



introduction



Hej!

Jestem Diana Falkowska.

Ember.js

“A framework for creating ambitious web applications”

Why so cool?



Who's using it?

- discourse.org
- zendesk.com
- livingsocial.com
- groupon.com
- cloud.digitalocean.com
- dashboard.heroku.com



Ember.Application

```
window.App = Ember.Application.create();
```

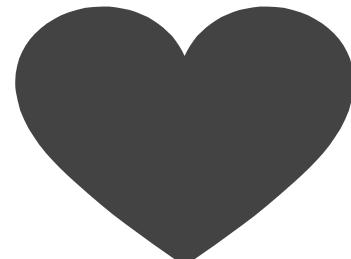
- adds **event listeners**
- renders application **template**
- runs application **route**



Ember.Object

```
User = Ember.Object.extend({  
  showMessage: function(text) {  
    alert(text);  
  }  
});
```

- Computed Properties
- Observers
- Bindings





Computed Properties

```
App.User = Ember.Object.extend({
  firstName: null,
  lastName: null,

  sendMessage: function(text) {
    alert(text);
  },

  fullName: Em.computed('firstName', 'lastName',
    function() {
      return this.get('firstName') + ' ' + this.get('lastName');
    });
});
```



Observers

```
friendsObserver: Em.observer('friends.count', function () {  
    this.updateFriendsLabel(this.get('friends.count'));  
})
```



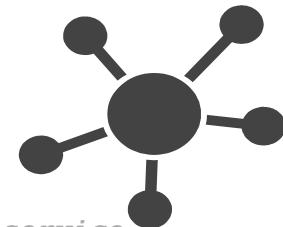


Bindings

```
userA = Ember.Object.create({
  cinemaWithPartner: 11
});

User = Ember.Object.extend({
  cinemaWithPartner: Ember.computed.alias('partner.cinemaWithPartner')
});
userB = User.create({
  partner: partner
});

userB.get('cinemaWithPartner'); // 11
// They go to the cinema one more time and she posts it in our service
userB.set('cinemaWithPartner', 12);
userA.get('cinemaWithPartner'); // 12
```





Router

```
App.Router.map(function() {  
  this.route('user', { path: 'users/:user_id' });  
  this.route('users');  
});
```

- stan aplikacji \Leftrightarrow URL
- URL \Leftrightarrow szablon (model)



Ember.View

```
App.ApplicationView = Ember.View.create({  
  templateName: 'user-gallery',  
  labelPhotos: 'Photos'  
});
```

- dostarcza dane do szablonów
- odpowiada za obsługę eventów i przekazywanie ich dalej - do kontrolera lub routera



Template

- Opisuje UI aplikacji
- Handlebars / HTMLbars
- Przypisany do kontekstu

Co moze zawierac?

- Wyrazenia: {{myVariable}}
- Outlety: {{outlet}}
- Komponenty: {{my-component}}



Template

```
// context
App.ApplicationController = Ember.Controller.extend({
  firstName: "Diana",
  lastName: "Falkowska"
});

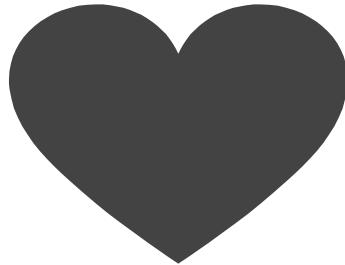
// template
Hello, <strong>{{firstName}} {{lastName}}</strong>!

// output
Hello, <strong>Diana Falkowska</strong>!
```



Template

- Wyrażenia warunkowe
- Iteratory
- Binding atrybutów
- Binding klas





Conditionals

```
{#if user}
    Welcome <b>{user.firstName}</b> {user.
lastName}</b>!
{{else}}
    Please log in.
{{/if}}
```



Iterators

```
{#each friends as |friend| }
Hello, {{friend.name}}!
{{else}}
    Sorry, nobody is here.
{/each}
```



Bindowanie atrybutów

```
<div id="avatar">  
  <img src={{avatarUrl}} alt="Avatar">  
</div>  
  
// output  
<div id="avatar">  
    
</div>
```



