

Oracle JET



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Oracle Solutions



OJET Toolkit



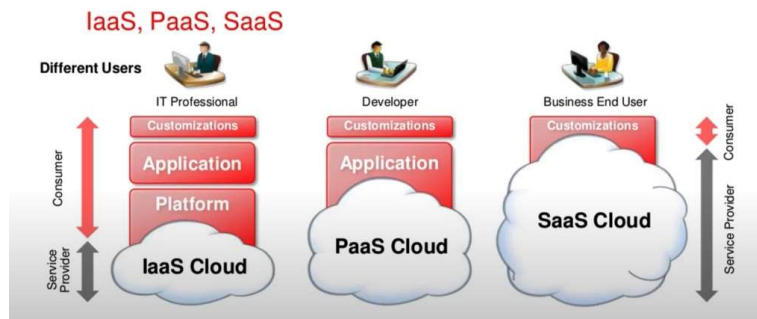
APACHE
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Javascript Ecosystem

- Vibrant, innovative ecosystem
- Increasing popularity of mobile devices
- Expense of native applications
- Popularity of hybrid mobile applications
- Challenges of a volatile, dynamic ecosystem
- Relevant and Maintainable over a number of years

Modern Business Applications and Cloud

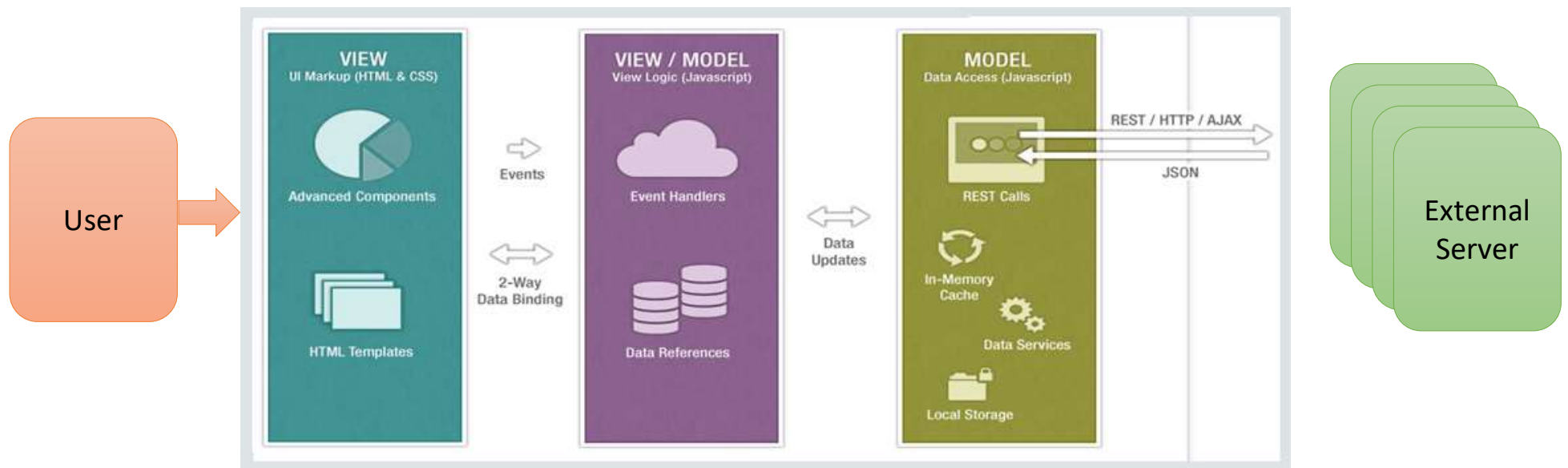


- JS is the native language of the internet
- Research with Cloud architectures
- OJET is the resultant of that research
- Oracle recommendations and best practices for enterprise JS

