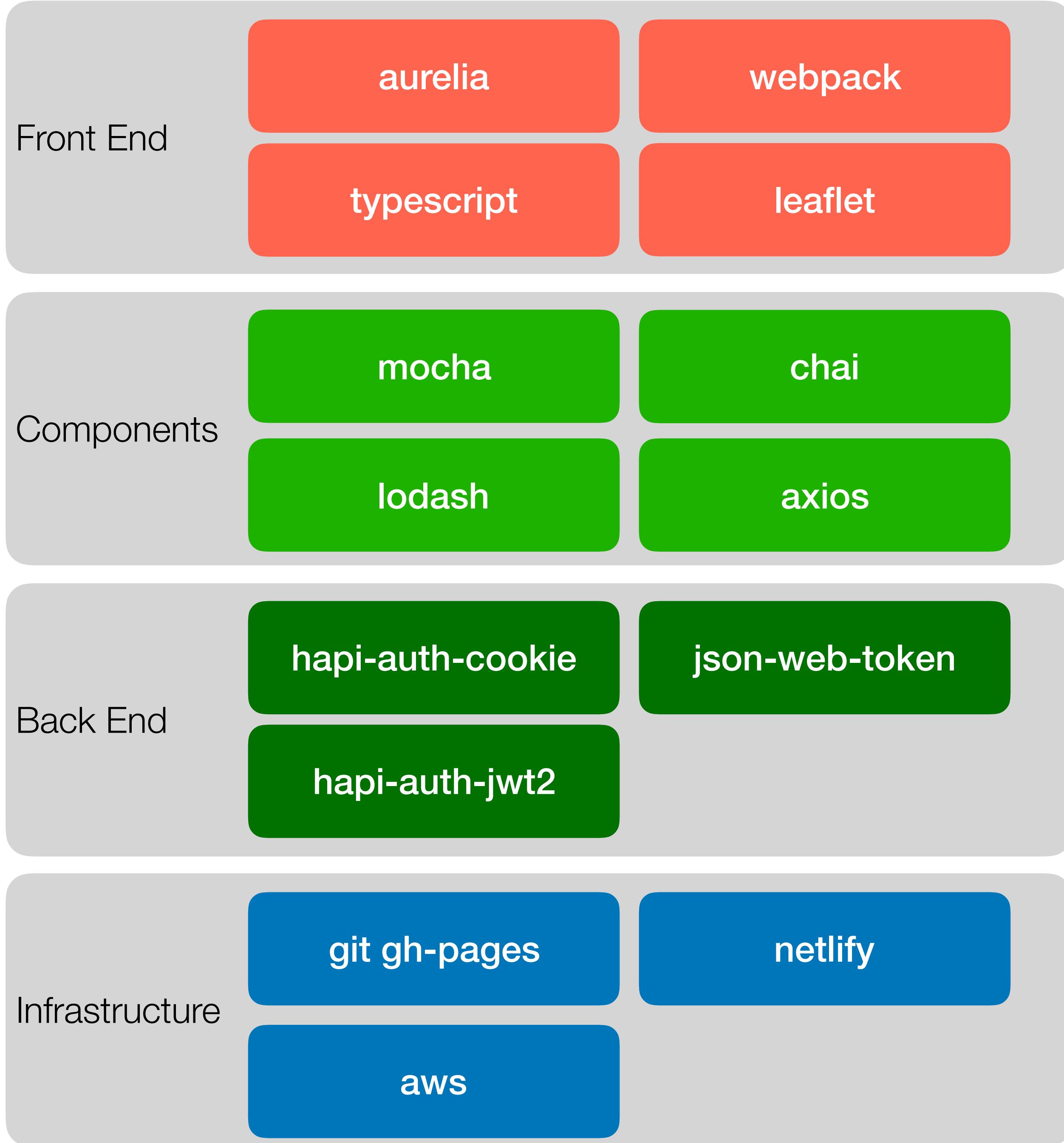
POI SPA Web  
Application

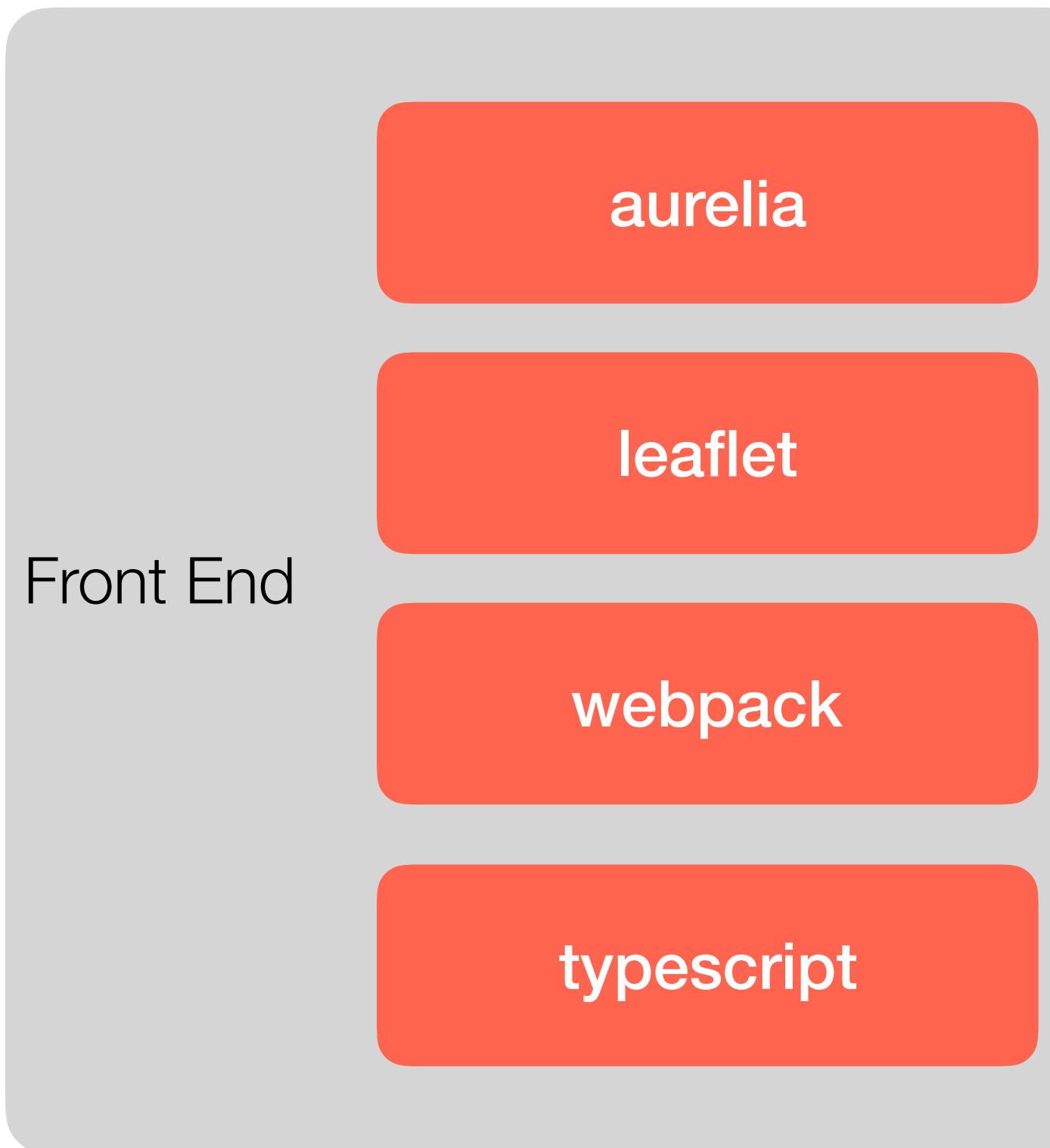
+ Maps

POI Social

	POI Service API	POI API Tests	POI Client	Authentication	Git & Deployment
baseline	POI Core	Simple Tests	Server Rendered (Handlebars)	Cookie + Sanitisation of input & output	Tagged Releases
good	POI Enhanced	40% API Coverage	Aurelia (Basic)	Hashing & salting passwords	Develop / Feature / Master branch
excellent	POI Social (1)	60% Coverage	Aurelia (Routers + Components)	JWT	Heroku/Glitch
outstanding	POS Social (2)	80% Coverage	Aurelia (+ Leaflet Maps)	JWT + LocalStorage	Amazon/Github/Netlify