Bindowanie klas

```
<input type="checkbox" disabled=
{{isAdministrator}}>

// output

<input type="checkbox" disabled>
```



Logging & debugging

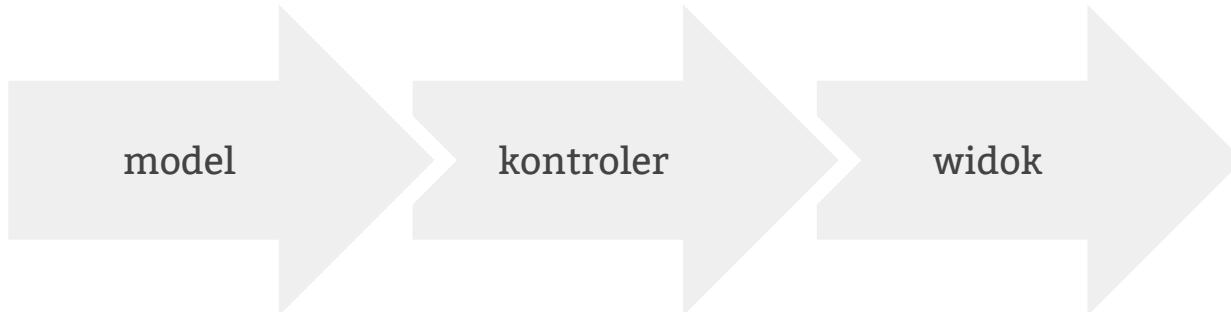
```
{ {debugger} }
```

```
{ {log someVariable} }
```



Ember.Controller

Dekoruje dane modelu. Przekazuje i udostępnia dane szablonowi.





Ember.Component

- zdefiniowany przez Ciebie tag HTML
- do wykorzystania w każdym miejscu aplikacji
- obsługa zdarzeń w JS
- elastyczne i customizowalne (yyy...)
- enkapsulowane



Ember.Component

```
App.MediaImageComponent = Em.Component.extend({
  tagName: 'figure',
  width: null,
  height: null,
  caption: Em.computed('media', {
    get(): string {
      var media = this.get('media');

      if (media && typeof media.caption ===
'string') {
        return media.caption;
      }
    },
    set(key: string, value: string): string {
      return value;
    }
  }),
  ...
});
```

VIDEO



Zoo animals escape in Georgia floods

Heavy flooding in the Georgian capital, Tbilisi, has killed eight people and officials are warning residents to stay indoors to avoid animals that have escaped from a zoo.



Zoo animals escape in Georgia floods



Texas pool party officer was 'stressed'



Swedish prince marries reality-TV star



ICC urges Sudan leader arrest

ENTERTAINMENT & ARTS



Downton to get special Bafta tribute

Actors lead entertainment honours

Entertainment Live: Star Wars at Comic-Con; Orange is the New Black and Clangers return

HEALTH



Penis recipient 'to become father'

Nuts 'protect against early death'

Baby from ovary frozen in childhood

US net neutrality rules to go ahead

Crowdfund man spent money on himself

Pain of producing climate change deal

SCIENCE & ENVIRONMENT



Supersonic car bid put back to 2016

Damehood for former EC science chief

Pain of producing climate change deal

EARTH



CAPITAL



UK spies moved over Snowden files

4

Arrest Sudan leader, S Africa urged

5

TV & RADIO

World News TV

Schedules in your country

World Service Radio

On air now: 11:00 - 11:05 GMT

LIVE BBC News

The latest five minute news bulletin from BBC World Service.