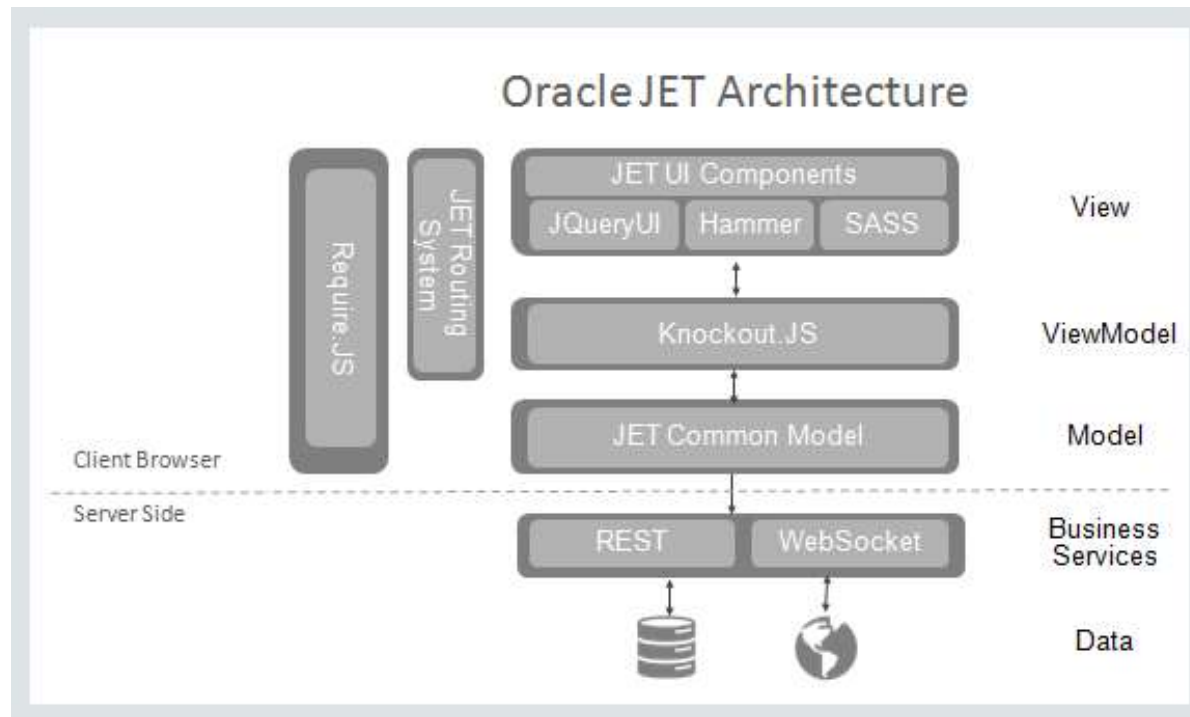
Oracle JET

- Free and Open Source
 - github.com/oracle/oraclejet
- Javascript Toolkit
- Useful Architectures, Patterns, Templates, Techniques, Components
- Focussed on Enterprise Applications
- Javascript, HTML5 and CSS3
- Result of research at Oracle in Javascript enterprise applications

