

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, locationbased social networking games, geocaching, mapping and navigation systems."

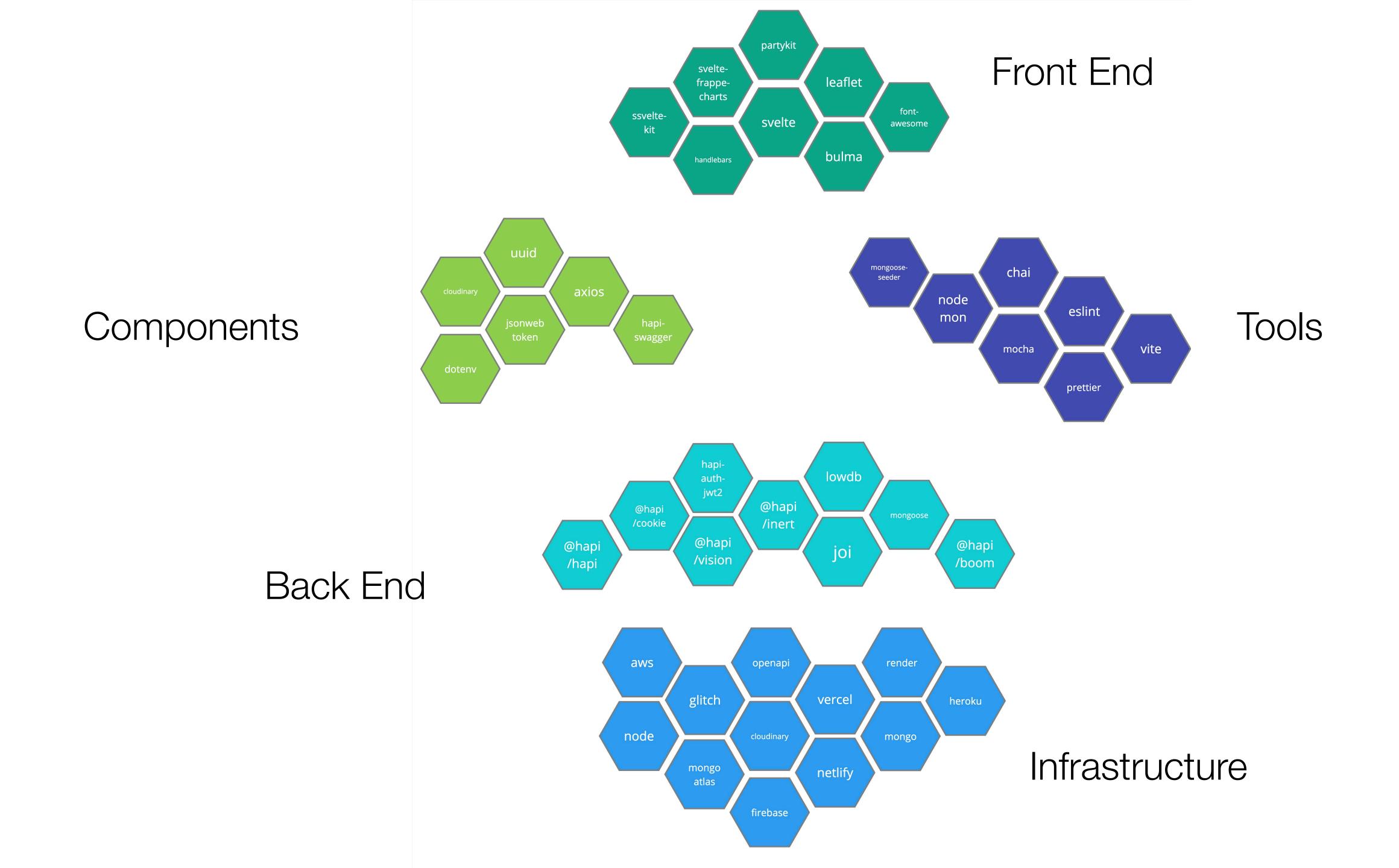
http://www.opengeospatial.org/projects/groups/poiswg

