

MVC Handlebars

// Dependencies

```
const express = require('express');
```

// Import express-handlebars

```
const exphbs = require('express-handlebars');
```

```
const hbs = exphbs.create({});
```

```
const path = require('path');
```

// Sets up the Express App

```
const app = express();
```

```
const PORT = process.env.PORT || 3001;
```

// Describe what the following two lines of code are doing.

// The following two lines of code are setting Handlebars.js
as the default template engine.

```
app.engine('handlebars', hbs.engine);
```

```
app.set('view engine', 'handlebars');
```

```
app.use(express.static(path.join(__dirname, 'public')));
```

```
app.use(require('./controllers/dish-routes'));
```

// Starts the server to begin listening

```
app.listen(PORT, () => {  
  console.log('Server listening on: http://localhost:' + PORT);  
});
```

// Is this a Model, a View, or a Controller?

// This file is a Controller.

// What is it responsible for handling?

// It routes commands to the Model and View parts.

```
const router = require('express').Router();
```

// Add a comment describing the purpose of the 'get' route

// GET route for getting all of the dishes that are on the menu

```
router.get('/', async (req, res) => {
```

// Add a comment describing the purpose of the render method

// This method is rendering the 'all' Handlebars.js template.

This is how we connect each route to the correct template.

```
  res.render('all');
```

```
});
```

```
module.exports = router;
```

```
"dependencies": {  
  "express": "^4.16.3",  
  "express-handlebars": "^3.0.0"  
}
```

<!-- This template includes hardcoded data.

In future lessons, you will be rendering data dynamically. -->

```
<div class="menu-container">
```

```
<div class="card-header col-md-10">
```

```
<h2>
```

```
&#127869 Current Menu
```

```
</h2>
```

```
</div>
```

```
<div>
```

```
<ol>
```

```
<li>
```

```
French Bread with Brie Cheese
```

```
</li>
```

```
<li>
```

```
Cheese Plate with Spanish Chorizo
```

```
</li>
```

```
<li>
```

```
Fish Tacos
```

```
</li>
```

```
<li>
```

```
Tropical Fruit Salad
```

```
</li>
```

```
<li>
```

```
Pork Gyoza
```

```
</li>
```

```
<li>
```

```
Yebeg Tibs with Injera Bread
```

```
</li>
```

```
<li>
```

```
Cape Malay Curry
```

```
</li>
```

```
</ol>
```

```
</div>
```

```
</div>
```

```
</div>
```

<!-- Add a comment indicating how this file fits into the MVC framework

(is it a Model, a View, or a Controller?) and what it is responsible for handling. -->

<!-- This file is part of the View. It handles UI/UX concerns (layout and display)-->

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Potluck Party</title>
```

```
<link rel="stylesheet" href="/css/jass.css">
```

```
<link rel="stylesheet" href="/css/style.css">
```

```
</head>
```

```
<body>
```

```
<div class="flex-column justify-space-around">
```

```
<header class="display-flex justify-space-between align-center p-2">
```

```
<h1>
```

```
&#127881 Potluck Party! &#127881
```

```
</h1>
```

```
</header>
```

```
<main class="container container-fluid mt-5">
```

<!-- Add a comment describing what the following line of code is doing. -->

<!-- The following line is a place holder for where the main content will be rendered. -->

<!-- What should we expect to see when visiting http://localhost:3001/ in the browser? -->

<!-- We would expect to see the contents of all.handlebars in the browser,
because that is what we are instructing it to render in dish-routes.js. -->

```
{{{ body }}}
```

```
</main>
```

```
</div>
```

```
</body>
```

```
</html>
```

// Here is where we set up our Dish model, for when we are
ready to connect to a database in future activities.

// Add a comment indicating how this file fits into the MVC
framework.

// This file is a Model.

// What it is responsible for handling?

// It is responsible for handling data and business logic.

```
const { Model, DataTypes } = require('sequelize');
```

```
const sequelize = require('../config/connection');
```

```
class Dish extends Model {}
```

```
Dish.init(  
  {
```

```
    id: {
```

```
      type: DataTypes.INTEGER,
```

```
      allowNull: false,
```

```
      primaryKey: true,
```

```
      autoIncrement: true
```

```
    },
```

```
    dish_name: {
```

```
      type: DataTypes.STRING,
```

```
      allowNull: false,
```

```
    },
```

```
    description: {
```

```
      type: DataTypes.TEXT,
```

```
      allowNull: true
```

```
    },
```

```
    guest_name: {
```

```
      type: DataTypes.STRING,
```

```
      allowNull: false,
```

```
    },
```

```
    has_nuts: {
```

```
      type: DataTypes.BOOLEAN,
```

```
    },
```

```
  },
```

```
  {
```

```
    sequelize,
```

```
    freezeTableName: true,
```

```
    underscored: true,
```

```
    modelName: 'dish'
```

```
  }  
);
```

```
module.exports = Dish;
```

Expressions

// Dependencies

```
const express = require('express');
const exphbs = require('express-handlebars');
const path = require('path');
const hbs = exphbs.create({});
```

// Sets up the Express App

```
const app = express();
const PORT = process.env.PORT || 3001;
```

// Set Handlebars as the default template engine.

```
app.engine('handlebars', hbs.engine);
app.set('view engine', 'handlebars');
```

```
app.use(express.static(path.join(__dirname, 'public')));
app.use(require('./controllers/dish-routes'));
```

// Starts the server to begin listening

```
app.listen(PORT, () => {
  console.log('Server listening on: http://localhost:' + PORT);
});
```

```
<head>
<meta charset="UTF-8">
<title>Potluck Party</title>
<link rel="stylesheet" href="/css/jass.css">
<link rel="stylesheet" href="/css/style.css">
</head>
<body>
<div class="flex-column justify-space-around">
  <header class="display-flex justify-space-between align-center p-2">
    <h1>
      &#127881 Potluck Party! &#127881
    </h1>
  </header>
  <main class="container container-fluid mt-5">
    {{{ body }}}
  </main>
</div>
</body>
</html>
```

```
<div class="dish-card">
  <div class="dish-card-header">
    <!-- Below we are rendering the name of one dish
         using a Handlebars.js expression -->
    {{{dish_name}}}
  </div>
  <div class="card-body">
    <!-- We render the description below,
         using a Handlebars.js expression. -->
    <p>
      Description:
      {{{description}}}
    </p>
  </div>
</div>
```

// Here is where we set up our Dish model, for when we are ready
to connect to a database in future activities.

