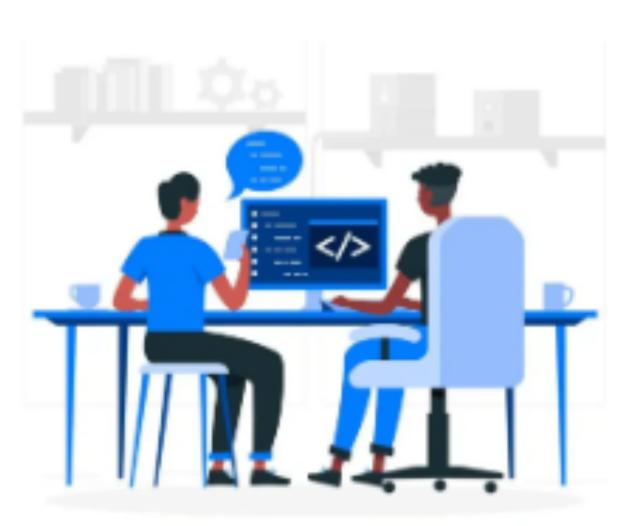
## 16: Assignment 2



Concept, detail and grading rubric

#### 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."

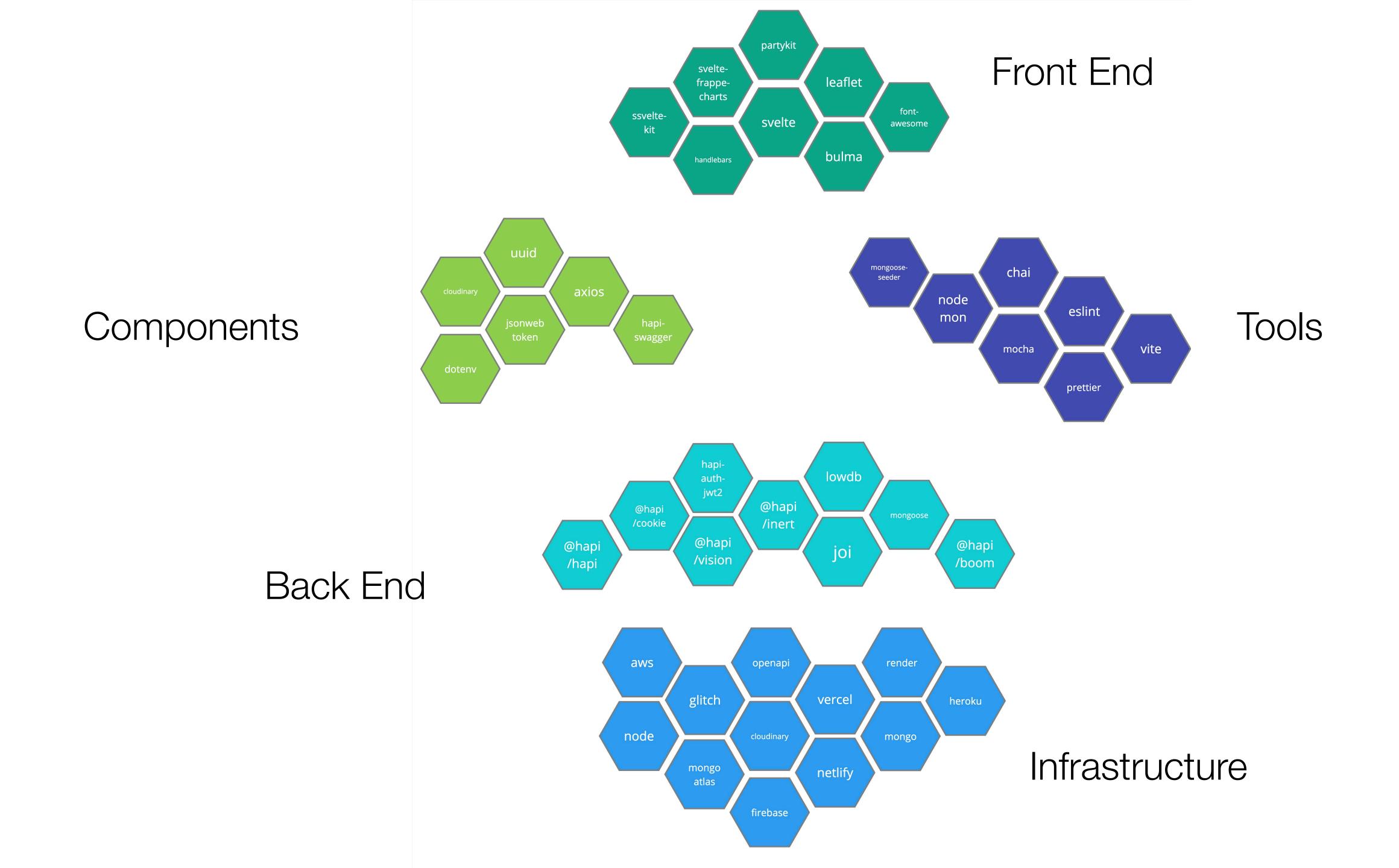
http://www.opengeospatial.org/projects/groups/poiswg