https://en.wikipedia.org/wiki/Point_of_interest

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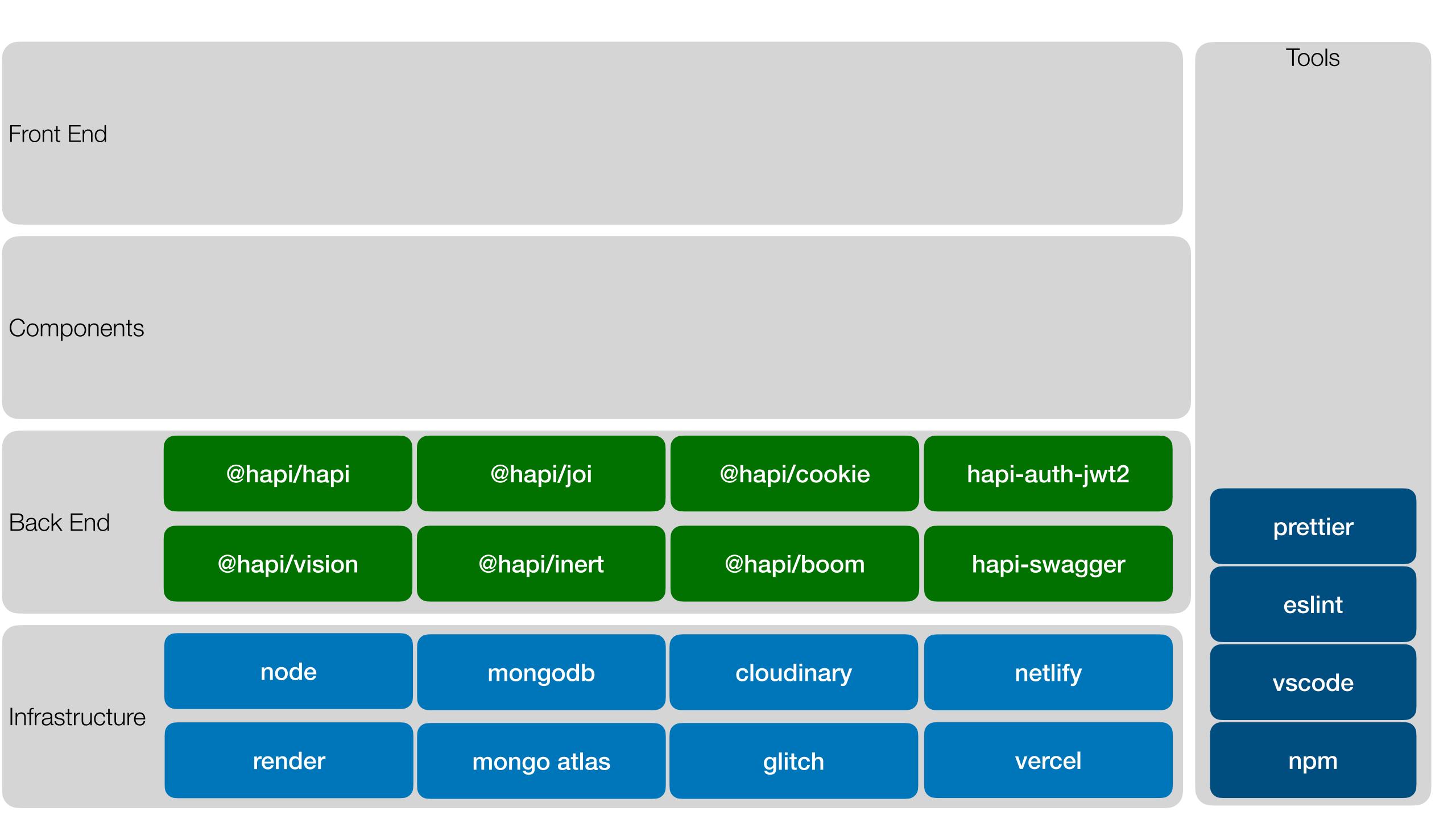
Full Stack Components & Services





Front End	Tools
TOTIL ENG	
Components	
Back End	
nfrastructure	





Front End					Tools
					axios
	dotenv	cloudinary	uuid	lowdb	nodemon
Components	mongoose	mais-mongoose- seeder	jsonwebtoken	dotenv	chai
	@hapi/hapi	@hapi/joi	@hapi/cookie	hapi-auth-jwt2	mocha
Back End	@hapi/vision	@hapi/inert	@hapi/boom	hapi-swagger	eslint
Infrastructure	node	mongodb	cloudinary	netlify	vscode
	render	mongo atlas	glitch	partykit	npm