Next on air: 11:05 - 12:00 GMT

The World Debate

Experts debate the legacy of the Magna Carta on political systems around the world

Today's Schedule

Hourly bulletins:

» News

WEATHER

London

Edit my location

Sun

Mon

Tue



Max: 19°C

Min: 11°C

Max: 20°C

Min: 12°C

Max: 23°C

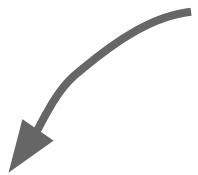
Min: 14°C

Detailed forecast



Ember.Component

```
app/templates/components/media-image.hbs
<img src="{{src}}>
{{#if caption}}
  <figcaption>
    {{caption}}
  </figcaption>
{{/if}}
```



```
app/templates/gallery.hbs
{{#each images as |image|}}
  {{media-image src=image.src}}
{{/each}}
```

```
app/components/news-wall.hbs
<h3>news.title</h3>
{{media-image src=news.imageSrc}}
```





Model

Model to inaczej obiekt, który przechowuje wszystko to, co jest stałe w aplikacji.

Ember Data



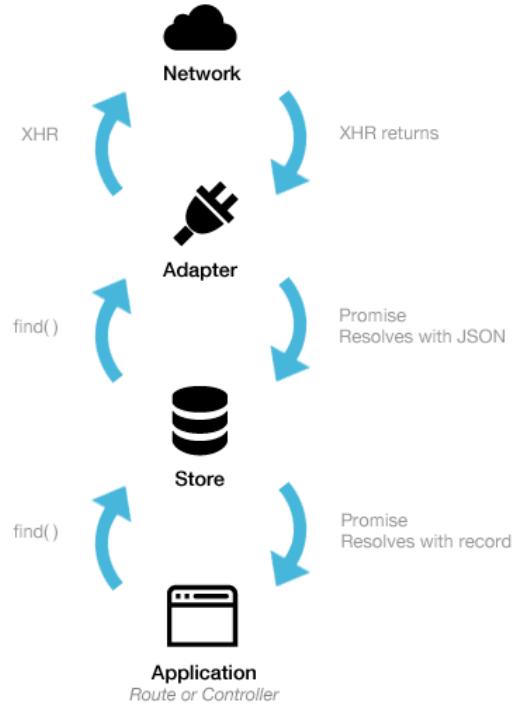
Ember Data

- biblioteka do ładowania danych z serwera
- cachuje rekordy
- tworzy nowe rekordy po stronie klienta
- zapisuje zmiany spowrotem na serwerze



Ember Data - obsługa API

- automatyczna obsługa RESTowych API
- prosta konfiguracja nie-REST API
- obsługa tzw. streaming API: socket.io, Firebase, WebSockets itp.

