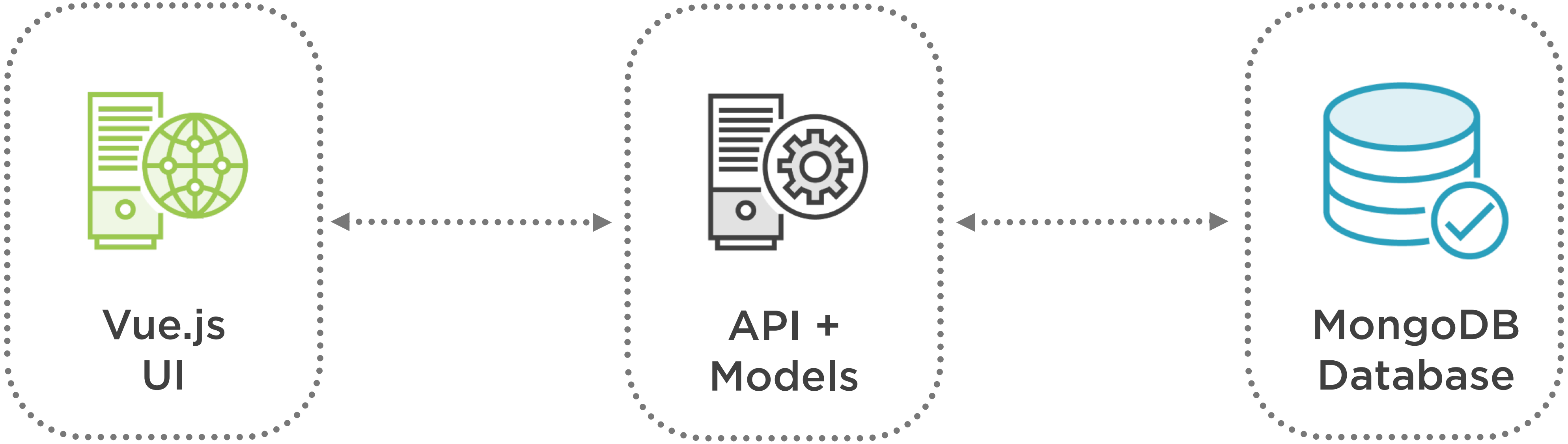
Developing the API with Node and Express

Mark Scott
PLURALSIGHT AUTHOR

@tripletdad99

Interface to Our Data



Vue.js UI

API + Models

MongoDB Database

Review User Schema

```
const mongoose = require('mongoose')

const userSchema = mongoose.Schema({
  first: { type: String, required: true },
  last: { type: String, required: true },
  email: { type: String, required: true },
  password: { type: String, required: true },
  isActive: { type: Boolean, default: true },
  createdOn: { type: Date, default: Date.now }
})
```

User Model

```
const mongoose = require('mongoose')
const userSchema = mongoose.Schema({
  ...
})
const User = mongoose.model('User', userSchema)
module.exports = User
```

Review Transaction Schema

```
const mongoose = require('mongoose')

const transactionSchema = mongoose.Schema({
  userId: mongoose.SchemaTypes.ObjectId,
  transactionDate: { type: Date, required: true },
  transactionType: { type: String, required: true },
  description: { type: String, required: true },
  charge: Number,
  deposit: Number,
  notes: { type: String, default: '' },
  createdOn: { type: Date, default: Date.now }
})
```

Transaction Model

```
const mongoose = require('mongoose')
const transactionSchema = mongoose.Schema({
  ...
})
const Transaction = mongoose.model(Transaction',
transactionSchema)
module.exports = Transaction
```

Design the API

User Endpoint

	HTTP Verb	CRUD Action
✓	POST	Create
✓	GET	Read
✓	PUT	Update / Replace
?	PATCH	Update / Modify
⊖	DELETE	Delete

Transaction Endpoint

	HTTP Verb	CRUD Action
✓	POST	Create
✓	GET	Read
✓	PUT	Update / Replace
?	PATCH	Update / Modify
✓	DELETE	Delete

```
client
    build
    config
    src
        assets
        components
        router
    static
    ...

server
    api
    models
    ...
```

◂ Client project

◂ Vue.js source folder

◂ Server project

◂ API endpoints

◂ Mongoose models

```
server
    api
        routes
            transaction.js
            user.js
        index.js
    models
        transaction.js
        user.js
```

◂ Our API routes or “endpoints”

◂ Index “bundle” file

◂ Our Mongoose Model files

User Route Example

```
const User = require('../../models/user')

module.exports = function (router) {
  router.get('/user/:id', function (req, res) {
    User.findById(req.params.id).exec()
      .then(docs => res.status(200)
        .json(docs))
  })
```

Demo

Install Express.js

Build the API Endpoints

- User
- Transaction
    - Build off-screen and Review

Debugging and Testing the API

Demo

Postman

- Test sending requests to the API

Studio 3T

- Verify the data

Next Steps

API services

Tested with Postman

- Looking good
- Works as expected

What should we do next?

Vue.js client project “stub”

Vuetify