https://en.wikipedia.org/wiki/Point\_of\_interest

https://en.wikipedia.org/wiki/Point\_of\_interest

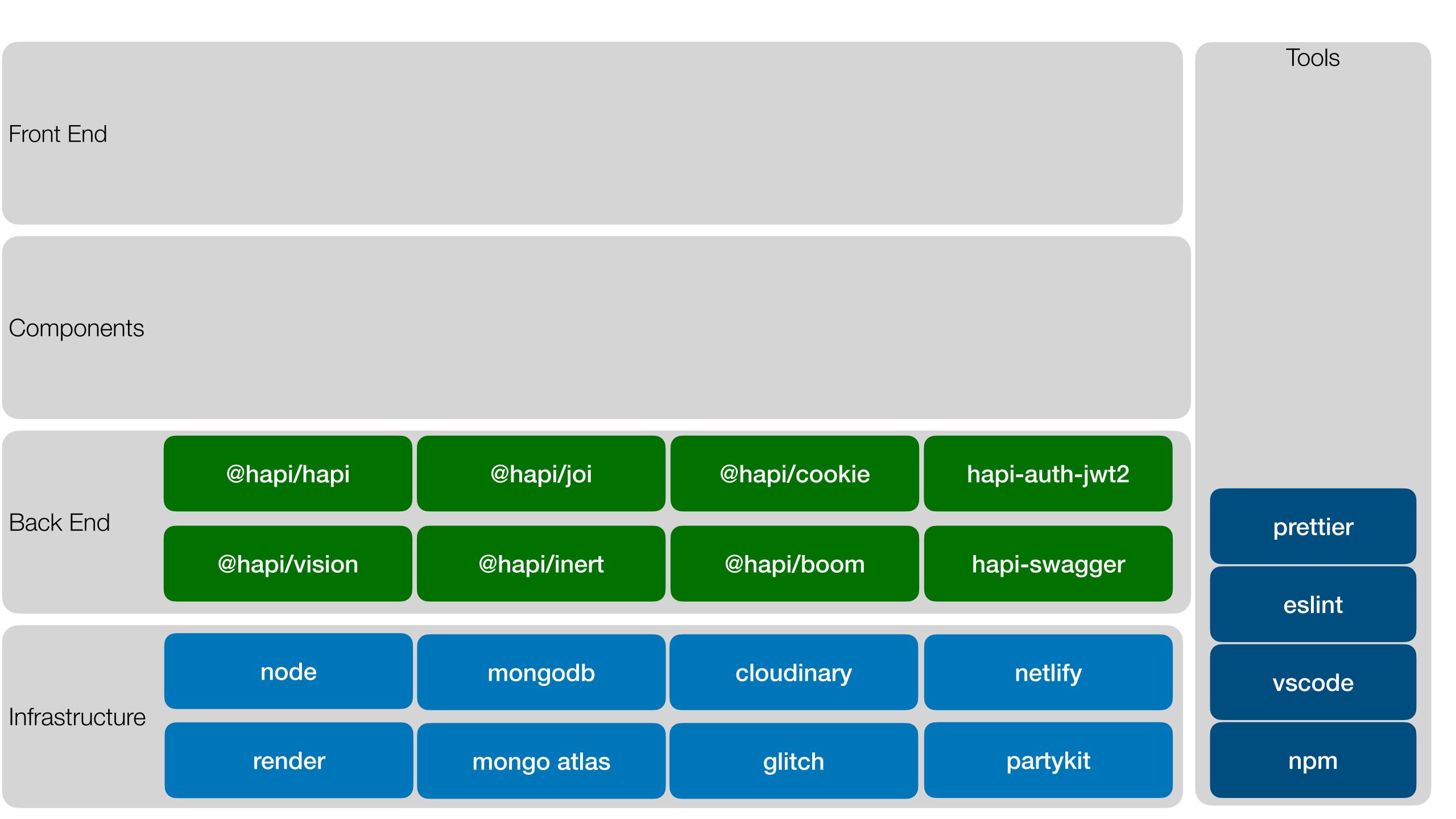
# Full Stack Components & Services





Front End	Tools
TOTIL ENG	
Components	
Back End	
nfrastructure	





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

					Tools
Front End	handlebars	bulma	Font awesome		typescript
	dotenv	cloudinary	uuid	lowdb	nodemon
Components	mongoose	mais-mongoose- seeder	jsonwebtoken	axios	chai
	@hapi/hapi	@hapi/joi	@hapi/cookie	hapi-auth-jwt2	mocha
Back End	@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	Svelte	sveltekit	leaflet	frappe-charts	Tools
	handlebars	bulma	Font awesome	iconify	vite
	datany	alau dia any		lowell	typescript
Components	dotenv	cloudinary	uuid	lowdb	nodemon
	mongoose	mais-mongoose- seeder	jsonwebtoken	axios	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