					Tools
Front End	handlebars	bulma	Font awesome		axios
	dotenv	cloudinary	uuid	lowdb	nodemon
Components	mongoose	mais-mongoose- seeder	jsonwebtoken	dotenv	chai
Back End	@hapi/hapi	@hapi/joi	@hapi/cookie	hapi-auth-jwt2	mocha
	@hapi/vision	@hapi/inert	@hapi/boom	hapi-swagger	prettier eslint
Infrastructure	node	mongodb	cloudinary	netlify	vscode
	render	mongo atlas	glitch	partykit	npm

					Toolo
Front End	sveltekit	iconify	leaflet	svelte-frappe-charts	Tools
	handlebars	bulma	Font awesome	typescript	vite
					axios
Components	dotenv	cloudinary	uuid	lowdb	nodemon
	mongoose	mais-mongoose- seeder	jsonwebtoken	dotenv	chai
Back End	@hapi/hapi	@hapi/joi	@hapi/cookie	hapi-auth-jwt2	mocha
	@hapi/vision	@hapi/inert	@hapi/boom	hapi-swagger	prettier
					eslint
Infrastructure	node	mongodb	cloudinary	netlify	vscode
	render	mongo atlas	glitch	partykit	npm

PlaceMark Examples

- Landscape feature

- Ringfort

- Beach

- National monument

- Dolmen

- Museum

Walking Trail

- River

- Climb

- Bridge

- Bog

- Cycleway

- Tree

- Island

BirdwatchingLocations

- Venue

- Forest

- Diving

Product Feature Sets

POI Sharing /
Community Features

Community

You are free to innovate an the type, range and variety of features

Richer Media Experience + User Management

Enhanced

These categories are to stimulateyourbrainstorming

Essential Data
Structure & Support
Service

Core

- Some ideas on the next slides...

Information Model

<u>Features</u>

- Placemark
 - Name
 - Category
 - Description
 - Analytics
- User
 - Basic user details

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

Core

Information Model

<u>Features</u>

- Placemark
 - Images
 - Location
 - Weather
- User
 - Types

- Placemark images
- Placemark Map Location
- Admin
 - Admin user
 - Admin dashboard

Enhanced

Information Model

<u>Features</u>

- Placemark
 - Creator / Editor
 - Rating
 - Reviews
 - Discussion
- User
 - Interaction information

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

Community

Implement POI Core + selected features of POI Enhanced

Support the following User Management Features:

- 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 PlaceMarks into categories