```
const { Model, DataTypes } = require('sequelize');
const sequelize = require('./config/connection');
```

```
class Dish extends Model {}
```

```
Dish.init({
  id: {
    type: DataTypes.INTEGER,
    allowNull: false,
    primaryKey: true,
    autoIncrement: true,
  },
  dish_name: {
    type: DataTypes.STRING,
    allowNull: false,
  },
  description: {
    type: DataTypes.TEXT,
    allowNull: true,
  },
  guest_name: {
    type: DataTypes.STRING,
    allowNull: false,
  },
  has_nuts: {
    type: DataTypes.BOOLEAN,
  },
}, {
  sequelize,
  freezeTableName: true,
  underscored: true,
  modelName: 'dish',
})
```

```
module.exports = Dish;
```

```
const router = require('express').Router();
```

// We are using hardcoded data here, where would our data usually come from?
Remember - we haven't yet set up a database or Sequelize in our app.

```
const dishes = [
  {
    dish_name: 'French Bread with Brie Cheese',
    description: 'French baguette with warm brie',
  },
  {
    dish_name: 'Cheese Plate with Spanish Chorizo',
    description: 'Manchego, Iberico, Cabrales, fig jam, grapes, pecans, and Spanish Chorizo',
  },
  {
    dish_name: 'Fish Tacos',
    description: 'Battered/fried fish, corn tortillas, fresh slaw with jalapenos and cilantro, pickled red onion',
  },
  {
    dish_name: 'Tropical Fruit Salad',
    description: 'Guava, papaya, pineapple, mango, and star fruit',
  },
  {
    dish_name: 'Pork Gyoza',
    description: 'Homemade japanese dumplings stuffed with a pork and green onion filling',
  },
  {
    dish_name: 'Yebeg Tibs with Injera Bread',
    description: 'Marinated lamb dish with rosemary, garlic, onion, tomato, jalapeño and the East African spice berbere',
  },
  {
    dish_name: 'Cape Malay Curry',
    description: 'Chicken and vegetable curry dish with basmati rice',
  },
];
```

// get all dishes

```
router.get('/', async (req, res) => {
  res.render('all');
});
```

// get one dish

```
router.get('/dish/:num', async (req, res) => {
  // This method renders the 'dish' template, and uses params to select the correct dish
  // to render in the template, based on the id of the dish.
  // Now, we have access to a dish description in the 'dish' template.
  return res.render('dish', dishes[req.params.num - 1]);
});
```

```
module.exports = router;
```

Built-in Helpers

```
<div class="menu-container">
  <div class="card-header col-md-10">
    <h2>
      &#127869 Current Menu
    </h2>
  </div>
  <!-- We implement the built-in helper, #each. This helper will iterate over dishes -->
  {{#each dishes as |dish|}}
  <!-- For each dish in the array of dish objects, the following <div> will be rendered. -->
  <div class="dish col-md-5">
    <!-- We use dish.id instead of <od> and <li> elements. -->
    <p>
      {{dish.id}}.
      {{dish.dish_name}}
    </p>
  </div>
  <div class="col-md-7">
    <p>
      <!-- guest_name will eventually go here -->
    </p>
  </div>
  <!-- Below, we close the #each helper. -->
  {{/each}}
</div>
```

```
<ul class="people_list">
  {{#each people}}
    <li>{{this}}</li>
  {{/each}}
</ul>
```

```
{{#each paragraphs}}
<p>{{this}}</p>
{{else}}
<p class="empty">No content</p>
{{/each}}
```

```
{{#each array}} {{@index}}: {{this}} {{/each}}
```

```
{{#each object}} {{@key}}: {{this}} {{/each}}
```

```
<div class="entry">
  {{#if author}}
  <h1>{{firstName}} {{lastName}}</h1>
  {{/if}}
</div>
```

```
<div class="entry">
  {{#if author}}
  <h1>{{firstName}} {{lastName}}</h1>
  {{else}}
  <h1>Unknown Author</h1>
  {{/if}}
</div>
```

```
{{#if (isdefined value1)}}true{{else}}false{{/if}}
{{#if (isdefined value2)}}true{{else}}false{{/if}}
```

```
{{#with person}}
  {{firstname}} {{lastname}}
{{/with}}
```

```
{{#with city}}
  {{city.name}} (not shown because there is no city)
  {{else}}
  No city found
{{/with}}
```

```
{{#with city as | city |}}
  {{#with city.location as | loc |}}
    {{city.name}}: {{loc.north}} {{loc.east}}
  {{/with}}
{{/with}}
```

```
{{#each people}}
  {{.}} lives in {{lookup ../cities @index}}
{{/each}}
```

```
{{log 'this is a simple log output'}}
```

```
<div class="entry">
  {{#unless license}}
  <h3 class="warning">WARNING: This entry does not have a license!</h3>
  {{/unless}}
</div>
```

```
<div class="dish-card">
  <div class="dish-card-header">
    {{dish_name}}
  </div>
  <div class="card-body">
    <p>
      Description:
      {{description}}
    </p>
    <!-- This is where we initiate the #if helper with has_nuts set as the condition -->
    {{#if has_nuts}}
    <!-- This code will be rendered if the condition (has_nuts) is truthy -->
    <p class="has-nuts">
      Contains Nuts
    </p>
    <!-- Below, we end the #if helper -->
    {{/if}}
  </div>
</div>
```

Serialization

```
const router = require("express").Router();
const Dish = require("../models/Dish");
```

// get one dish without serializing data

```
router.get("/dish/:id", async (req, res) => {
  try {
    const dishData = await Dish.findById(req.params.id);
    console.log(dishData);
    res.render("dish", dishData);
  } catch (err) {
    res.status(500).json(err);
  }
});
```

// get one dish with serialized data

```
router.get("/dish/:id", async (req, res) => {
  try {
    // Search the database for a dish with an id that matches params
    const dishData = await Dish.findById(req.params.id);
    console.log(dishData);
    // We use .get({ plain: true }) on the object to serialize it so that it only includes the data that we need.
    const dish = dishData.get({ plain: true });
    // Then, the 'dish' template is rendered and dish is passed into the template.
    res.render("dish", dish);
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
module.exports = router;
```