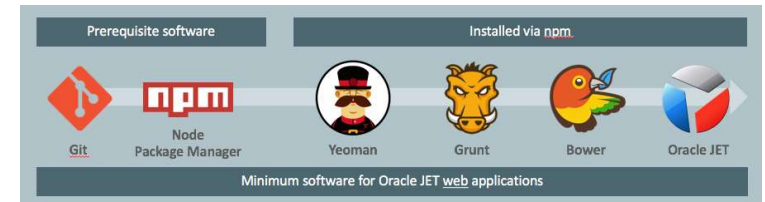
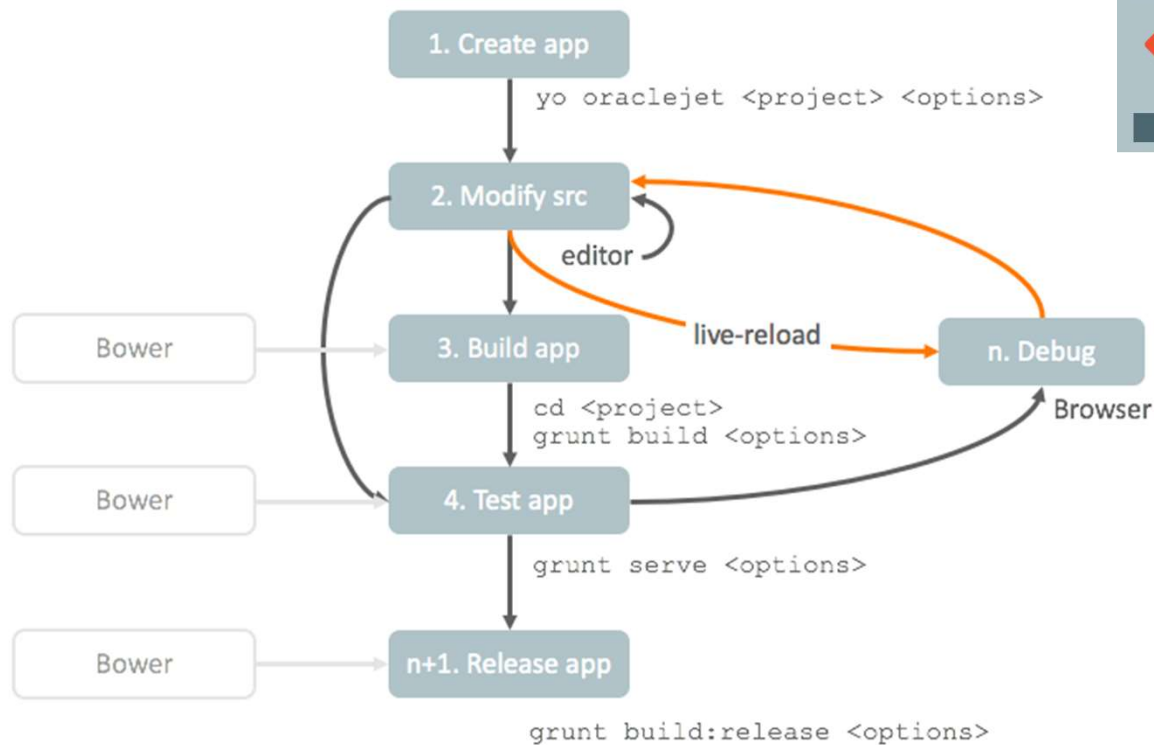
OJET MVVM Concepts



OJET Architecture



Development Process with OJET



Installation and Configuration

- Download and install node.js
<https://nodejs.org/en/download/>
- Install OJET Client
> (sudo) npm install -g @oracle/ojet-cli
- Verify the OJET CLI
> ojet help
> ojet --version

