

Introduction to Sequelize ORM for Node.js



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Overview



2 sections

Core features

- New project
- Models
- Associations

Sample app

- Build out backend



Prerequisites



Prerequisites



JavaScript

- Arrays, variables, objects

Node.js

Visual Studio code

Helpful to know

- SQL
- Angular



What Is Sequelize?



Sequelize is a promise-based Object Relational Mapper.



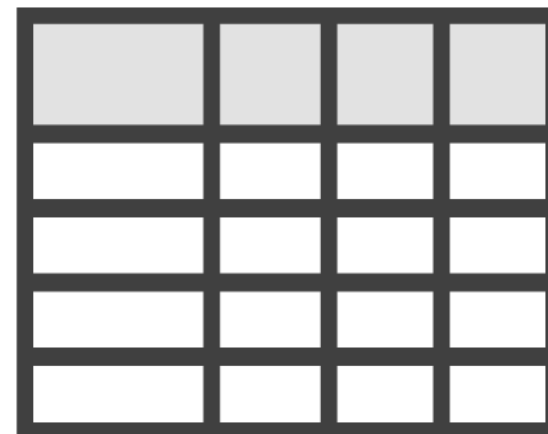
Sequelize ORM



Model



Transform
into Table






Table






SQL Database Explained



Table:  Users  

id	name	email	createdAt	updatedAt
Filter	Filter	Filter	Filter	Filter
1	Buckminster	Proin.velit@eli...	2018-08-16 0...	2018-08-16 0...
2	William	libero.et@Cur...	2018-08-16 0...	2018-08-16 0...



Table:  Posts  

id	title	createdAt	updatedAt	userId
Filter	Filter	Filter	Filter	Filter
1	First post	2018-08-16 0...	2018-08-16 0...	1
2	Second post	2018-08-16 0...	2018-08-16 0...	2

SQL Database

Stores data in tables

Tables have columns and rows

Each row contains a new entry



```
[  
  {  
    "id": 1,  
    "title": 'First post',  
    "userId": 1,  
    "User": {  
      "name": 'Buckminster',  
      "email": '123@email.com'  
    }  
  }  
]
```

◀ Results of join



SQL Databases



Tables

Columns and rows

- Primary key

JOIN table



Sequelize Is Promise Based



Promise

Represents the eventual completion (or failure) of an asynchronous operation, and its resulting value.



Then / Catch

Returns the result of a promise. 'Then' for success and 'catch' for error.



```
User.findById(1)
  .then((user) => {
    res.json(user);
  })
  .catch((err) => {
    console.log(err);
  })
```

◀ Find user

◀ Respond with user

◀ Catch any error



```
app.get( '/async', async (req, res)
    => {
    let users;
    try {
        users = await User.findById(1);
    } catch(err) {
        console.log(err);
    }
    return res.json(users);
});
```

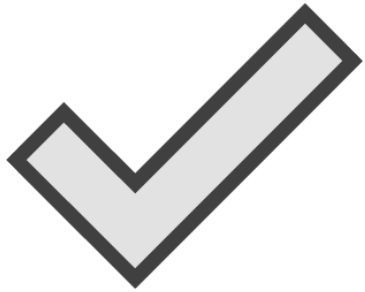
◀ Async/Await example



Benefits of Sequelize



Sequelize Benefits



Simplifies code

JavaScript, not SQL

Robust API

Security

Community

CLI tool



Summary



Sequelize fundamentals

SQL databases

Promises