## Stack II



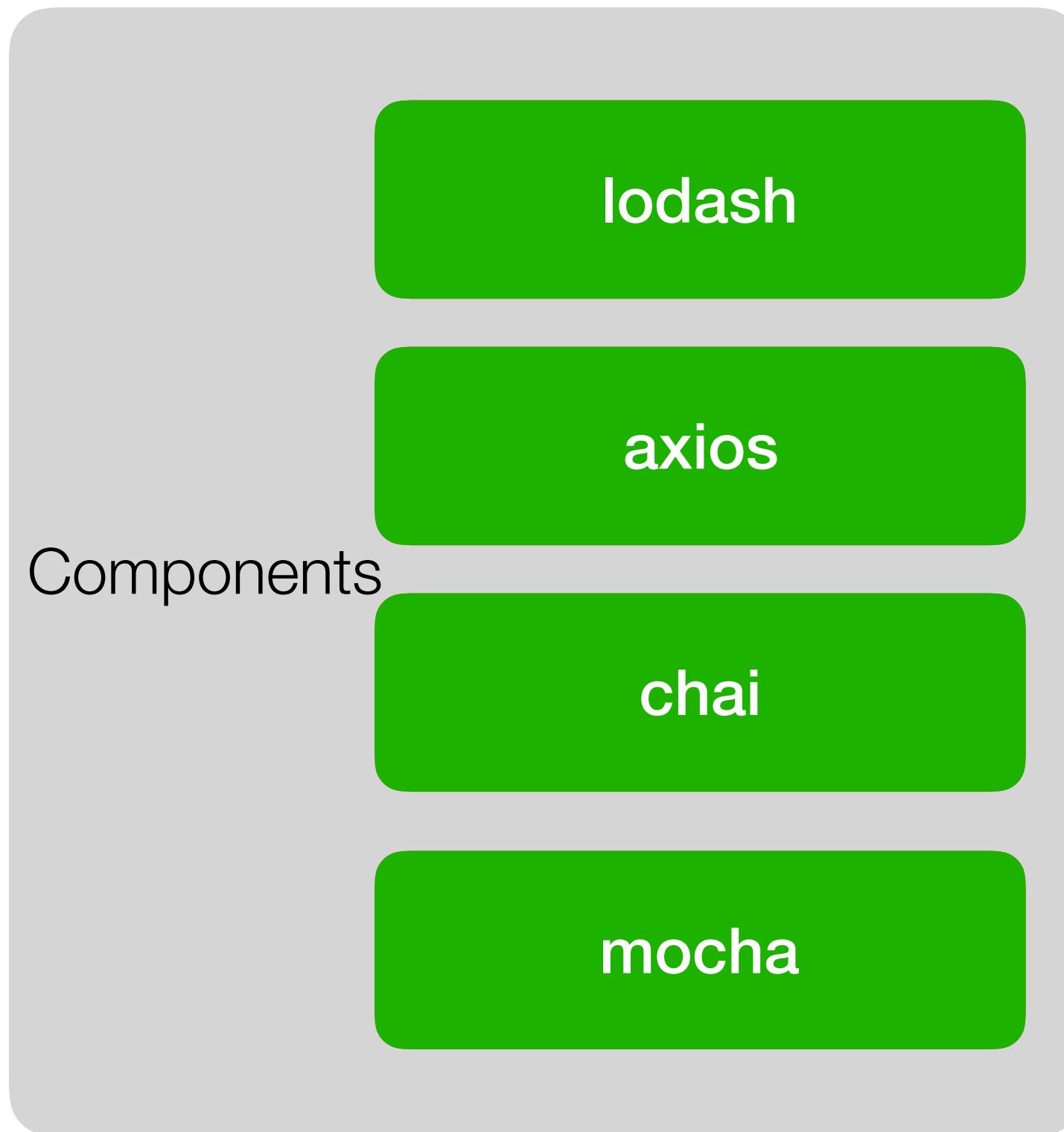


Single Page Application (SPA) Framework

Mapping Component

Front End Package Manager