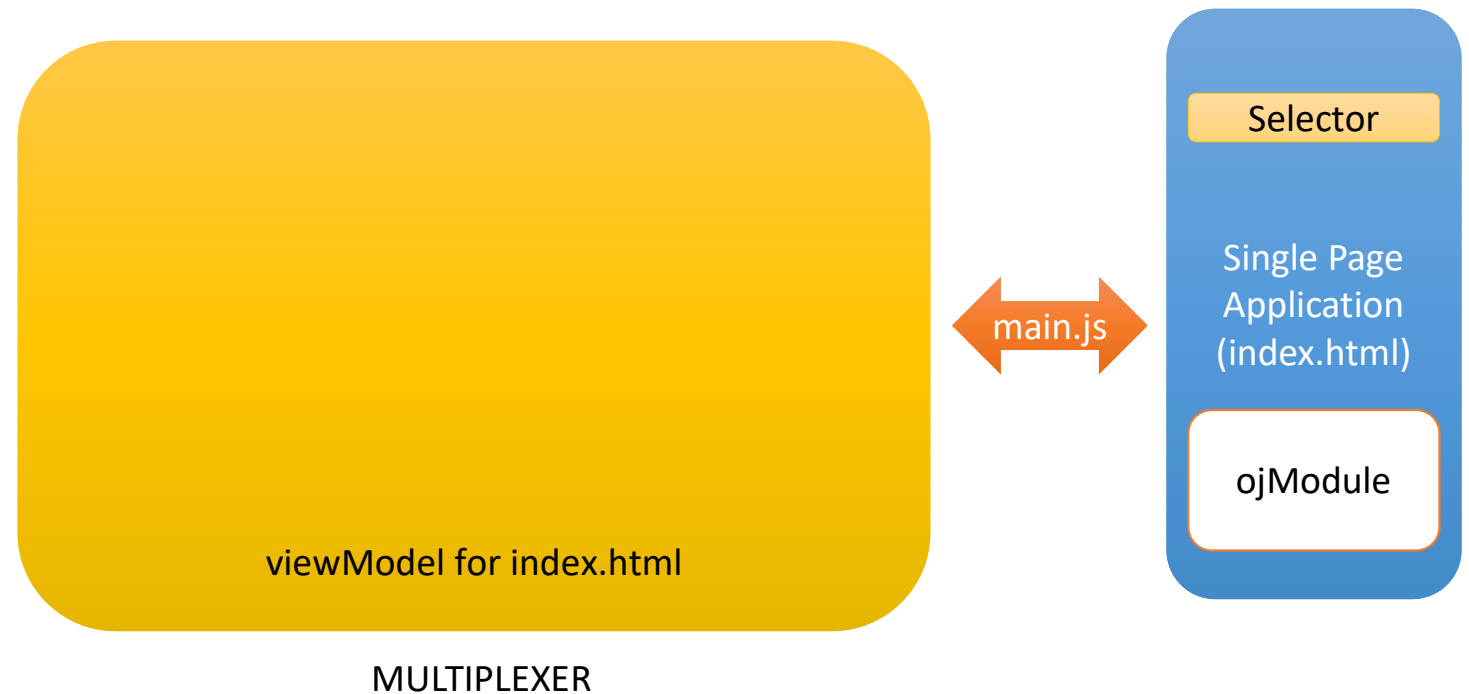
First OJET Web Application

- Developing client-side web application with Oracle JET is simple and efficient
- Create a starter template
 - > `ojet create firstwebapp --template=navdrawer`
- Run the web application
 - Change the directory to firstwebapp
 - Execute the command