```
<div class="menu-container">
  <div class="card-header col-md-10">
    <h2>
      &#127869 Current Menu
    </h2>
  </div>
  <!-- For each dish in the array of dish objects,
        the following <div> will be rendered. -->
  { {#each dishes as |dish|} }
  <div class="dish col-md-5">
    <!-- We use dish.id instead of <od> and <li> elements. -->
    <p>
      { {dish.id} }.
      { {dish.dish_name} }
    </p>
  </div>
  <div class="col-md-7">
    <p>
      Guest:
      { {dish.guest_name} }
    </p>
  </div>
  { {/each} }
</div>
```

```
const router = require('express').Router();
const Dish = require('../models/Dish');
```

// route to get all dishes

```
router.get('/', async (req, res) => {
  // We find all dishes in the db and set the data equal to dishData
  const dishData = await Dish.findAll().catch((err) => {
    res.json(err);
  });
  // We use map() to iterate over dishData and
  // then add .get({ plain: true }) each object to serialize it.
  const dishes = dishData.map((dish) => dish.get({ plain: true }));
  // We render the template, 'all', passing in dishes,
  // a new array of serialized objects.
  res.render('all', { dishes });
});
```

// route to get one dish

```
router.get('/dish/:id', async (req, res) => {
  try {
    const dishData = await Dish.findById(req.params.id);
    if(!dishData) {
      res.status(404).json({ message: 'No dish with this id!' });
      return;
    }
    const dish = dishData.get({ plain: true });
    res.render('dish', dish);
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
module.exports = router;
```

```

async function editFormHandler(event) {
  event.preventDefault();
  const dish_name = document.querySelector('#dish_name').value;
  const description = document.querySelector('#description').value;
  const guest_name = document.querySelector('#guest_name').value;

  // What will the value of has_nuts be if the box in the form is checked?
  // The value of has_nuts will be true if the box is checked.
  // What do we call this kind of operator?
  // We call this a ternary operator. It begins with a condition followed
  // by a question mark and two code blocks separated by a :.
  const has_nuts = document.querySelector('#has_nuts:checked') ? true : false;

```

```

// window.location gives us access to the URL. We then use the .split() method
// to access the number at the end of the URL and set that equal to id.
const id = window.location.toString().split('/')[
  window.location.toString().split('/').length - 1
];

```

```

// What part of our application will handle this 'put' request?
// The Controller will handle this 'put' request.

```

```

const response = await fetch(`/api/dish/${id}`, {
  method: 'PUT',
  body: JSON.stringify({
    dish_name,
    description,
    guest_name,
    has_nuts,
  }),
  headers: {
    'Content-Type': 'application/json',
  },
});

```

```

// What happens if the response is ok?
// If the response is ok, that means that the dish was updated successfully.
if (response.ok) {
  document.location.replace(`/dish/${id}`);
} else {
  alert('Failed to edit dish');
}
document.querySelector('.edit-dish-form').addEventListener('submit', editFormHandler);

```

Front End Logic

```

const router = require('express').Router();
const Dish = require('../models/Dish');

```

```

// route to create/add a dish
router.post('/', async (req, res) => {
  try {
    const dishData = await Dish.create({
      dish_name: req.body.dish_name,
      description: req.body.description,
      guest_name: req.body.guest_name,
      has_nuts: req.body.has_nuts,
    });
    res.status(200).json(dishData)
  } catch (err) {
    res.status(400).json(err);
  }
});

```

```

// According to MVC, what is the role of this action method?
// This action method is the Controller. It accepts input and sends data to the Model and the View.
router.put('/:id', async (req, res) => {
  // Where is this action method sending the data from the body of the fetch request? Why?
  // It is sending the data to the Model so that one dish can be updated with new data in the database.
  try {
    const dish = await Dish.update(
      {
        dish_name: req.body.dish_name,
        description: req.body.description,
        guest_name: req.body.guest_name,
        has_nuts: req.body.has_nuts,
      },
      {
        where: {
          id: req.params.id,
        },
      },
    );
    // If the database is updated successfully, what happens to the updated data below?
    // The updated data (dish) is then sent back to handler that dispatched the fetch request.
    res.status(200).json(dish);
  } catch (err) {
    res.status(500).json(err);
  }
});

```

```

module.exports = router;

```

```

"dependencies": {
  "dotenv": "^8.2.0",
  "express": "^4.17.1",
  "express-handlebars": "^3.1.0",
  "handlebars": "^4.7.3",
  "mysql2": "^2.1.0",
  "sequelize": "^5.21.5"
},
"devDependencies": {
  "eslint": "^7.13.0"
}

```

```

<div class="dish-card">
  <div class="dish-card-header">
    { {dish_name}}
  </div>
  <div class="card-body">
    <p>
      Description:
      { {description}}
    </p>
    <p>
      Guest:
      { {guest_name}}
    </p>
    { {if has_nuts}}
    <p class="has-nuts">
      Contains Nuts
    </p>
    { {/if}}
  </div>
</div>

```

```

<!-- This is the form for updating a dish.
      According to MVC framework, what is this form responsible for? -->
<!-- This form is responsible for the UI logic,
      or the components in the View that the user will interact with. -->
<!-- What isn't it responsible for? -->
<!-- It is not responsible for data-related logic, requests, or business-logic. -->

```

```

<div class="edit-dish-container">
  <h2>
    Update Dish
  </h2>
  <form class="edit-dish-form">
    <label for="dish_name">
      Dish Name:
    </label>
    <input type="text" id="dish_name" name="dish_name" rows="2" cols="30">
    { {dish_name}}
  </form>
  <label for="description">
    Description:
  </label>

```

```

<input type="text" id="description" name="description" rows="5" cols="30">
    { {description}}
  </form>
  <label for="guest_name">
    Guest Name:
  </label>
  <input type="text" id="guest_name" name="guest_name" rows="2" cols="30">
    { {guest_name}}
  </form>
  <input type="checkbox" id="has_nuts" name="has_nuts" value="true" />
    <label for="has_nuts">
      Check box if this dish contains nuts
    </label>
  <input type="submit" value="Submit">
  </form>
</div>
<script src="/js/edit-dish.js"></script>

```

Partials