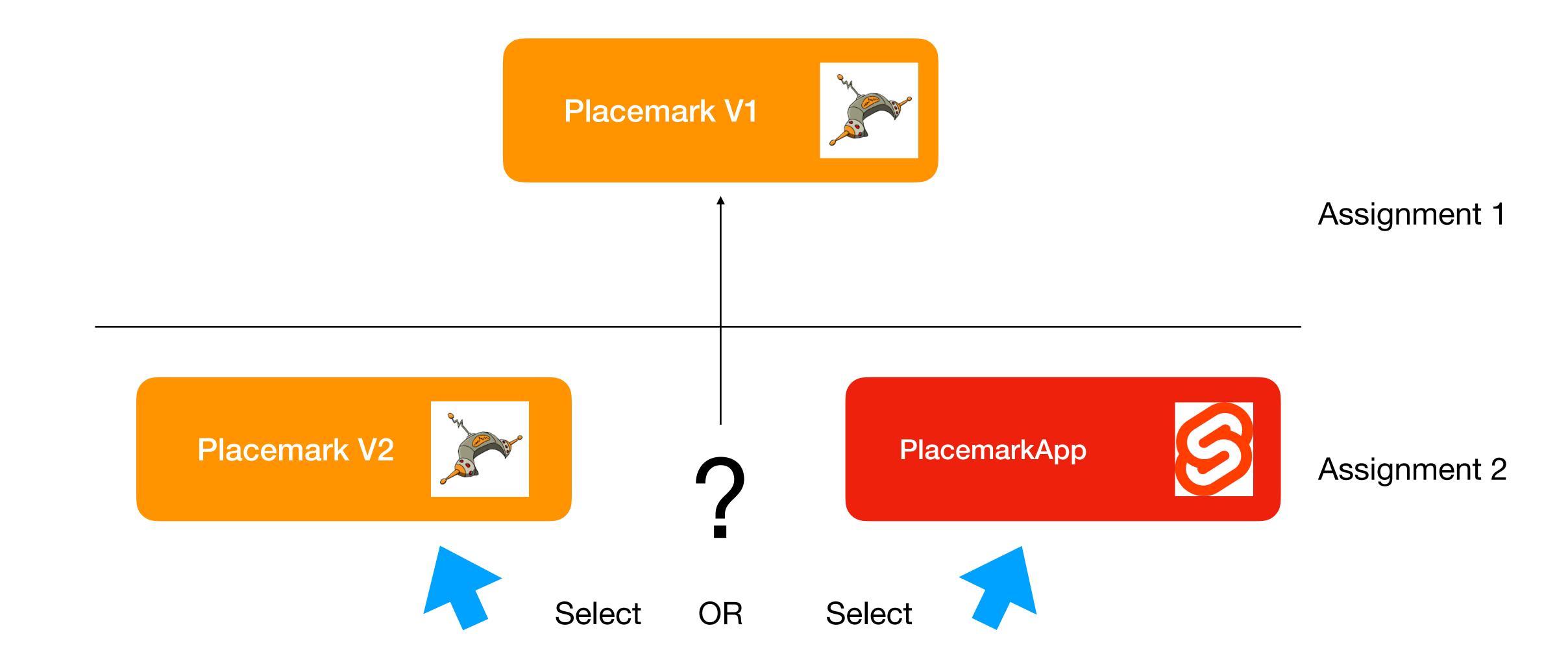
API

Placemark V1

- Endpoints + tests

- Swagger Documentation

- JWT Security