> `ojet serve`

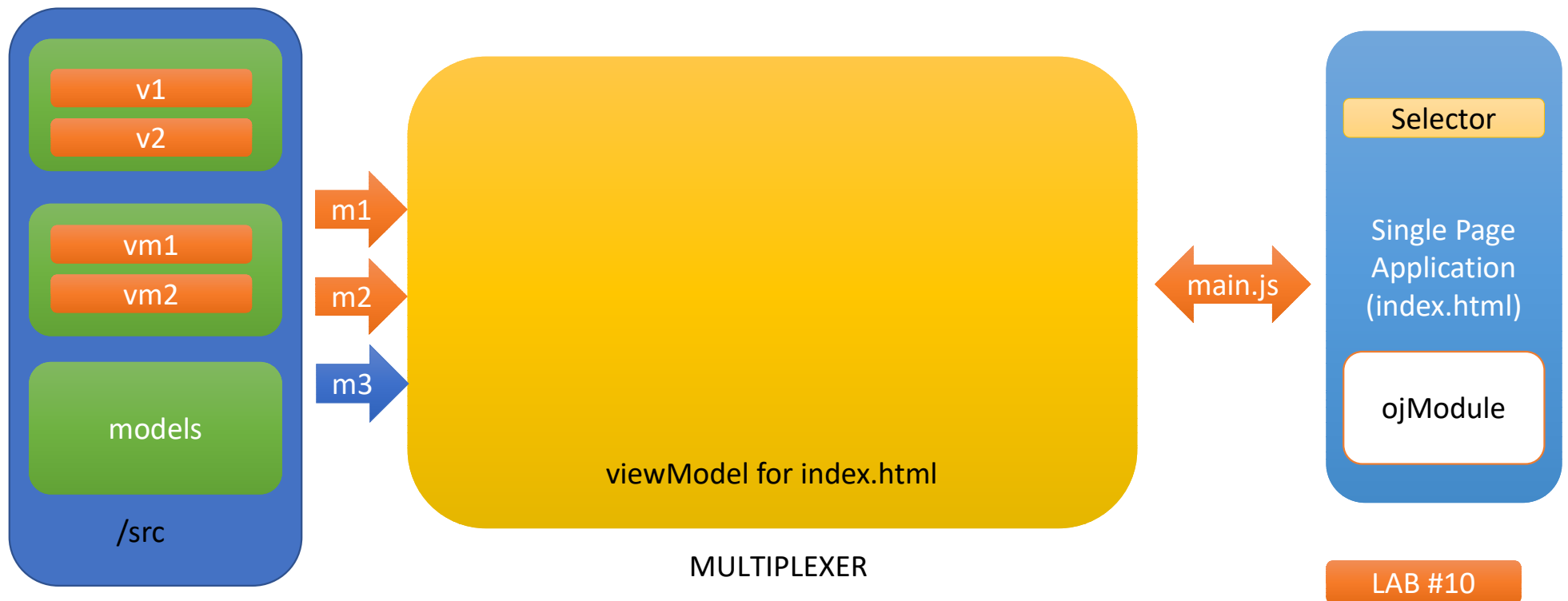
OJET Code Structure

Feature = Module = view + viewModel



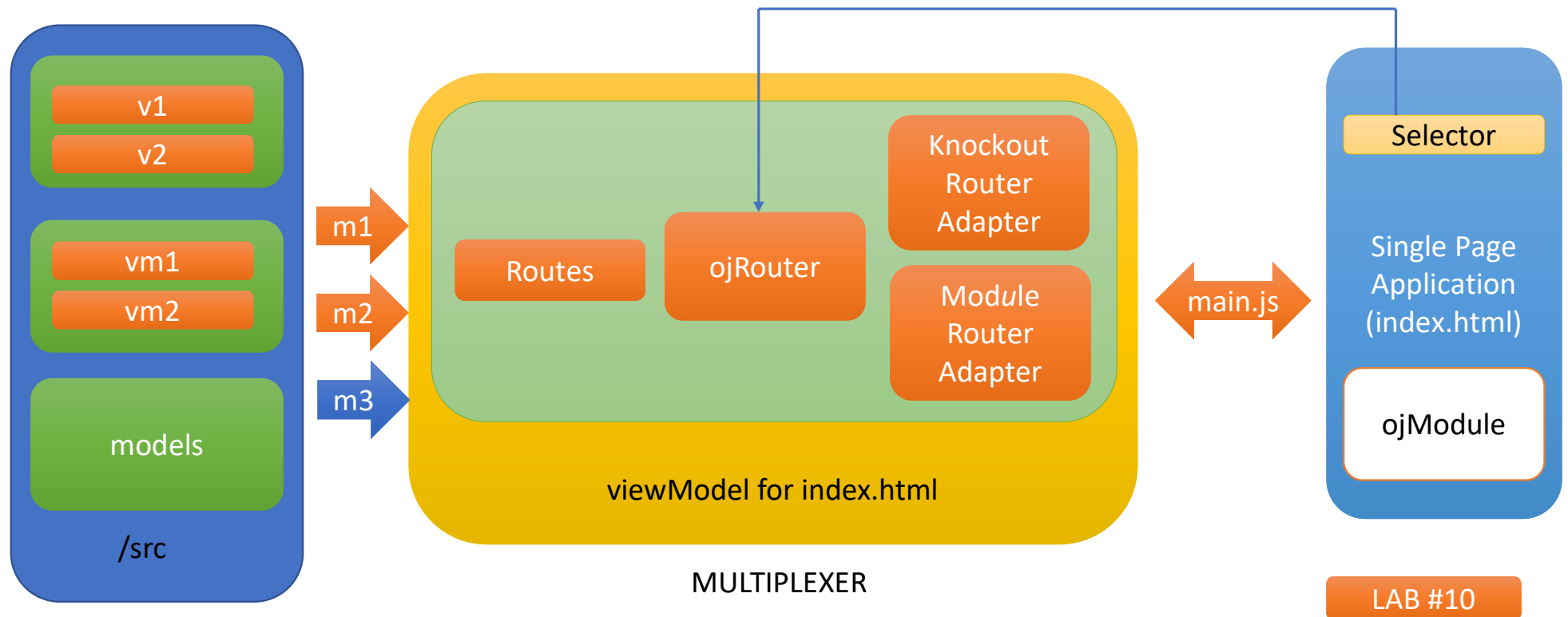
OJET Code Structure

Feature = Module = view + viewModel



OJET Code Structure

Feature = Module = view + viewModel





Evolution of Javascript Ecosystem

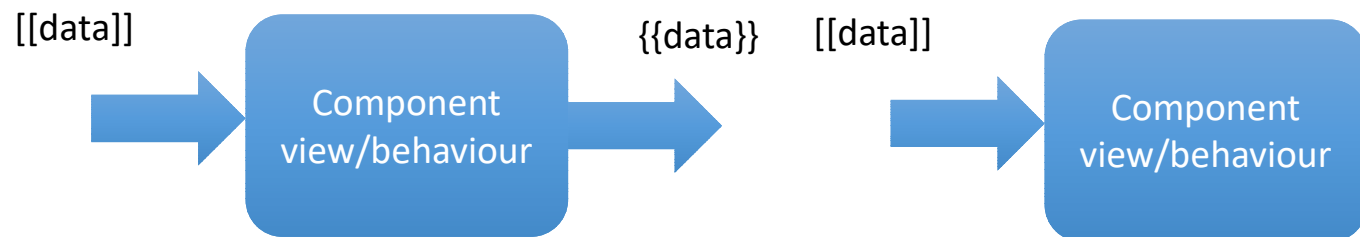
Using Require JS and Knockout JS in OJET

- Require JS helps in dependency management
- Knockout JS helps in data-binding and automatic tracking of value/property changes, it updates all references to that property automatically

A UI element for temperature conversion. It consists of an orange rounded rectangle. Inside, there is a blue input field containing the number '100'. To the right of the input field is a small 'C' label. Below the input field is a horizontal line. Below the line is the text '212 F'.

Oracle JET Components

- Powerful and clean way of organizing UI code into self-contained reusable chunks
- Development patterns beneficial for large applications, simplifying by encapsulation
- Improve performance by incremental loading of resources