```
<section class="card">

  <!-- The contents of the painting card links to the painting page using the painting ID -->
  <a href="/painting/{{id}}">

    <!-- The card contains the painting name as the card header -->
    <header>{{title}}</header>

    <!-- In the body of the card, the painting is rendered along with the artist name -->
    <div class="card-body">
      
      <p>By: {{artist}}</p>
    </div>
  </a>
</section>
```

```
<section class="card">

  <!-- The contents of this card links to the gallery page using the gallery ID -->
  <a href="/gallery/{{id}}">

    <!-- The card contains the gallery name as the card header -->
    <header>{{name}}</header>

    <!-- The card contains the first painting of the gallery -->
    
  </a>
</section>
```

```
<!-- For each gallery, the 'gallery-details' partial is used to render the gallery data -->
{{#each galleries as |gallery|}}
{{> gallery-details}}
{{/each}}
```

```
<section class="container">
  <h3 class="gallery-name">{{gallery.name}}</h3>
  <section class="flex-row justify-center">

    <!-- For each painting that belongs to this gallery,
         the painting-details partial
         is used to render each painting's data -->
    {{#each gallery.paintings as |painting|}}
    {{> painting-details}}
    {{/each}}
  </section>
</section>
```

```
<section class="painting">
  
  <div class="painting-details">
    <h3>{{painting.title}}</h3>
    <p>By: {{painting.artist}}</p>
  </div>
</section>
```

Custom Helpers

```
const path = require('path');
const express = require('express');
const exphbs = require('express-handlebars');
```

```
const routes = require('./controllers');
const sequelize = require('./config/connection');
```

```
// Import the custom helper methods
const helpers = require('./utils/helpers');
```

```
const app = express();
const PORT = process.env.PORT || 3001;
```

```
// Incorporate the custom helper methods
const hbs = exphbs.create({ helpers });
app.engine('handlebars', hbs.engine);
```

```
app.set('view engine', 'handlebars');
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(express.static(path.join(__dirname, 'public')));
```

```
app.use(routes);
```

```
sequelize.sync({ force: false }).then(() => {
  app.listen(PORT, () => console.log('Now listening'));
});
```

```
module.exports = {
  // the helper method 'format_time' will take in a timestamp
  // and return a string with only the time
  format_time: (date) => {
    // We use the 'toLocaleTimeString()' method to format the time
    // as H:MM:SS AM/PM
    return date.toLocaleTimeString();
  },

  // The custom helper 'format_date' takes in a timestamp
  format_date: (date) => {
    // Using JavaScript Date methods, we get and format the month, date, and year
    // We need to add one to the month since it is returned as a zero-based value
    return `${new Date(date).getMonth() + 1}/${new Date(date).getDate()}/${
      // We add five years to the 'year' value to calculate the end date
      new Date(date).getFullYear() + 5
    }`;
  },
};
```

```
"dependencies": {
  "dotenv": "^8.2.0",
  "express": "^4.17.1",
  "express-handlebars": "^3.1.0",
  "handlebars": "^4.7.3",
  "mysql2": "^2.1.0",
  "sequelize": "^5.21.5"
```

```
<section class="container">
  <h3 class="gallery-name">{{gallery.name}}</h3>
```

```
<!-- Without the custom helper, the entire timestamp is printed -->
<h4>Opening Hour: {{gallery.starting_date}}</h4>
```

```
<!-- Using a custom helper 'format_time', the time has been formatted -->
<h4>Closing Hour: {{format_time gallery.ending_date}}</h4>
<section class="flex-row justify-center">
  {{#each gallery.paintings as |painting|}}
    {{> painting-details}}
  {{/each}}
</section>
</section>
```

```
<section class="painting">
  
  <div class="painting-details">
    <h3>{{painting.title}}</h3>
    <p>By: {{painting.artist}}</p>

    <!-- The custom method 'format_date'
    is used to calculate the end date and format it correctly -->
    <p>Exhibition open until: {{format_date painting.exhibition_date}}</p>
  </div>
</section>
```

Sessions

```
const router = require('express').Router();
const { Gallery, Painting } = require('../models');

// GET all galleries for homepage
router.get('/', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findAll({
      include: [
        {
          model: Painting,
          attributes: ['filename', 'description'],
        },
      ],
    });
    const galleries = dbGalleryData.map((gallery) =>
      gallery.get({ plain: true }));
    req.session.save(() => {
      // We set up a session variable to count the number of times
      // we visit the homepage
      if (req.session.countVisit) {
        // If the 'countVisit' session variable already exists, increment it by 1
        req.session.countVisit++;
      } else {
        // If the 'countVisit' session variable doesn't exist, set it to 1
        req.session.countVisit = 1;
      }
      res.render('homepage', {
        galleries,
        // We send over the current 'countVisit' session variable to be rendered
        countVisit: req.session.countVisit,
      });
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
<!-- We are tracking the number of times we visit this homepage -->
<h3>Number of times you've visited this homepage: {{countVisit}}</h3>
<section class="galleries">
  {{#each galleries as |gallery|}}
    {{> gallery-details}}
  {{/each}}
</section>
```

```
// GET one gallery
router.get('/gallery/:id', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findByPk(req.params.id, {
      include: [
        {
          model: Painting,
          attributes: [
            'id', 'title', 'artist', 'exhibition_date', 'filename', 'description',
          ],
        },
      ],
    });
    const gallery = dbGalleryData.get({ plain: true });
    res.render('gallery', {
      gallery,
      // We are not incrementing the 'countVisit' session variable here
      // but simply sending over the current 'countVisit' session variable
      // to be rendered
      countVisit: req.session.countVisit,
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// GET one painting
router.get('/painting/:id', async (req, res) => {
  try {
    const dbPaintingData = await Painting.findByPk(req.params.id);
    const painting = dbPaintingData.get({ plain: true });
    res.render('painting', {
      painting,
      // We are not incrementing the 'countVisit' session variable here
      // but simply sending over the current 'countVisit' session variable
      // to be rendered
      countVisit: req.session.countVisit,
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
module.exports = router;
```

```
"dependencies": {
  "dotenv": "^8.2.0",
  "express": "^4.17.1",
  "express-handlebars": "^5.2.0",
  "express-session": "^1.17.1",
  "handlebars": "^4.7.6",
  "mysql2": "^2.2.5",
  "sequelize": "^6.3.5"
}
```