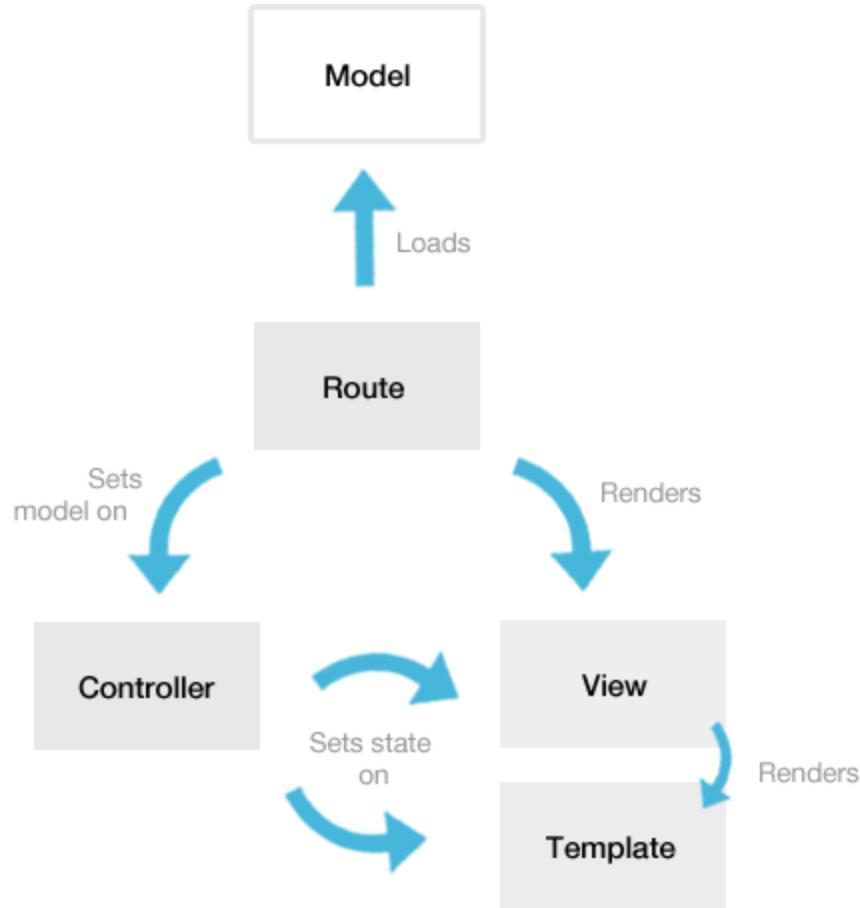




Ember Data

```
App.User = DS.Model.extend({  
  firstName: DS.attr('string'),  
  lastName: DS.attr('string'),  
  
  fullName: Em.computed('firstName',  
'lastName',  
  function() {  
    return this.get('firstName') + ' ' +  
this.get('lastName');  
  })  
});
```

```
App.User.createRecord({  
  firstName: 'Diana',  
  lastName: 'Fa'  
})  
var ja = App.Person.find(1);  
  
ja.get('fullName'); // Diana Fa  
ja.get('isDirty'); // false  
  
ja.set('lastName', 'Lol');  
ja.get('isDirty'); // true
```



