

# Rapid API Development with SailsJS

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# Who Am I?

Web Developer for the past 21 years

Been using SailsJS for the past 4 years

Microsoft MVP in Developer Technologies

Speak at 10-12 conferences each year

Founder and CEO of Speaker Coaching Specialist



# Agenda

What?

Why?

Setup

Coding  
Walk-Through



# Create JavaScript Services



# Auto-generated REST APIs





# Any Database



# Flexible and Configurable



# Security





Built-On  
Top of

express



# Why I Love Sails



# Ridiculously Fast



# Just Works



# Does NOT hide the magic



*Oh Yes!* IT'S  
**FREE**





tiny amounts of code  
gets you a ton!



# Getting Started



# Install



# Setup

```
npm install -g sails
```



# Create Project

**sails new [Project Name]**

**Select #2 – Blank App**



# Start Sails Server

**sails lift**





# Debug API

**sails inspect**



# Interactive Console

**sails console**



# Generate

```
sails generate [type] [name]
```



**API** Generates both Model and Controller

**sails generate api**



# Models

represents a record

usually maps to db table

attributes map to columns

**sails generate model**



# Controllers

Dictionary of actions

Responds to requests

Bound to routes

`sails generate controller`





# Action

Responds to requests

Bound to routes

Structured way to create an action

1 file per action

Self-documenting and validating

```
sails generate action [ctrl/name]
```



# Using Api

POST <http://localhost:1337/<Name>>

GET <http://localhost:1337/<Name>>

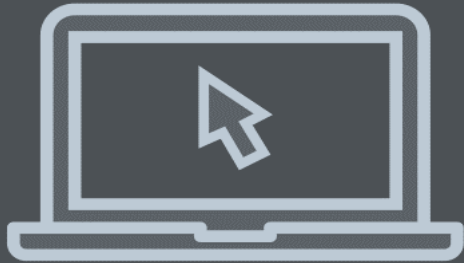
GET <http://localhost:1337/<Name>/:id>

PATCH <http://localhost:1337/<Name>/:id>

DELETE <http://localhost:1337/<Name>/:id>



# CODING TIME



## Todo API

- Project layout
- Default REST routes
- Associate User and Todo Models



# CUSTOM LOGIC

overriding default REST verbs



# Override Action Example

```
api\controllers\[controller]\find.js           // GET
api\controllers\[controller]\find-one.js — // GET/id
api\controllers\[controller]\create.js         // POST
api\controllers\[controller]\update.js         // PUT
api\controllers\[controller]\destroy           // DELETE
```



# Override Action Example

```
api\controllers\[controller]\find.js           // GET
api\controllers\[controller]\find-one.js       // GET/id
api\controllers\[controller]\create.js         // POST
api\controllers\[controller]\update.js         // PUT
api\controllers\[controller]\destroy           // DELETE
```





# Override Action Example

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api\controllers\[controller]\find.js           // GET
api\controllers\[controller]\find-one.js      // GET/id
api\controllers\[controller]\create.js         // POST
api\controllers\[controller]\update.js         // PUT
api\controllers\[controller]\destroy           // DELETE
```



# Override Controller Example

```
module.exports = {  
  findOne: function findOneFn(req, res) {},    // GET/id  
}
```



# Override Action Example

```
api\controllers\[controller]\find.js           // GET
api\controllers\[controller]\find-one.js      // GET/id
api\controllers\[controller]\create.js         // POST
api\controllers\[controller]\update.js         // PUT
api\controllers\[controller]\destroy           // DELETE
```



# Override Action Example

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# Override Action Example

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api\controllers\[controller]\find-one.js      // GET/id
api\controllers\[controller]\create.js          // POST
api\controllers\[controller]\update.js          // PUT
api\controllers\[controller]\destroy            // DELETE
```

```
sails generate action [controller]/[action]
```



# Helpers

reusable code  
available across whole app

`sails generate helper`



# Optional Helpers

Exposes a set of commonly-used functions as Sails helpers

Examples:

password: hash and check

gravatar: get avatar url

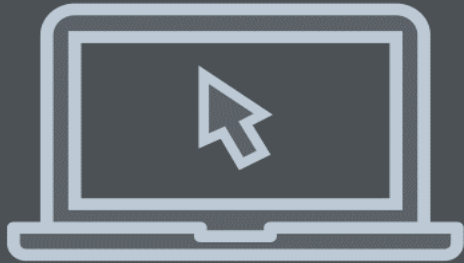
stripe: bill info and charging

```
npm i sails-hook-organics --save
```





# CODING TIME



## Todo API

- Hide password
- Hash password
- Verify password
- Store user in session



# Responses

Responses to actions

Standard responses included

Can create custom responses

**sails generate response**



# Standard Responses

200 – ok, send

500 - serverError

404 - notFound

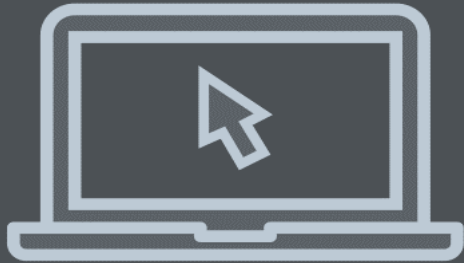
403 - forbidden

400 – badRequest

[Code] – json, send



# CODING TIME



## Todo API

- Create Custom Responses
- Use Custom Responses



# Routing

Interpret a request sent to a URL

Send back a response

Custom or Automatic



# Route Security

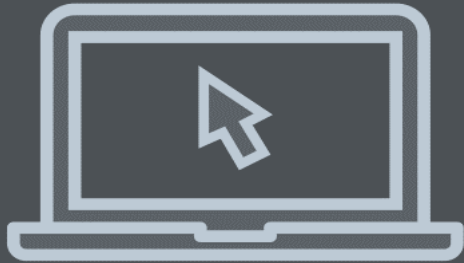
Execute some logic before an action to determine if request is processed

Stored in api\policies folder

Configured in api\config\policies.js



# CODING TIME



## Todo API

- Custom Routes
- Lock Down Routes



# CORS

Allows scripts served from other domains

Disabled By Default

Origin can be array of urls

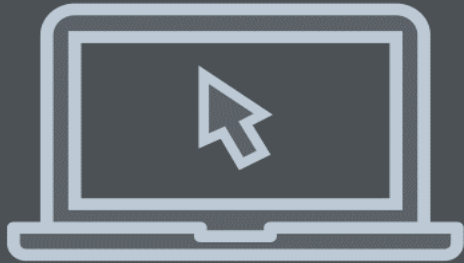
App wide or individual routes

`config/security.js`





# CODING TIME



## Todo API

- Enable Others to Use API



# References

Documentation: [sailsjs.com/](https://sailsjs.com/)

Slides: [slideshare.net/digitaldrummerj/](https://slideshare.net/digitaldrummerj/)

Demo Code: [github.com/digitaldrummerj/sailsjs-talk-2018](https://github.com/digitaldrummerj/sailsjs-talk-2018)



## Contact Info



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