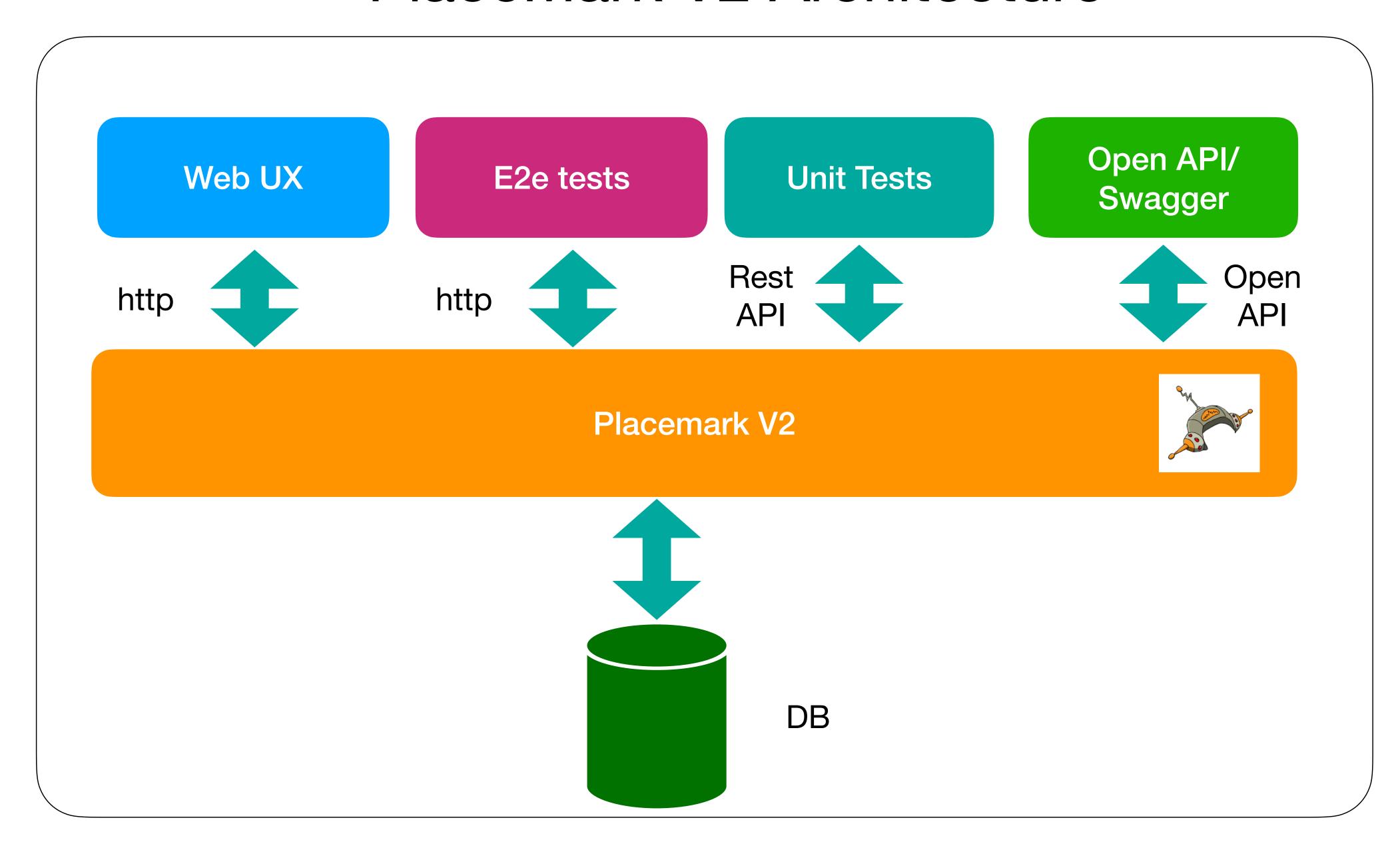
- Choose

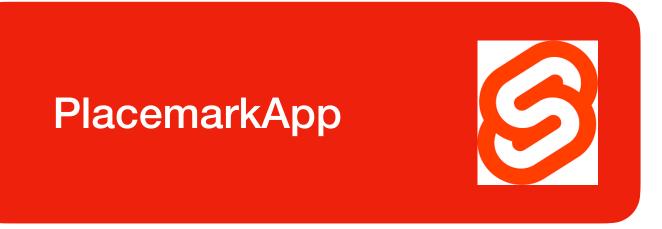
if you wish to:

- 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



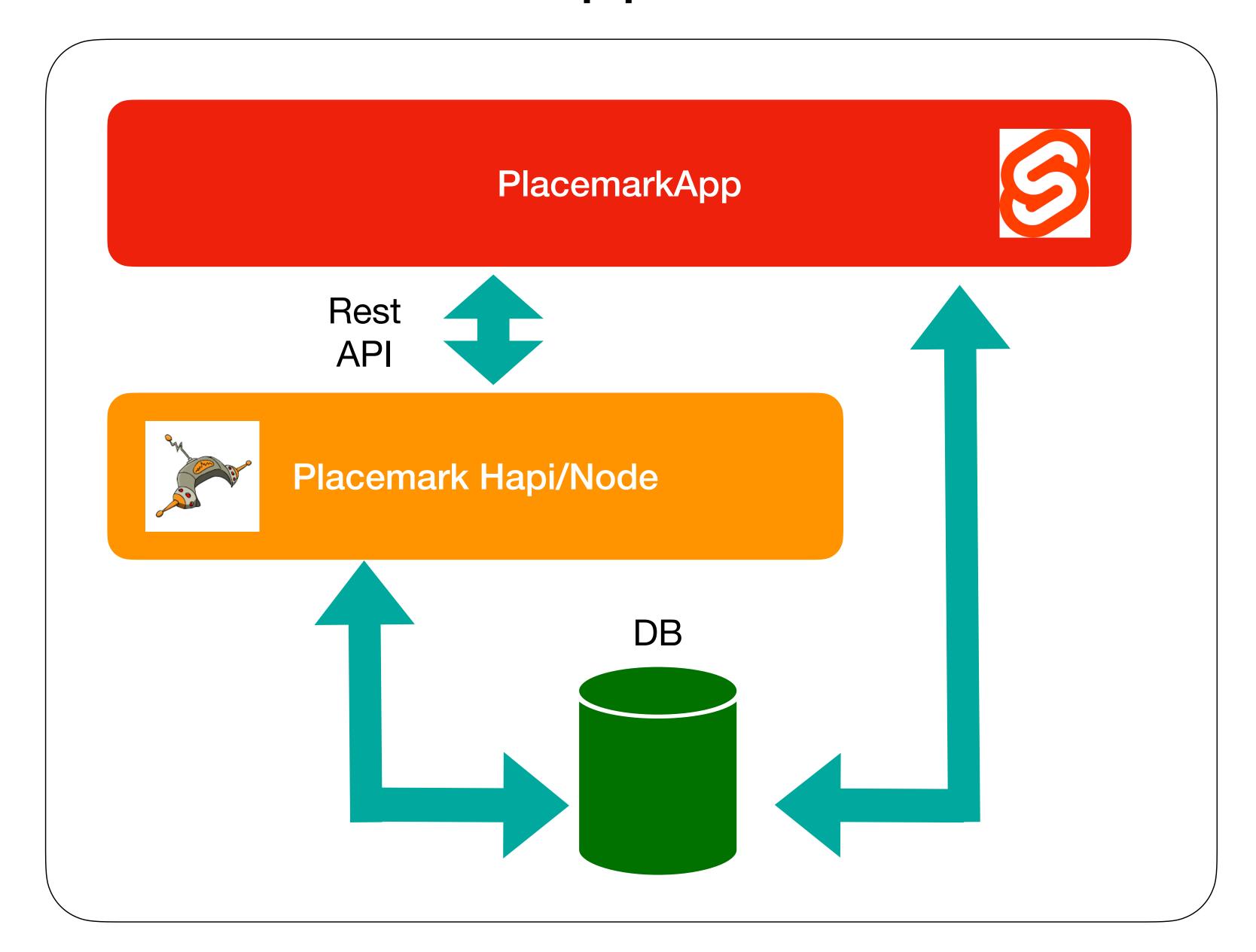


- Choose

- 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	Svelte
Level 2	Multiple Chart Types	Map Layers based on Categories	Support Delete Image	Hashing & salting passwords	SvelteKit
Level 3	Apache ECharts (or equivalent)	Multiple Maps on single page	Multiple Images per POI	OAuth (login via Github, Google etc)	SSR
Level 4	Trends and Projections	Weather Conditions at POI / Weather Maps	Image Gallery Feature	3rd Party Auth Service (Auth0, Firebase or equivalent)	Full Stack