```
const router = require('express').Router();
const { Gallery, Painting } = require('../models');
```

```
// GET all galleries for homepage
router.get('/', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findAll({
      include: [
        {
          model: Painting,
          attributes: ['filename', 'description'],
        },
      ],
    });
    const galleries = dbGalleryData.map((gallery) =>
      gallery.get({ plain: true })
    );
    // Send over the 'loggedIn' session variable to the 'homepage' template
    res.render('homepage', {
      galleries,
      loggedIn: req.session.loggedIn,
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// GET one gallery
router.get('/gallery/:id', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findByPk(req.params.id, {
      include: [
        {
          model: Painting,
          attributes: [
            'id', 'title', 'artist', 'exhibition_date', 'filename', 'description',
          ],
        },
      ],
    });
    const gallery = dbGalleryData.get({ plain: true });
    // Send over the 'loggedIn' session variable to the 'gallery' template
    res.render('gallery', { gallery, loggedIn: req.session.loggedIn });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// GET one painting
router.get('/painting/:id', async (req, res) => {
  try {
    const dbPaintingData = await Painting.findByPk(req.params.id);
    const painting = dbPaintingData.get({ plain: true });
    // Send over the 'loggedIn' session variable to the 'homepage' template
    res.render('painting', { painting, loggedIn: req.session.loggedIn });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Login route
router.get('/login', (req, res) => {
  // If the user is already logged in, redirect to the homepage
  if (req.session.loggedIn) {
    res.redirect('/');
    return;
  }
  // Otherwise, render the 'login' template
  res.render('login');
});
```

```
module.exports = router;
```

Sessions Solved

```
const router = require('express').Router();
const { User } = require('../models');
```

```
// CREATE new user
router.post('/', async (req, res) => {
  try {
    const dbUserData = await User.create({
      username: req.body.username,
      email: req.body.email,
      password: req.body.password,
    });
    // Set up sessions with a 'loggedIn' variable set to 'true'
    req.session.save(() => {
      req.session.loggedIn = true;
      res.status(200).json(dbUserData);
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Login
router.post('/login', async (req, res) => {
  try {
    const dbUserData = await User.findOne({
      where: {
        email: req.body.email,
      },
    });
    if (!dbUserData) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password. Please try again!' });
      return;
    }
    const validPassword = await dbUserData.checkPassword(req.body.password);
    if (!validPassword) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password. Please try again!' });
      return;
    }
    // Once the user successfully logs in, set up the sessions variable 'loggedIn'
    req.session.save(() => {
      req.session.loggedIn = true;
      res
        .status(200)
        .json({ user: dbUserData, message: 'You are now logged in!' });
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Logout
router.post('/logout', (req, res) => {
  // When the user logs out, destroy the session
  if (req.session.loggedIn) {
    req.session.destroy(() => {
      res.status(204).end();
    });
  } else {
    res.status(404).end();
  }
});
```

```
module.exports = router;
```

Sessions Solved pt.2

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Museum</title>
  <link rel="stylesheet" type="text/css" href="/css/jass.css">
  <link rel="stylesheet" type="text/css" href="/css/style.css">
</head>
<body>
  <header>
    <h1>Welcome to the Four Seasons Museum</h1>
  </header>
  <nav>
    <a href="/">Home</a>
    <!-- If the user is logged in, show a logout button -->
    {{#if loggedIn}}
    <button id="logout" class="btn-no-style">Logout</button>
    {{else}}
    <!-- Otherwise, show a link to login -->
    <a href="/login">Login</a>
    {{/if}}
  </nav>
  <main>
    <aside>
      <h2>Enjoy the galleries!</h2>
    </aside>
    <div class="gallery">
      {{{body}}}
    </div>
  </main>

  <!-- If the user is logged in, load the JS script
        for when they logout -->
  {{#if loggedIn}}
  <script src="/js/logout.js"></script>
  {{/if}}
</body>
</html>
```

```
<section class="container">
  <h3 class="gallery-name">{{ gallery.name }}</h3>
  <h4>Opening Hour: {{format_time gallery.starting_date}}</h4>
  <h4>Closing Hour: {{format_time gallery.ending_date}}</h4>

  <!-- If the user is logged in, render the gallery content -->
  {{#if loggedIn}}
  <section class="flex-row justify-center">
    {{#each gallery.paintings as |painting|}}
    {{> painting-details}}
    {{/each}}
  </section>
</section>

<!-- Otherwise, provide a link to login -->
{{else}}
<a href="/login">You must login first to view the paintings</a>
{{/if}}
```

```
const path = require('path');
const express = require('express');
```

```
// Import express-session
const session = require('express-session');
const exphbs = require('express-handlebars');
```

```
const routes = require('./controllers');
const sequelize = require('./config/connection');
const helpers = require('./utils/helpers');
```

```
const app = express();
const PORT = process.env.PORT || 3001;
```

```
// Set up sessions
const sess = {
  secret: 'Super secret secret',
  resave: false,
  saveUninitialized: true,
};
```

```
app.use(session(sess));
```

```
const hbs = exphbs.create({ helpers });
```

```
app.engine('handlebars', hbs.engine);
app.set('view engine', 'handlebars');
```

```
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(express.static(path.join(__dirname, 'public')));
```

```
app.use(routes);
sequelize.sync({ force: false }).then(() => {
  app.listen(PORT, () => console.log('Now listening'));
});
```

```
const path = require('path');
const express = require('express');
const session = require('express-session');
const exphbs = require('express-handlebars');
```

```
// Initializes Sequelize with session store
const SequelizeStore = require('connect-session-sequelize')(
  session.Store);
```

```
const routes = require('./controllers');
const sequelize = require('./config/connection');
const helpers = require('./utils/helpers');
const app = express();
```

```
const PORT = process.env.PORT || 3001;
```

```
// Sets up session and connect to our Sequelize db
```

```
const sess = {
  secret: 'Super secret secret',
  // Tells our session to use cookies
  cookie: {},
  resave: false,
  saveUninitialized: true,
  // Sets up session store
  store: new SequelizeStore({
    db: sequelize,
  })),
};
```

```
app.use(session(sess));
```

```
const hbs = exphbs.create({ helpers });
```

```
app.engine('handlebars', hbs.engine);
app.set('view engine', 'handlebars');
```

```
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(express.static(path.join(__dirname, 'public')));
```

```
app.use(routes);
```

```
sequelize.sync({ force: false }).then(() => {
  app.listen(PORT, () => console.log('Now listening'));
});
```