Javascript Superset - adding types

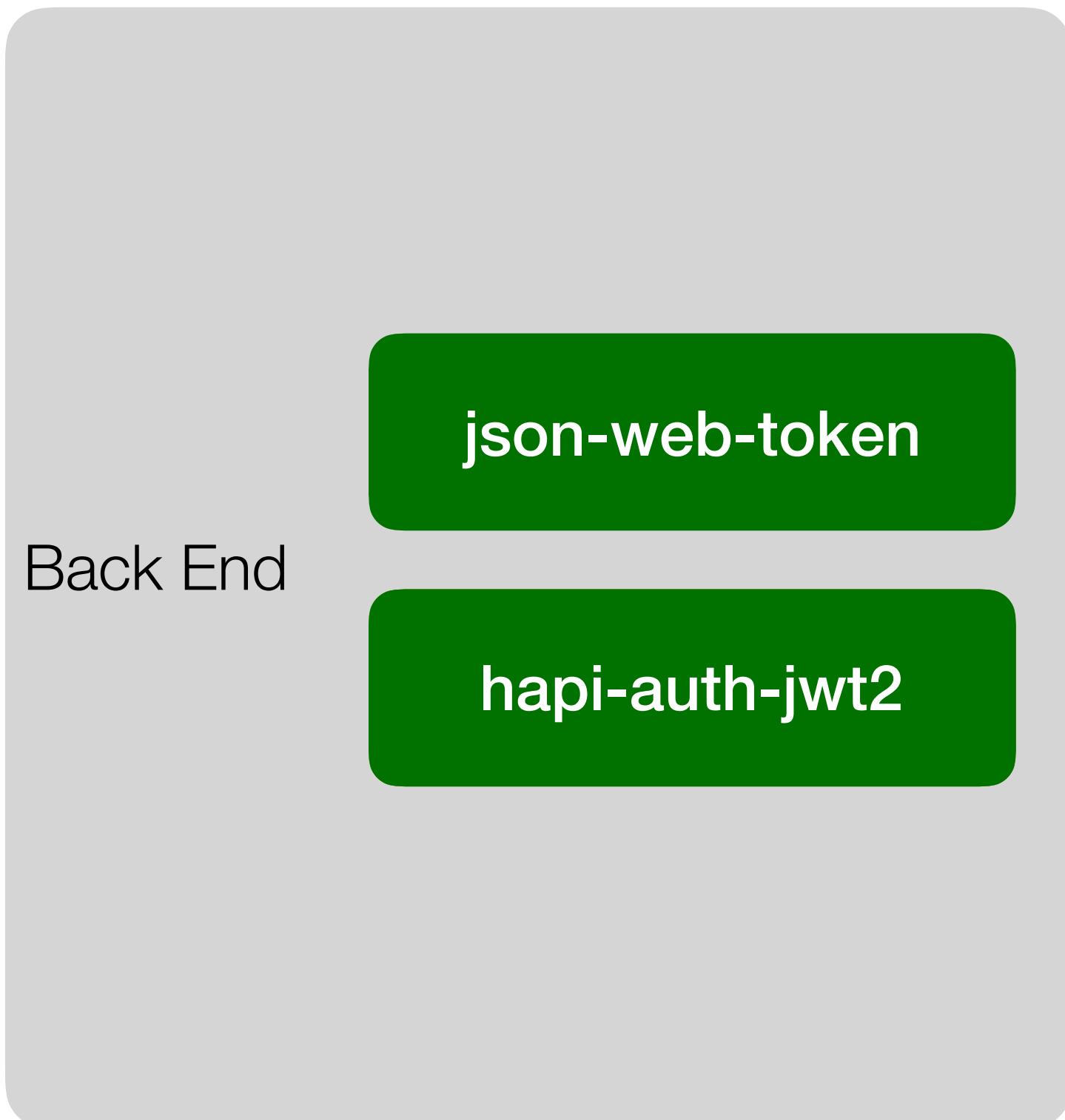


General purpose algorithms + data structures

Http client library