Ember CLI



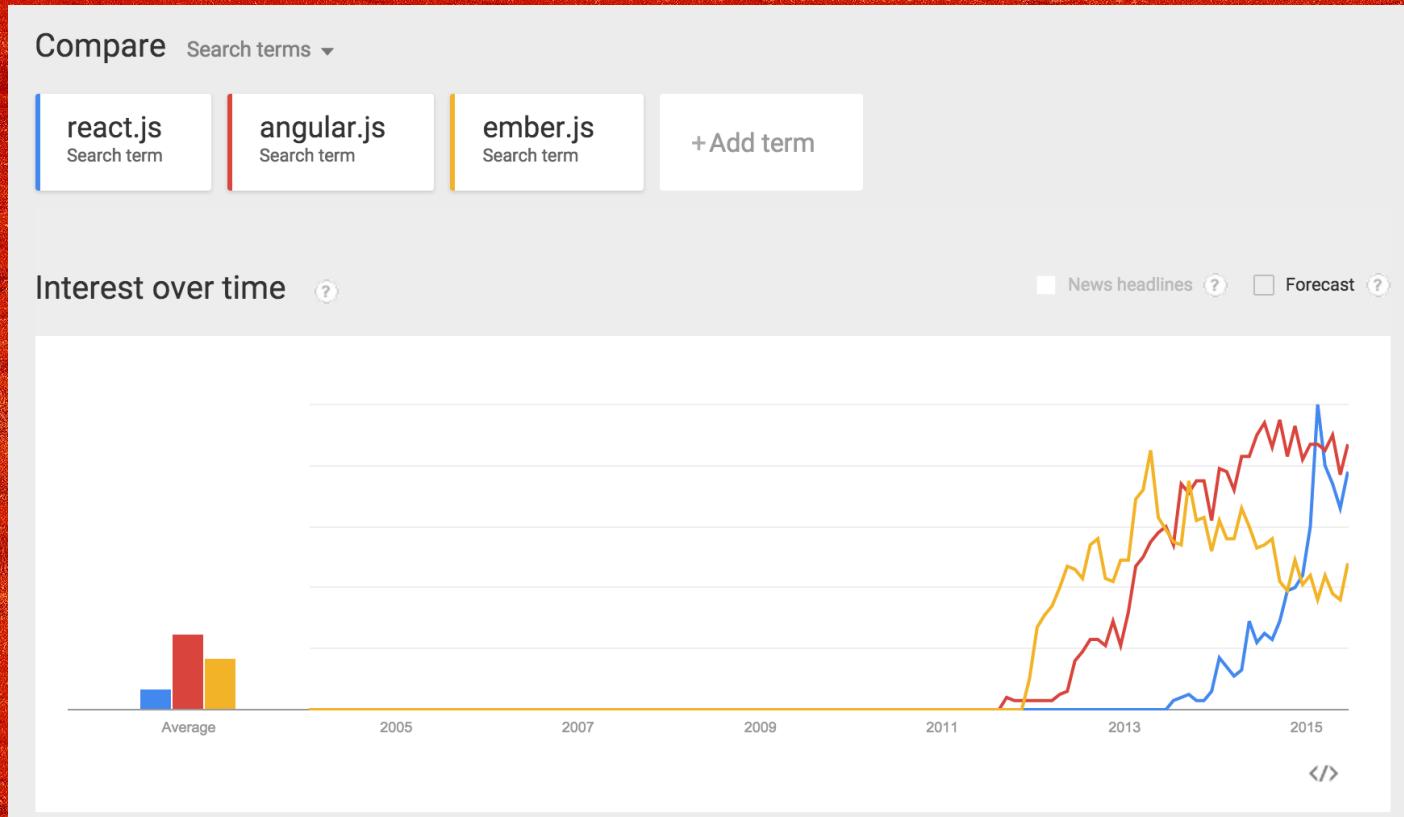
Ember CLI

- asset pipeline
- konwencje, konwencje, konwencje
- ES6 Module Transpiler
- współpraca z QUnit, Ember Testing package i Ember QUnit
- blueprints
- Dependency Management: bower i NPM
- Runtime Configuration

Ember vs Angular vs React

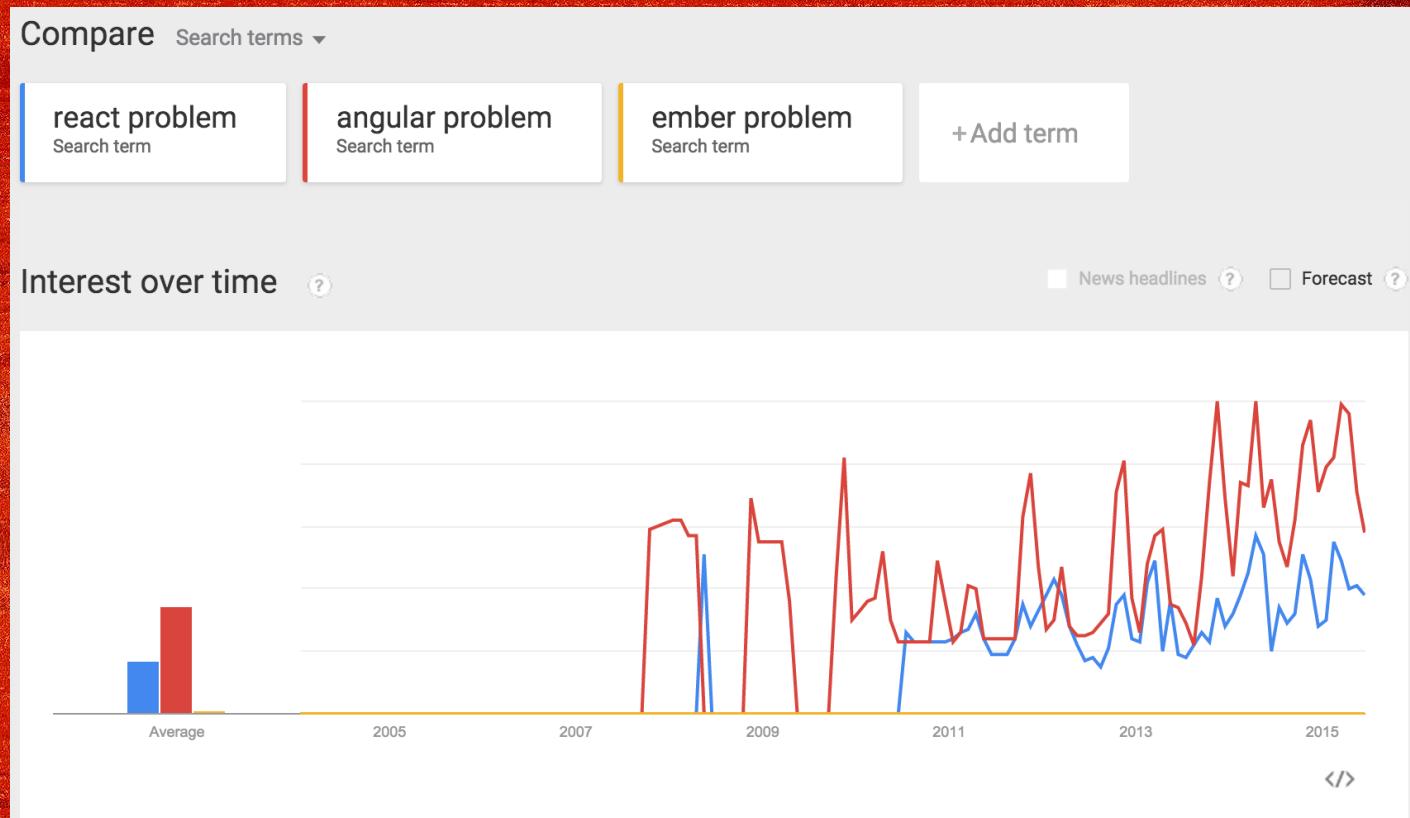
I dlaczego Ember jest fajniejszy.

