

# Ember JS

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# What is it?

- An open source client side Java Script web application framework
- Based on the MVC software architectural pattern
- Used to create scalable single page applications

# History

- Initially released in 2011
- Latest stable release April 14, 2015
- Has a large, active development community
- Noob friendly, no really it defines everything you come across its great.

# Why use it?

- Declarative two way binding
- Computed properties
- Automatically updating templates
- It has a template library (HTMLBars)
- Easy to learn, with an awesome introduction guide:  
<http://guides.emberjs.com/v1.11.0/ember-cli/>

# Basic concepts

- Routes
- Models
- Controllers
- Templates
- Views
- Components



# Routes

- Route object corresponds to a URL
- Serializes application's current state
- Defined in the singleton Router object

# Models

- Each route has an associated model to contain the current state of the application's data
- Can use jQuery to load JSON objects and use them as models
- Or: Use model library like Ember Data

# Controllers

- Decorate models with display logic
- Usually the model property of these are explicitly accessed
- Can inherit from objects or arrays depending on whether it was associated with a single record or multiple



# Templates

- Written in HTMLBars template language, which is basically HTML with a few other attributes.
- Used to:
  - describe the user interface
  - build the application in HTML
  - embed dynamically updating expressions

# Template Specialties

- Expressions: like `{{firstName}}`, can take information from the template's model and put it into HTML.
- Outlets: placeholders for other templates.
- Components: custom HTML elements that you can use to clean up repetitive templates or create reusable controls.

# Views

- Used to add :
  - special handling of user events
  - custom graphics (not css)
  - JavaScript animations
  - reusable behavior

# Components

- Special view used to create custom, reusable elements for templates.
- Conforms to the W3C web components specification.



# Enumerables

- Any object that contains child objects
- Allows you to change the way the underlying data is stored without changing the bits of the app that access it



# Used by:

- Yapp
- Tilde
- Yahoo!
- Square
- Groupon