Cookies

```
const router = require('express').Router();
const { Gallery, Painting } = require('../models');
```

```
// GET all galleries for homepage
router.get('/', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findAll({
      include: [
        {
          model: Painting,
          attributes: ['filename', 'description'],
        },
      ],
    });
    const galleries = dbGalleryData.map((gallery) =>
      gallery.get({ plain: true }));
    res.render('homepage', {
      galleries,
      loggedIn: req.session.loggedIn,
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// GET one gallery
router.get('/gallery/:id', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findByPk(req.params.id, {
      include: [
        {
          model: Painting,
          attributes: [
            'id',
            'title',
            'artist',
            'exhibition_date',
            'filename',
            'description',
          ],
        },
      ],
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// GET one painting
router.get('/painting/:id', async (req, res) => {
  try {
    const dbPaintingData = await Painting.findByPk(req.params.id);
    const painting = dbPaintingData.get({ plain: true });
    res.render('painting', { painting, loggedIn: req.session.loggedIn });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Login route
router.get('/login', (req, res) => {
  if (req.session.loggedIn) {
    res.redirect('/');
    return;
  }
  res.render('login');
});
```

```
module.exports = router;
```

```
const router = require('express').Router();
const { User } = require('../models');
```

```
// CREATE new user
router.post('/', async (req, res) => {
  try {
    const dbUserData = await User.create({
      username: req.body.username,
      email: req.body.email,
      password: req.body.password,
    });
    req.session.save() => {
      req.session.loggedIn = true;
      res.status(200).json(dbUserData);
    };
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Login
router.post('/login', async (req, res) => {
  try {
    const dbUserData = await User.findOne({
      where: {
        email: req.body.email,
      },
    });
    if (!dbUserData) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password. Please try again!' });
      return;
    }
    const validPassword = await dbUserData.checkPassword(req.body.password);
    if (!validPassword) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password. Please try again!' });
      return;
    }
    req.session.save() => {
      req.session.loggedIn = true;
      res
        .status(200)
        .json({ user: dbUserData, message: 'You are now logged in!' });
    };
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});
```

```
// Logout
router.post('/logout', (req, res) => {
  if (req.session.loggedIn) {
    req.session.destroy() => {
      res.status(204).end();
    };
  } else {
    res.status(404).end();
  }
});
```

```
module.exports = router;
```

Middleware

```
const router = require('express').Router();
const { Gallery, Painting } = require('../models');

// Import the custom middleware
const withAuth = require('../utils/auth');

// GET all galleries for homepage
router.get('/', async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findAll({
      include: [
        {
          model: Painting,
          attributes: ['filename', 'description'],
        },
      ],
    });
    const galleries = dbGalleryData.map((gallery) =>
      gallery.get({ plain: true })
    );
    res.render('homepage', {
      galleries,
      loggedIn: req.session.loggedIn,
    });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});

const withAuth = (req, res, next) => {
  // If the user is not logged in, redirect the user to the login page
  // This is directly from the `/gallery/:id` and `/painting/:id` routes
  if (!req.session.loggedIn) {
    res.redirect('/login');
  } else {
    // If the user is logged in, execute the route function
    // that will allow them to view the gallery
    // We call next() if the user is authenticated
    next();
  }
};

module.exports = withAuth;
```

```
// GET one gallery
// Use the custom middleware before allowing the user to access the gallery
router.get('/gallery/:id', withAuth, async (req, res) => {
  try {
    const dbGalleryData = await Gallery.findByPk(req.params.id, {
      include: [
        {
          model: Painting,
          attributes: [
            'id',
            'title',
            'artist',
            'exhibition_date',
            'filename',
            'description',
          ],
        },
      ],
    });
    const gallery = dbGalleryData.get({ plain: true });
    res.render('gallery', { gallery, loggedIn: req.session.loggedIn });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});

// GET one painting
// Use the custom middleware before allowing the user to access the painting
router.get('/painting/:id', withAuth, async (req, res) => {
  try {
    const dbPaintingData = await Painting.findByPk(req.params.id);
    const painting = dbPaintingData.get({ plain: true });
    res.render('painting', { painting, loggedIn: req.session.loggedIn });
  } catch (err) {
    console.log(err);
    res.status(500).json(err);
  }
});

router.get('/login', (req, res) => {
  if (req.session.loggedIn) {
    res.redirect('/');
    return;
  }
  res.render('login');
});

module.exports = router;
```

Mini-Project pt.1

```
const Sequelize = require('sequelize');
require('dotenv').config();
```

```
let sequelize;
```

```
if (process.env.JAWSDB_URL) {
  sequelize = new Sequelize(process.env.JAWSDB_URL);
} else {
  sequelize = new Sequelize(
    process.env.DB_NAME,
    process.env.DB_USER,
    process.env.DB_PASSWORD,
    {
      host: 'localhost',
      dialect: 'mysql',
      port: 3306
    }
  );
}
```

```
module.exports = sequelize;
```

```
const sequelize = require('../config/connection');
const { User, Project } = require('../models');
```

```
const userData = require('../userData.json');
const projectData = require('../projectData.json');
```

```
const seedDatabase = async () => {
  await sequelize.sync({ force: true });
  const users = await User.bulkCreate(userData, {
    individualHooks: true,
    returning: true,
  });
  for (const project of projectData) {
    await Project.create({
      ...project,
      user_id: users[Math.floor(Math.random() * users.length)].id,
    });
  }
  process.exit(0);
};
```

```
seedDatabase();
```

```
DB_NAME=crowdfund_db
DB_PASSWORD=rootpass
DB_USER=root
```

```
DROP DATABASE IF EXISTS crowdfund_db;
CREATE DATABASE crowdfund_db;
```

```
[
  {
    "name": "Sal",
    "email": "sal@hotmail.com",
    "password": "password12345"
  },
  {
    "name": "Lernantino",
    "email": "lernantino@gmail.com",
    "password": "password12345"
  },
  {
    "name": "Amiko",
    "email": "amiko2k20@aol.com",
    "password": "password12345"
  }
]
```

```
[
  {
    "name": "Music Near Me",
    "description": "A mobile app that will send you
      notifications whenever a concert is playing in your area.",
    "needed_funding": 5000
  },
  {
    "name": "The Ultimate Tech Quiz",
    "description": "A web app that will give users
      10 new technical questions each day
      and track their progress in things like
      programming, cybersecurity, database architecture, and more!",
    "needed_funding": 10000
  },
  {
    "name": "Roll 'Em Up",
    "description": "A game for Windows and
      macOS where players move a ball through a series
      of increasingly challenging mazes.",
    "needed_funding": 800
  }
]
```