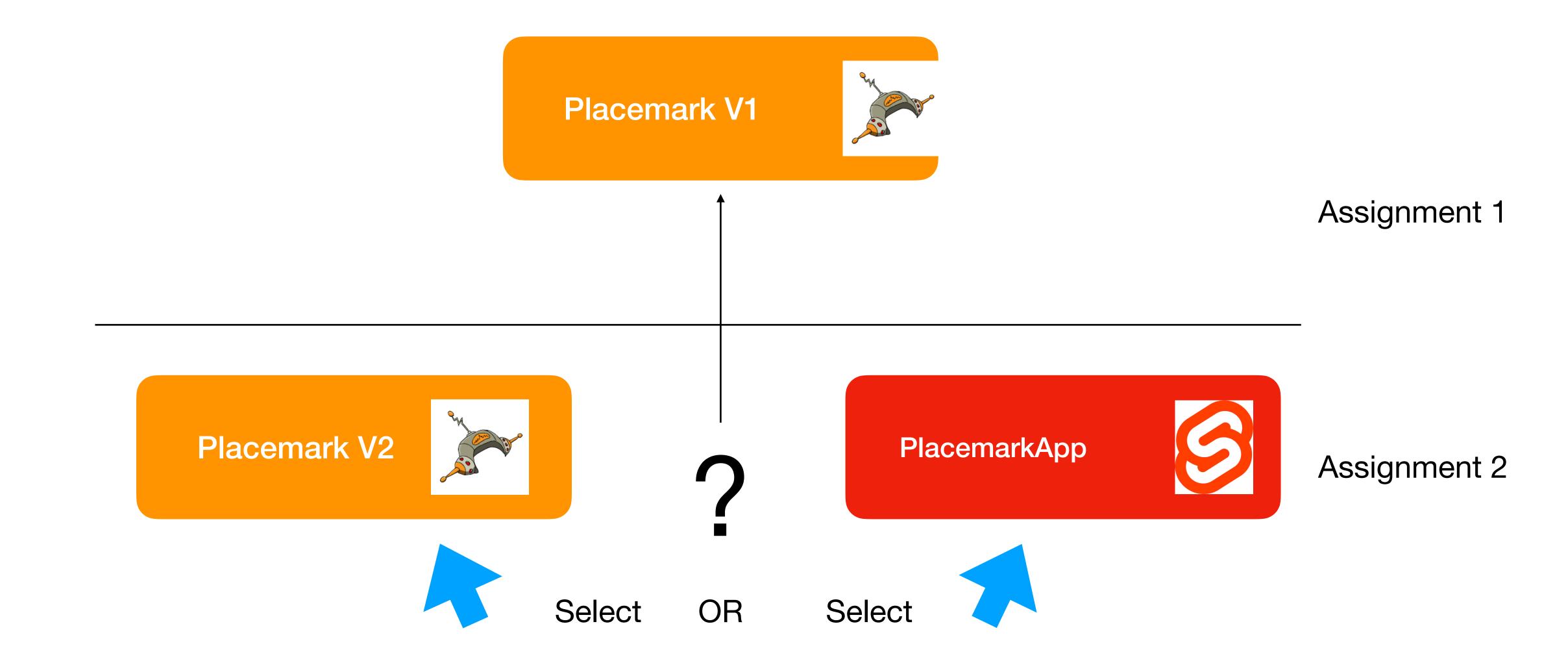
API

Placemark V1

- Endpoints + tests

- Swagger Documentation

- JWT Security





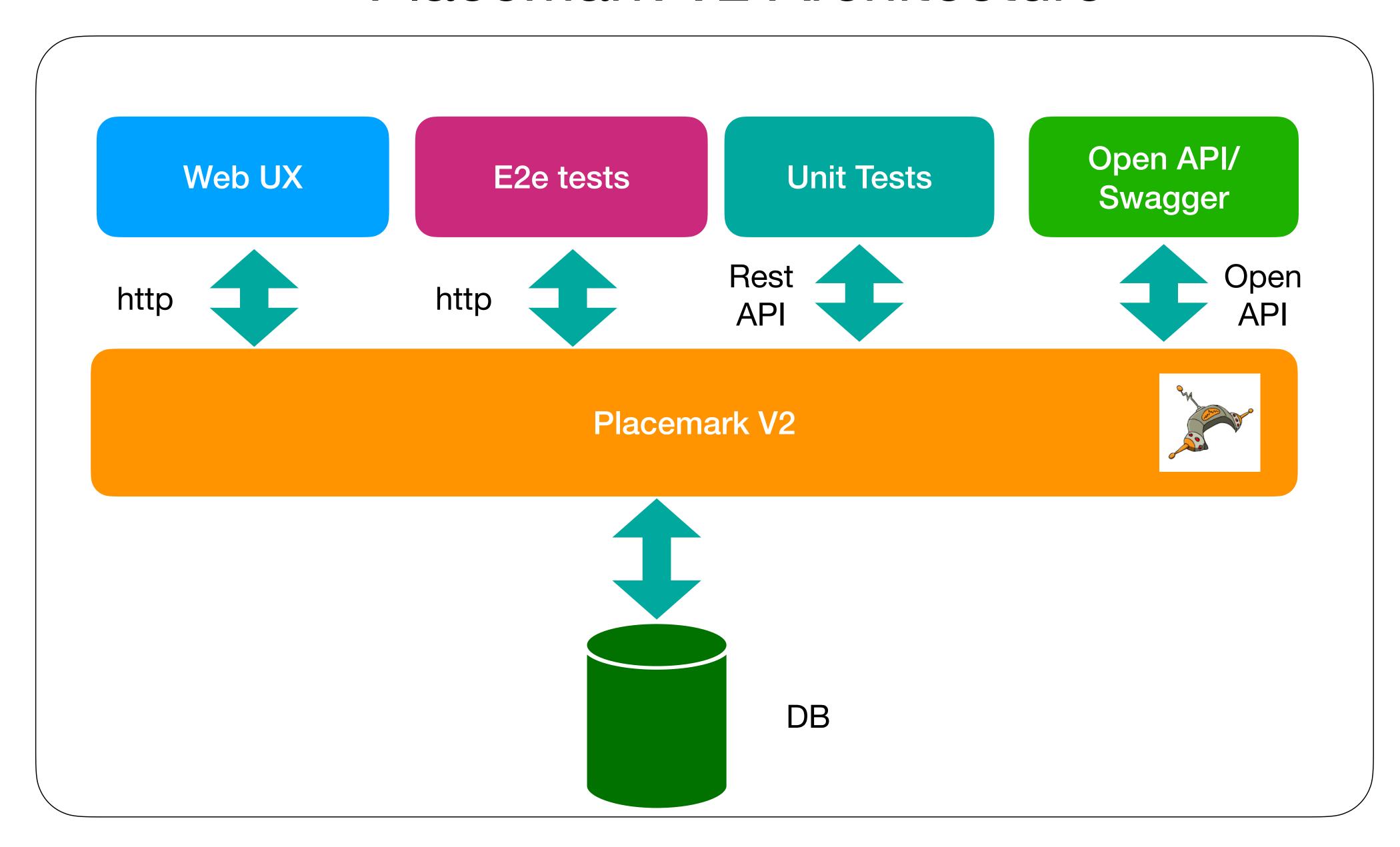
- Choose

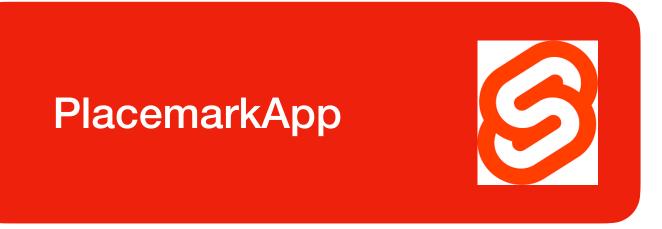
if you wish to:

- Deepen your knowledge of Hapi development
- Implement more sophisticated Models
- Pursue TDD in more depth
- Explore End-to-End testing (independently)
- Continue to evolve the features of your application