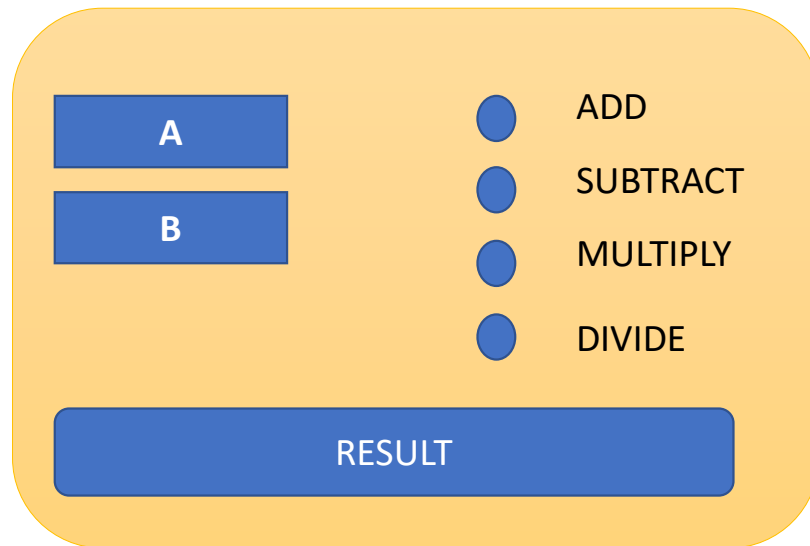
Loading Resources

- Require.js Text Plugin is an extension of Require.js
- Enables you to load text based resources
- Let's you separate HTML templates from business logic in Javascript files

Creating Modules

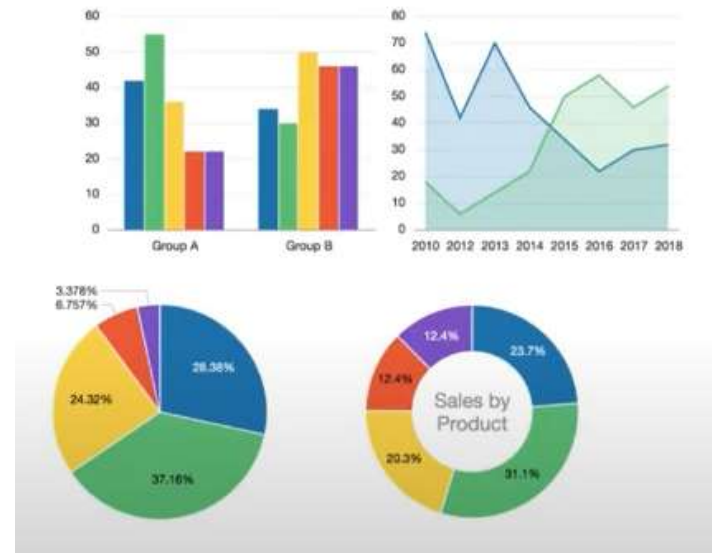
- OJET applications are inherently modular
- An OJET module has its business logic in Javascript and its view in HTML
- An OJET module represents a section in your application providing a new feature to the user

Creative Lab: Add a new feature to the app



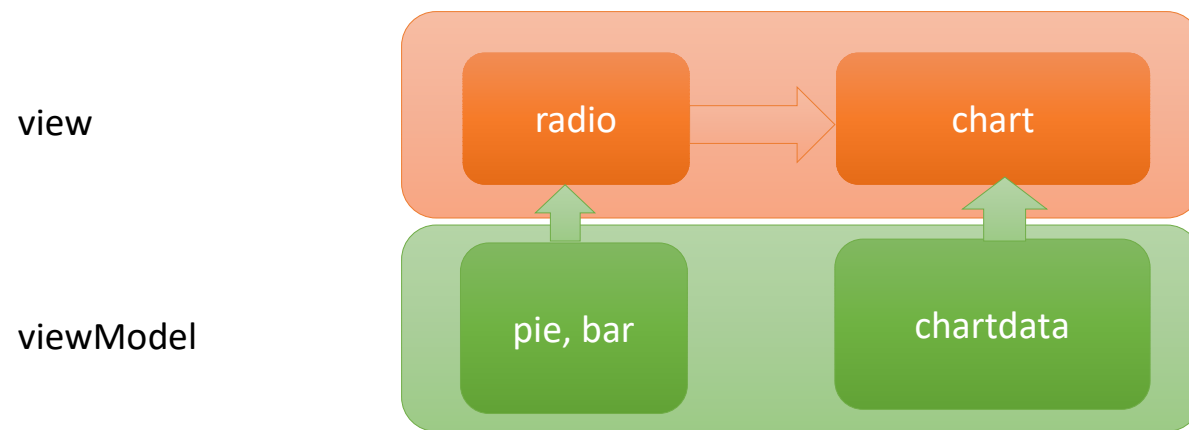
OJET Cookbook Components

- Open sourced
- Online OJET Cookbook provides recipes for each component
 - HTML View
 - JS/TS Business Logic
- JSDoc describes each component