Mini-Project pt.2

```
const router = require('express').Router();
const userRoutes = require('./userRoutes');
const projectRoutes = require('./projectRoutes');
```

```
router.use('/users', userRoutes);
router.use('/projects', projectRoutes);
```

```
module.exports = router;
```

```
const router = require('express').Router();
```

```
const apiRoutes = require('./api');
const homeRoutes = require('./homeRoutes');
```

```
router.use('/', homeRoutes);
router.use('/api', apiRoutes);
```

```
module.exports = router;
```

```
const router = require('express').Router();
const { Project } = require('../models');
const withAuth = require('../utils/auth');
```

```
router.post('/', withAuth, async (req, res) => {
  try {
    const newProject = await Project.create({
      ...req.body,
      user_id: req.session.user_id,
    });
    res.status(200).json(newProject);
  } catch (err) {
    res.status(400).json(err);
  }
});
```

```
router.delete('/:id', withAuth, async (req, res) => {
  try {
    const projectData = await Project.destroy({
      where: {
        id: req.params.id,
        user_id: req.session.user_id,
      },
    });
    if (!projectData) {
      res.status(404).json(
        ({ message: 'No project found with this id' })
      );
      return;
    }
    res.status(200).json(projectData);
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
module.exports = router;
```

```
const router = require('express').Router();
const { User } = require('../models');
```

```
router.post('/', async (req, res) => {
  try {
    const userData = await User.create(req.body);
    req.session.save(() => {
      req.session.user_id = userData.id;
      req.session.logged_in = true;
      res.status(200).json(userData);
    });
  } catch (err) {
    res.status(400).json(err);
  }
});
```

```
router.post('/login', async (req, res) => {
  try {
    const userData = await User.findOne({ where: { email: req.body.email } });
    if (!userData) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password, please try again' });
      return;
    }
    const validPassword = await userData.checkPassword(req.body.password);
    if (!validPassword) {
      res
        .status(400)
        .json({ message: 'Incorrect email or password, please try again' });
      return;
    }
    req.session.save(() => {
      req.session.user_id = userData.id;
      req.session.logged_in = true;

      res.json({ user: userData, message: 'You are now logged in' });
    });
  } catch (err) {
    res.status(400).json(err);
  }
});
```

```
router.post('/logout', (req, res) => {
  if (req.session.logged_in) {
    req.session.destroy(() => {
      res.status(204).end();
    });
  } else {
    res.status(404).end();
  }
});
```

```
module.exports = router;
```

```
const router = require('express').Router();
const { Project, User } = require('../models');
const withAuth = require('../utils/auth');
```

```
router.get('/', async (req, res) => {
  try {
    // Get all projects and JOIN with user data
    const projectData = await Project.findAll({
      include: [
        {
          model: User,
          attributes: ['name'],
        },
      ],
    });
    // Serialize data so the template can read it
    const projects = projectData.map((project) => project.get({ plain: true }));
    // Pass serialized data and session flag into template
    res.render('homepage', {
      projects,
      logged_in: req.session.logged_in
    });
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
router.get('/project/:id', async (req, res) => {
  try {
    const projectData = await Project.findByPk(req.params.id, {
      include: [
        {
          model: User,
          attributes: ['name'],
        },
      ],
    });
    const project = projectData.get({ plain: true });
    res.render('project', {
      ...project,
      logged_in: req.session.logged_in
    });
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
// Use withAuth middleware to prevent access to route
```

```
router.get('/profile', withAuth, async (req, res) => {
  try {
    // Find the logged in user based on the session ID
    const userData = await User.findByPk(req.session.user_id, {
      attributes: { exclude: ['password'] },
      include: [{ model: Project }],
    });
    const user = userData.get({ plain: true });
    res.render('profile', {
      ...user,
      logged_in: true
    });
  } catch (err) {
    res.status(500).json(err);
  }
});
```

```
router.get('/login', (req, res) => {
  // If the user is already logged in, redirect the request to another route
  if (req.session.logged_in) {
    res.redirect('/profile');
    return;
  }
  res.render('login');
});
```

```
module.exports = router;
```

Mini-Project pt.3

```
const { Model, DataTypes } = require('sequelize');
const bcrypt = require('bcrypt');

const sequelize = require('../config/connection');

class User extends Model {
  checkPassword(loginPw) {
    return bcrypt.compareSync(loginPw, this.password);
  }
}

User.init({
  {
    id: {
      type: DataTypes.INTEGER,
      allowNull: false,
      primaryKey: true,
      autoIncrement: true,
    },
    name: {
      type: DataTypes.STRING,
      allowNull: false,
    },
    email: {
      type: DataTypes.STRING,
      allowNull: false,
      unique: true,
      validate: {
        isEmail: true,
      },
    },
    password: {
      type: DataTypes.STRING,
      allowNull: false,
      validate: {
        len: [8],
      },
    },
  },
  {
    hooks: {
      beforeCreate: async (newUserData) => {
        newUserData.password = await bcrypt.hash(newUserData.password, 10);
        return newUserData;
      },
      beforeUpdate: async (updatedUserData) => {
        updatedUserData.password = await bcrypt.hash(updatedUserData.password, 10);
        return updatedUserData;
      },
    },
    sequelize,
    timestamps: false,
    freezeTableName: true,
    underscored: true,
    modelName: 'user',
  }
});

module.exports = User;
```

```
const User = require('./User');
const Project = require('./Project');

User.hasMany(Project, {
  foreignKey: 'user_id',
  onDelete: 'CASCADE'
});

Project.belongsTo(User, {
  foreignKey: 'user_id'
});

module.exports = { User, Project };
```

```
const { Model, DataTypes } = require('sequelize');
const sequelize = require('../config/connection');

class Project extends Model {}

Project.init({
  {
    id: {
      type: DataTypes.INTEGER,
      allowNull: false,
      primaryKey: true,
      autoIncrement: true,
    },
    name: {
      type: DataTypes.STRING,
      allowNull: false,
    },
    description: {
      type: DataTypes.STRING,
    },
    date_created: {
      type: DataTypes.DATE,
      allowNull: false,
      defaultValue: DataTypes.NOW,
    },
    needed_funding: {
      type: DataTypes.FLOAT,
      allowNull: false,
    },
    user_id: {
      type: DataTypes.INTEGER,
      references: {
        model: 'user',
        key: 'id',
      },
    },
  },
  {
    {
      sequelize,
      timestamps: false,
      freezeTableName: true,
      underscored: true,
      modelName: 'project',
    }
  }
});

module.exports = Project;
```