PlaceMark V2 Architecture



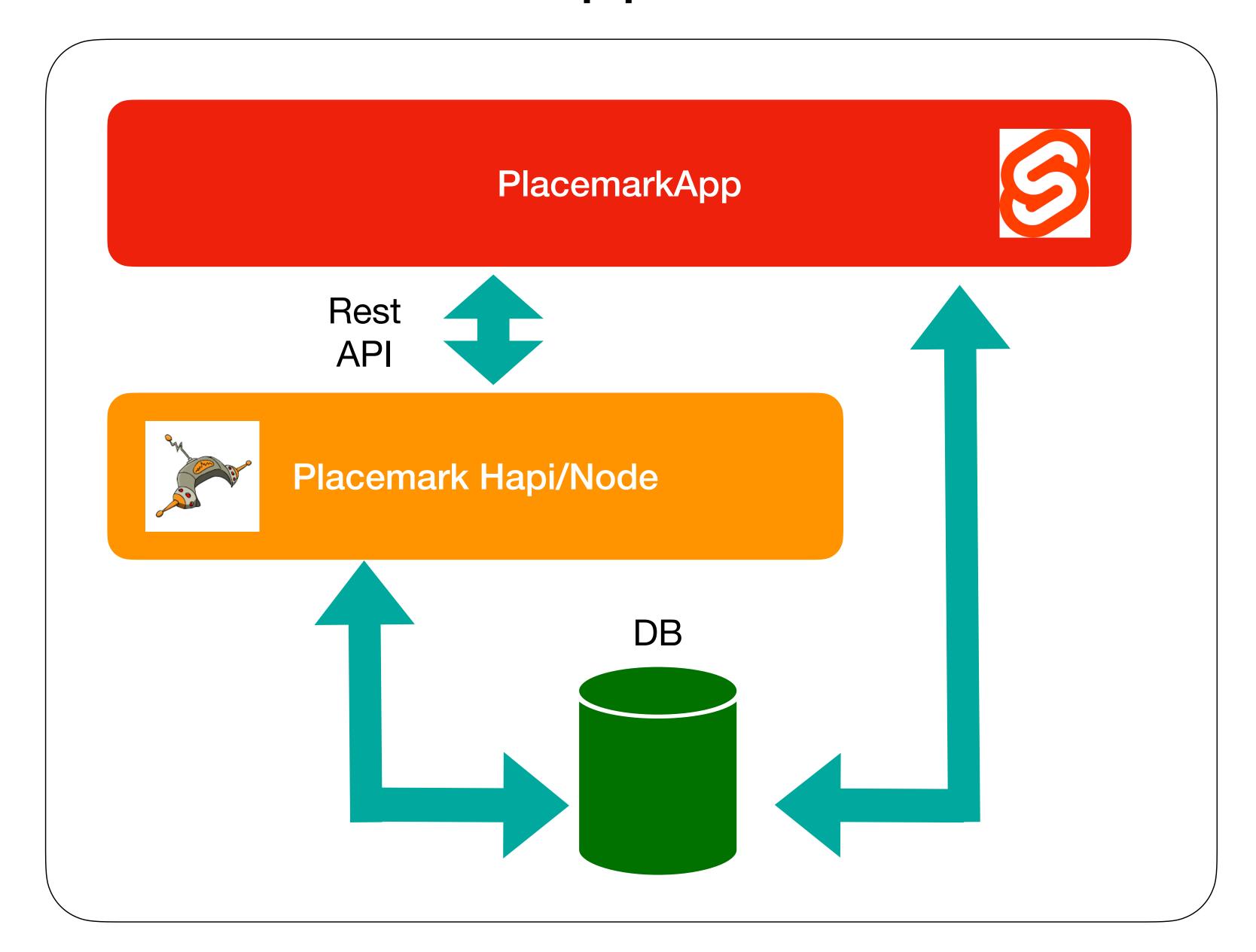


- Choose

- if you wish to:
- Gain an understanding of modern front end development
- Develop an engaging user experience
- Experiment with compelling Mapping features
- Explore interesting charting components
- Feature freeze your assignment 1 app (more or less)



