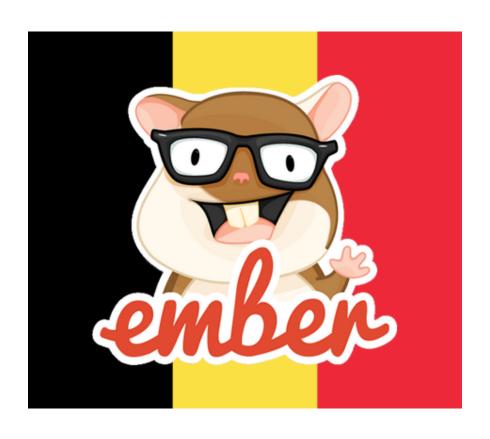
Ember Data and JSON API

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What is Ember Data?

The "M" in MVC

Framework for managing your models and relationships

Separate project

- Different repository
- Can use Ember.js without Ember Data

Four main components

Models

Store

Adapter

Serializer

Specifying a model

```
App.Post = DS.Model.extend({
    /* Attributes */
    title: DS.attr('string'),
    body: DS.attr('string'),
    nrViews: DS.attr('number'),
    createdAt: DS.attr('date'),
    isPublished: DS.attr('boolean'),
    /* Relationships */
    author: DS.belongsTo('user'),
    comments: DS.hasMany('comment'),
    /* Properties */
    hasComments: function() {
        return this.get('comments.length') > 0;
    }.property('comments.length')
});
```

The store

- Contains all instances of models
- Is a singleton

Create and destroy instances

- store.createRecord
- store.deleteRecord

Query records

```
• store.find('post', 1)
```

- store.find('post')
- store.find('post', { isPublished: true })

The adapter

Mediates between store and persistence layer

Write your own

- FixtureAdapter
- RESTAdapter
- LocalStorageAdapter?

Example RESTAdapter

```
Store find('post')

RESTAdapter findAll('post')

GET /posts
```

```
Store find('post', 1)

RESTAdapter find('post', 1)

GET /posts/1
```

```
Store find('post', { isPublished: true })

RESTAdapter findQuery('post', { isPublished: true })

GET /posts?is_published=true
```

```
Store createRecord('post')

↓

RESTAdapter createRecord('post')

↓

POST /posts
```

The serializer

Serializes and normalizes data in a form expected by Ember Data

Used by adapter

When sending to server serialize

When receiving from server normalize

Legacy API?

JSON structure: custom serializers

URLs: custom adapters

JSON API

Specification to standardize representation of resources in JSON

Driven by Yehuda Katz and Steve Klabnik

jsonapi.org

Various implementations

- Ember Data RESTAdapter/RESTSerializer
- Rails ActiveModel::Serializers
- Python SQLAlchemy-JSONAPI

Status of Ember Data

Right now v1.0.0-beta.9

Production release date not yet known

Ember Data is still under active development and is currently beta quality. That being said, the API has largely stabilized and many companies are using it in production.

Thank you