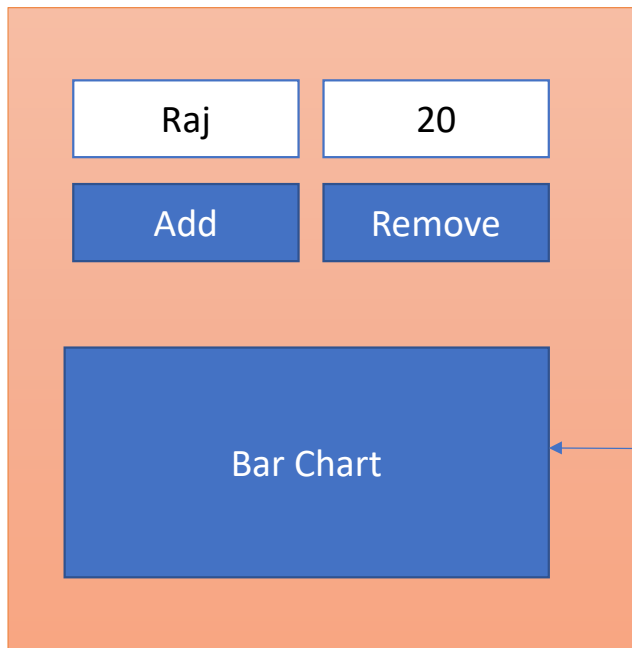


Explore Cookbook, Understand Workflow

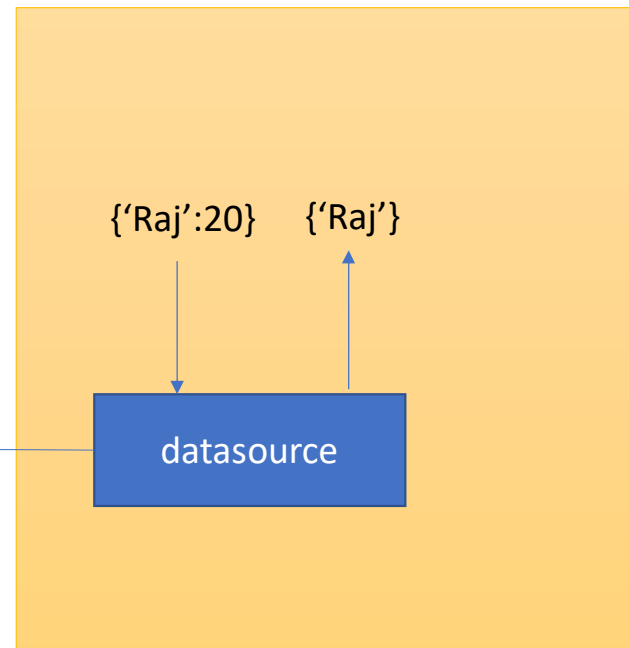
OJET Cookbook Components



Employees.html



Employees.js



OJET Flex Layouts

- Oracle ALTA UI design systems
<https://www.oracle.com/webfolder/ux/middleware/alta/index.html>
 - Set of CSS classes used to design modern Oracle applications
 - Default theme of Oracle JET
 - Design with mobile first approach
- Flex box layout is the standard part
 - Efficient way to layout, align and distribute space for applications
 - Helps accommodate variety of device visual spaces

Single Page Applications

- A single-page application is a web application or website that interacts with the web browser by **dynamically rewriting the current web page with new data** from the web server, instead of the default method of the browser loading entire new pages
- <https://www.excellentwebworld.com/what-is-a-single-page-application/>



<https://globekit.co/>