PlacemarkApp Architecture



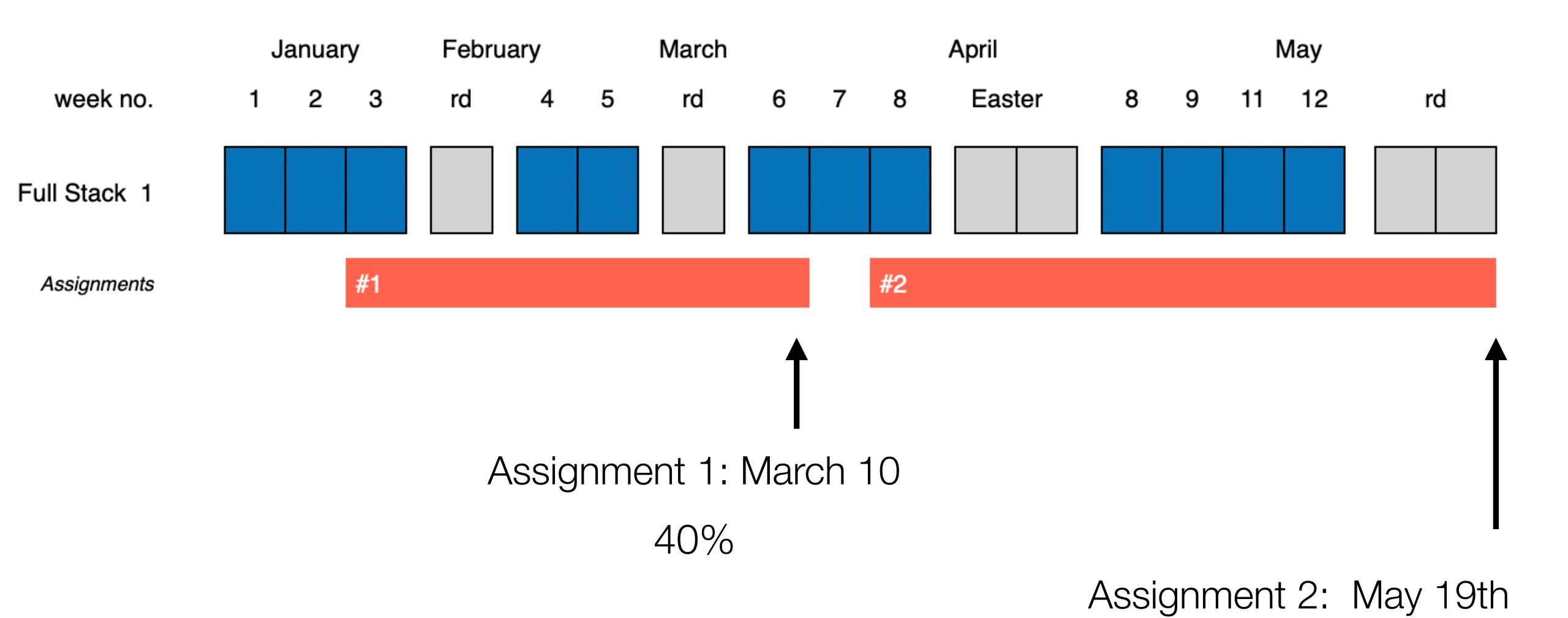
Placemark V2

	Social 1	Social 2	TDD	Authentication	Devops
Level 1	Private POIs	Reviews	Unit Tests	Sanitisation of input & output	Tagged Releases
Level 2	Public POIs	Share	Unit tests + coverage reports	Hashing & salting passwords	Git Flow
Level 3	Rating	Noticeboard	e2e Cypress - Basic	OAuth (login via Github, Google etc)	Render, AWS
Level 4	Favourites	Discussions	e2e Cypress - Enhanced	3rd Party Auth Service (Auth0, Firebase or equivalent)	Typescript

PlacemarkApp



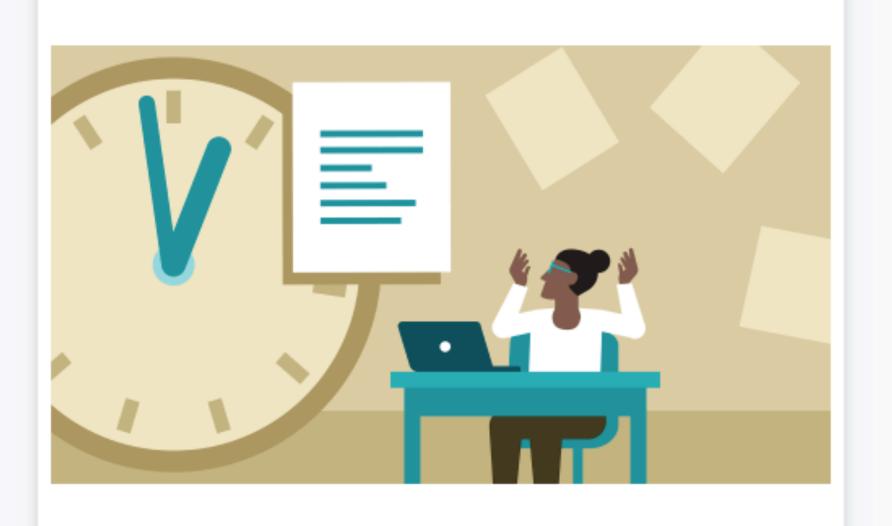
	Analytics	Maps	Images	Authentication	Architecture
Level 1	Single Chart	Show POI on Map	Single Images per POI	Sanitisation of input & output	SPA
Level 2	Multiple Chart Types	Map Layers based on Categories	Support Delete Image	Hashing & salting passwords	SSR
Level 3	Apache ECharts (or equivalent)	Multiple Maps on single page	Multiple Images per POI	OAuth (login via Github, Google etc)	Full Stack
Level 4	Trends and Projections	Weather Conditions at POI / Weather Maps	Image Gallery Feature	3rd Party Auth Service (Auth0, Firebase or equivalent)	Event Push (PartyKit)



60%







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