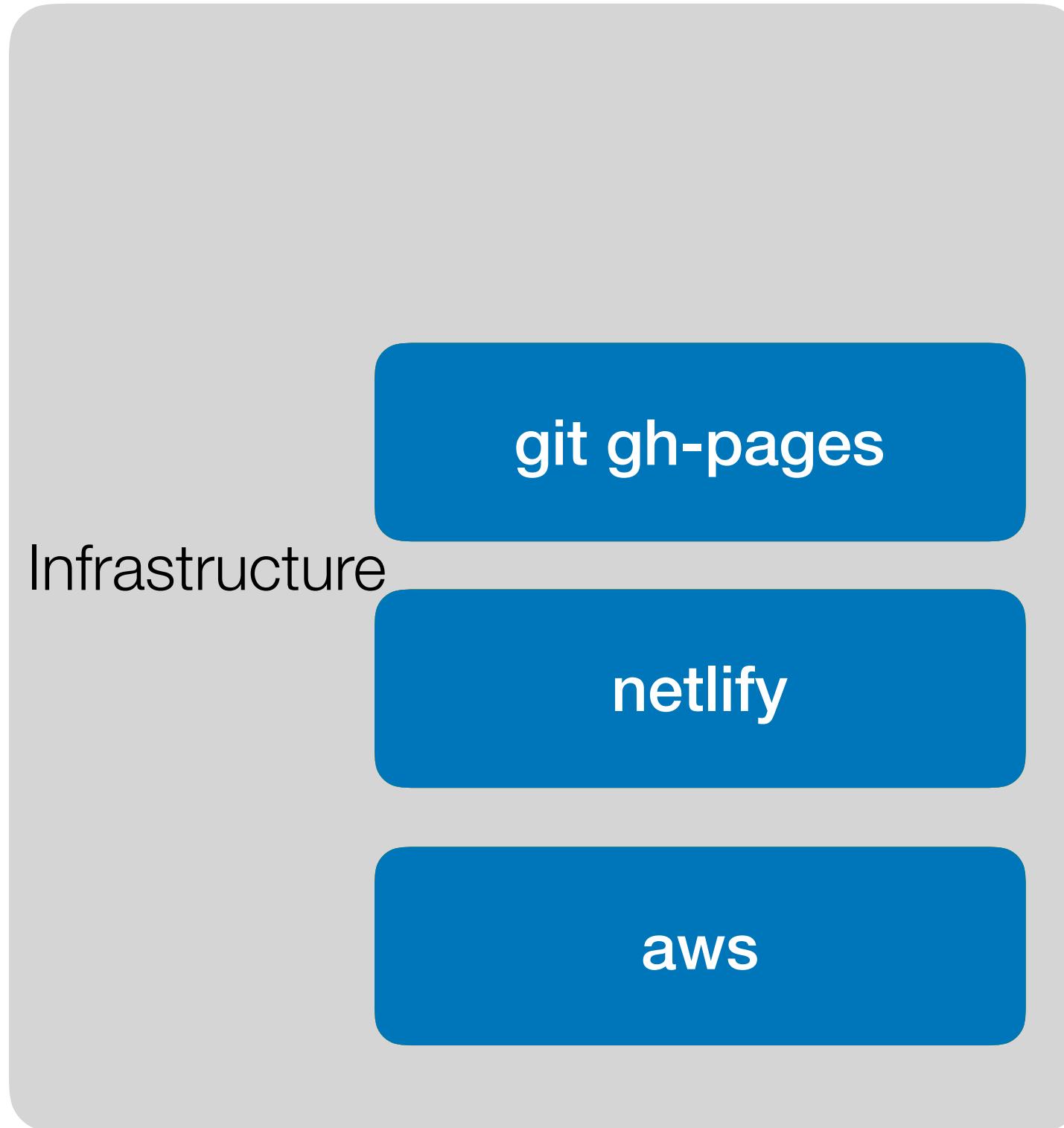
Unit test expressions

Test suite runner



JWT Encoder/Decoder

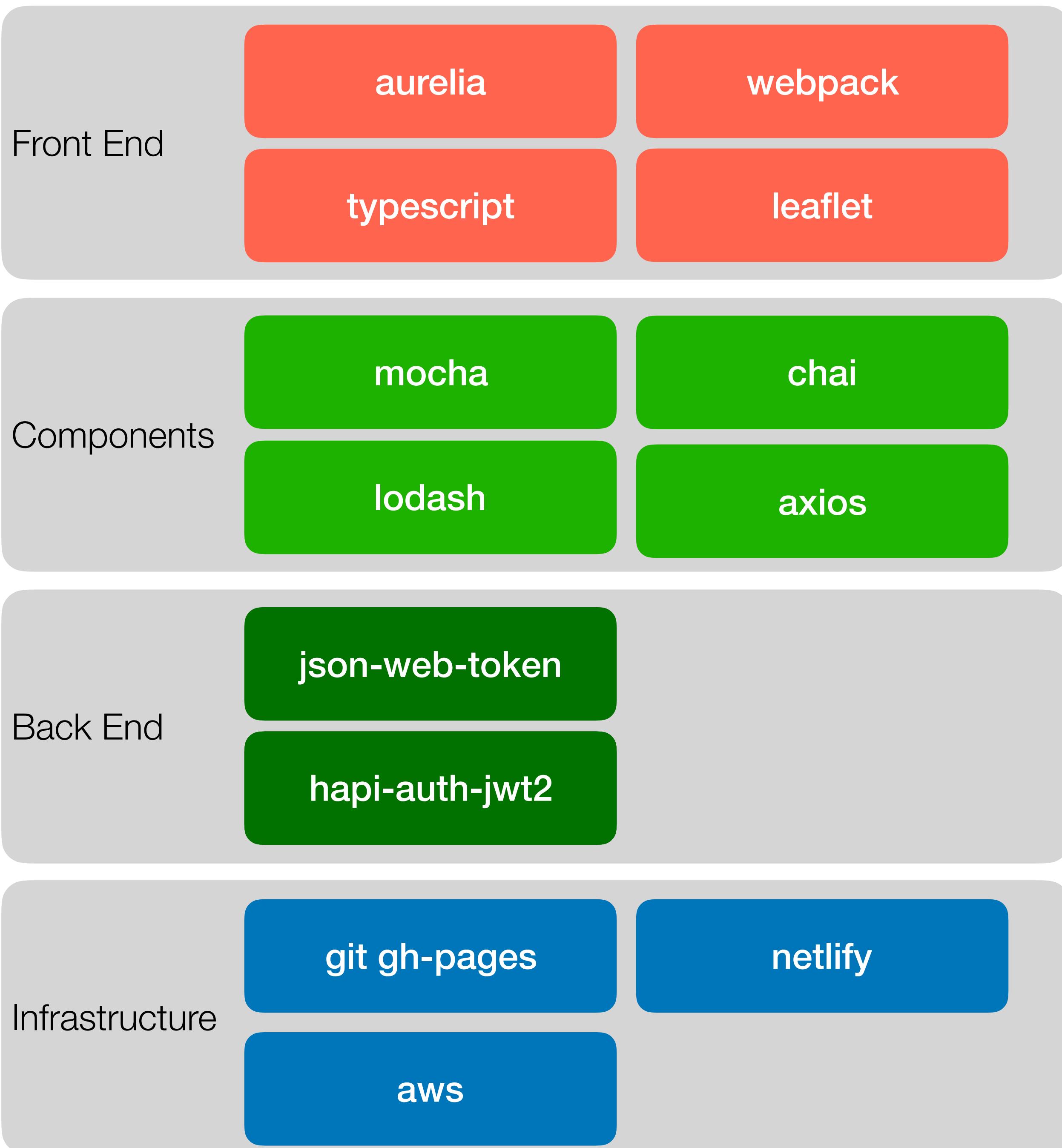
JWT Plug in for Hapi



Deployment target for Front End

Deployment target for Front End (alternative)

Deployment target for Back End (alternative)