What Google says



source: <http://www.google.com/trends/explore?hl=en-US#q=react.js%20angular.js%20ember.js>

Ember problem ?



source: <http://www.google.com/trends/explore?hl=en-US#q=react%20problem%2C%20angular%20problem%2C%20ember%20problem>



Ember vs Angular vs React

- Router
- Ember Data
- hard to start, magic happens after
- components vs. directives
- 2-way data binding
- conventions - fast code writing
- good date and floating numbers conversion
- Ember Inspector

Ember Inspector

The screenshot shows the Ember Inspector tool interface. The left sidebar contains navigation links: View Tree, /# Routes (selected), Data, Deprecations (0), Info, ADVANCED (Promises, Container, Render Performance), and a search bar. The main content area displays the routes table with the following data:

Route Name	Route	Controller	Template	URL
application	ApplicationRoute	> \$E ApplicationController	> \$E	application
loading	LoadingRoute	> \$E LoadingController	loading	/loading
error	ErrorRoute	> \$E ErrorController	error	
mainPage	MainPageRoute	> \$E MainPageController	mainPage	/
article	ArticleRoute	> \$E ArticleController	> \$E article	/wiki/:title
edit	EditRoute	> \$E EditController	> \$E edit	/wiki/edit/:title/:section
notFound	NotFoundRoute	> \$E NotFoundController	notFound	/:url



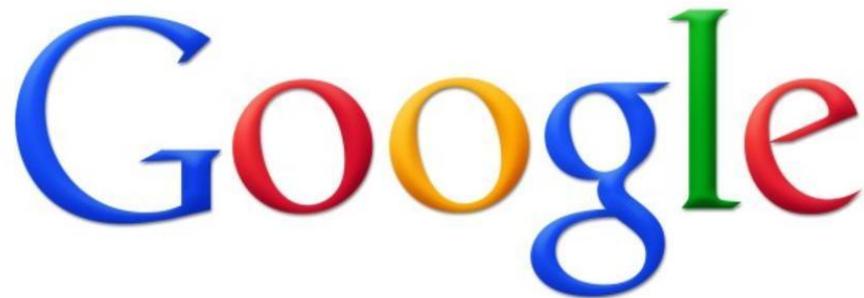
Ember vs Angular vs React - cons

- no dirty checking. Getters & setters instead.
- community
- częste zmiany - wada i zaleta



Od czego zacząć

- code school - kurs Embera
- oficjalny Ember.js TODO app tutorial
- Ember.js dokumentacja
- Ember CLI dokumentacja



Pytania?



Thanks!



Credits

Special thanks to all the people who made and released this awesome resource for free:

- Presentation template by [SlidesCarnival](#)

wikia

Zapraszam do stanowiska Wikia na korytarzu :)