Stack II

aurelia

typescript

webpack

leaflet

Front End

Components

lodash

axios

mocha

chai

Back End

hapi-auth-cookie

hapi-auth-jwt2

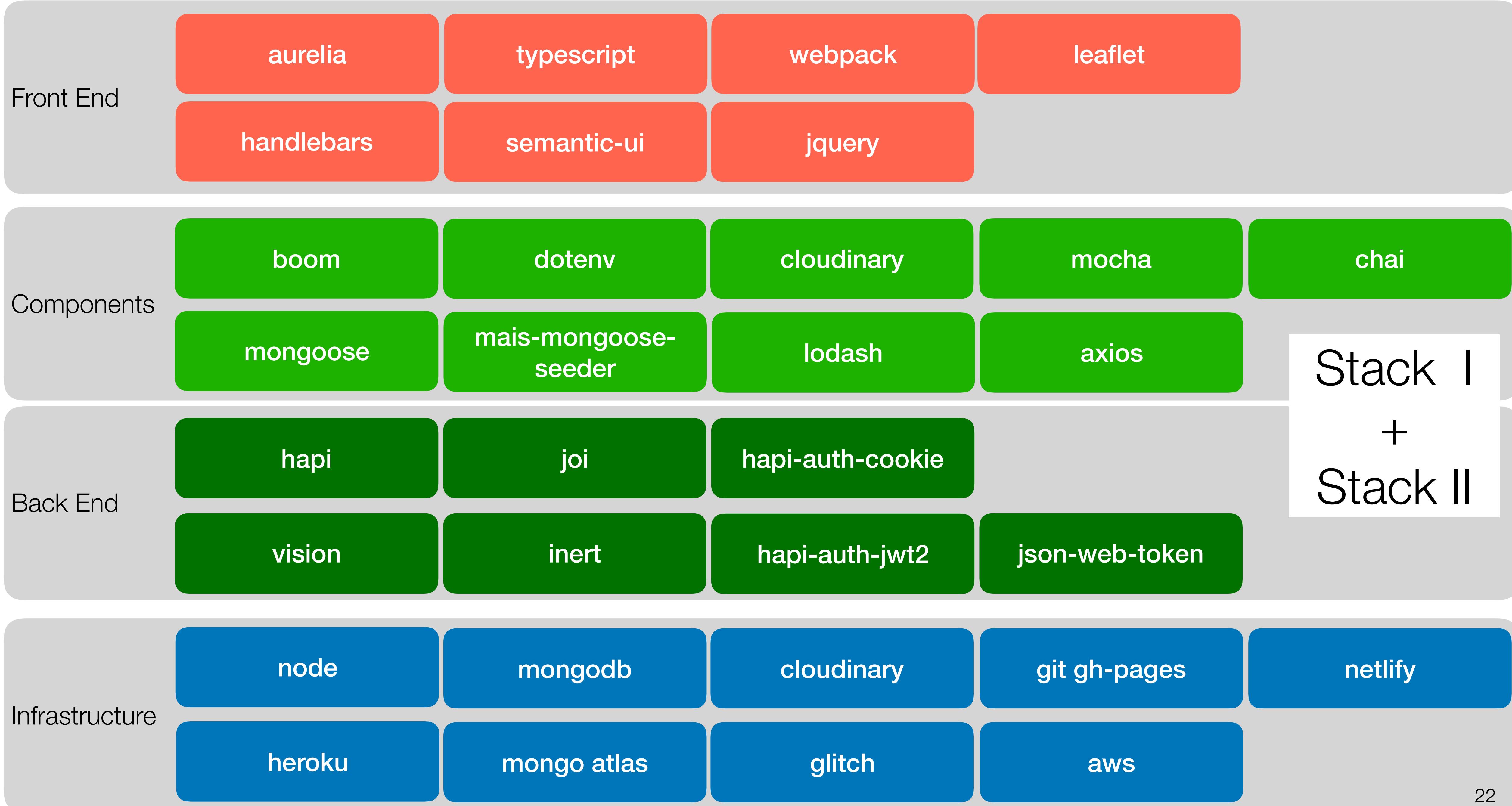
json-web-token

Infrastructure

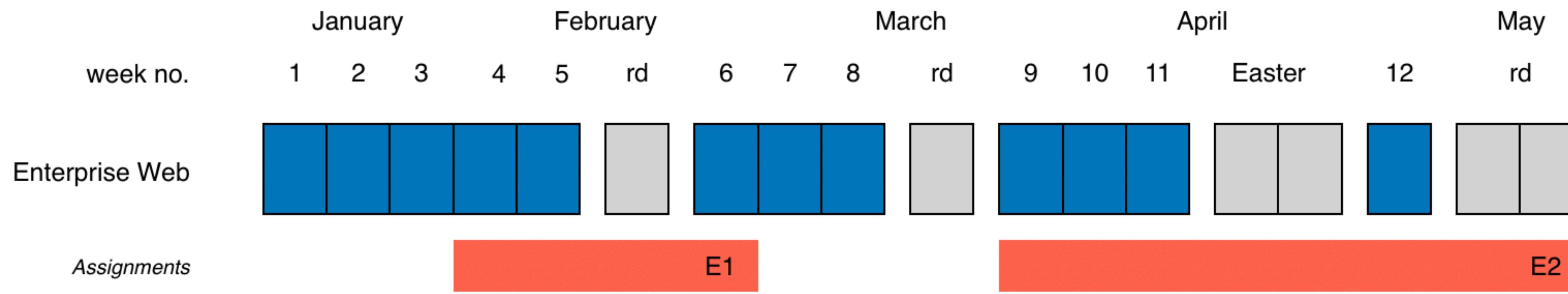
git gh-pages

netlify

aws



POI Web Service



Sunday, 18th May

POI SPA Application