Mini-Project pt.4

```
const loginFormHandler = async (event) => {
  event.preventDefault();
  // Collect values from the login form
  const email = document.querySelector('#email-login').value.trim();
  const password = document.querySelector('#password-login').value.trim();
  if (email && password) {
    // Send a POST request to the API endpoint
    const response = await fetch('/api/users/login', {
      method: 'POST',
      body: JSON.stringify({ email, password }),
      headers: { 'Content-Type': 'application/json' },
    });
    if (response.ok) {
      // If successful, redirect the browser to the profile page
      document.location.replace('/profile');
    } else {
      alert(response.statusText);
    }
  }
};

const signupFormHandler = async (event) => {
  event.preventDefault();
  const name = document.querySelector('#name-signup').value.trim();
  const email = document.querySelector('#email-signup').value.trim();
  const password = document.querySelector('#password-signup').value.trim();
  if (name && email && password) {
    const response = await fetch('/api/users', {
      method: 'POST',
      body: JSON.stringify({ name, email, password }),
      headers: { 'Content-Type': 'application/json' },
    });
    if (response.ok) {
      document.location.replace('/profile');
    } else {
      alert(response.statusText);
    }
  }
};

document
  .querySelector('.login-form')
  .addEventListener('submit', loginFormHandler);

document
  .querySelector('.signup-form')
  .addEventListener('submit', signupFormHandler);
```

```
const withAuth = (req, res, next) => {
  // If the user is not logged in, redirect the request to the login route
  if (!req.session.logged_in) {
    res.redirect('/login');
  } else {
    next();
  }
};

module.exports = withAuth;
```

```
const newFormHandler = async (event) => {
  event.preventDefault();
  const name = document.querySelector('#project-name').value.trim();
  const needed_funding = document.querySelector('#project-funding').value.trim();
  const description = document.querySelector('#project-desc').value.trim();
  if (name && needed_funding && description) {
    const response = await fetch('/api/projects', {
      method: 'POST',
      body: JSON.stringify({ name, needed_funding, description }),
      headers: {
        'Content-Type': 'application/json',
      },
    });
    if (response.ok) {
      document.location.replace('/profile');
    } else {
      alert('Failed to create project');
    }
  }
};

const delButtonHandler = async (event) => {
  if (event.target.hasAttribute('data-id')) {
    const id = event.target.getAttribute('data-id');
    const response = await fetch(`/api/projects/${id}`, {
      method: 'DELETE',
    });
    if (response.ok) {
      document.location.replace('/profile');
    } else {
      alert('Failed to delete project');
    }
  }
};

document
  .querySelector('.new-project-form')
  .addEventListener('submit', newFormHandler);
document
  .querySelector('.project-list')
  .addEventListener('click', delButtonHandler);
```

```
module.exports = {
  format_date: (date) => {
    // Format date as MM/DD/YYYY
    return date.toLocaleDateString();
  },
  format_amount: (amount) => {
    // format large numbers with commas
    return parseInt(amount).toLocaleString();
  },
  get_emoji: () => {
    const randomNum = Math.random();
    // Return a random emoji
    if (randomNum > 0.7) {
      return `<span for="img" aria-label="lightbulb">💡</span>`;
    } else if (randomNum > 0.4) {
      return `<span for="img" aria-label="laptop">💻</span>`;
    } else {
      return `<span for="img" aria-label="gear">⚙️</span>`;
    }
  },
};
```

```
const logout = async () => {
  const response = await fetch('/api/users/logout', {
    method: 'POST',
    headers: { 'Content-Type': 'application/json' },
  });
  if (response.ok) {
    document.location.replace('/');
  } else {
    alert(response.statusText);
  }
};

document.querySelector('#logout')
  .addEventListener('click', logout);
```


Mini-Project pt.5

```
<!-- Loop over each object in the projects array -->
{{#each projects as |project| }}
<div class="row mb-4 project">
  <div class="col-md-5">
    <h2>
      <!-- Call helper function with triple brackets to render the emoji span as HTML -->
      {{{get_emoji}}}
      <a href="/project/{{project.id}}">{{project.name}}</a>
    </h2>
    <p>
      <span for="img" aria-label="money">❌</span>
      <!-- Pass needed_funding value to the helper function -->
      <span class="dollar-amount">{{format_amount project.needed_funding}}</span>
      needed!
    </p>
    <p>Created by {{project.user.name}} on {{format_date project.date_created}}</p>
  </div>
  <div class="col-md-7">
    <p>
      {{{project.description}}}
    </p>
  </div>
</div>
{{/each}}
```

```
<div class="row">
  <div class="col-auto">
    <h2>Welcome, {{name}}!</h2>
  </div>
</div>
<div class="row mt-4">
  <div class="col-md-6">
    <h3>Create a New Project:</h3>
    <form class="form new-project-form">
      <div class="form-group">
        <label for="project-name">project name:</label>
        <input class="form-input" type="text" id="project-name" name="project-name" />
      </div>
      <div class="form-group">
        <label for="project-funding">needed funding ($):</label>
        <input class="form-input" type="number" id="project-funding" name="project-funding" />
      </div>
      <div class="form-group">
        <label for="project-desc">description:</label>
        <textarea class="form-input" id="project-desc" name="project-desc"></textarea>
      </div>
      <div class="form-group">
        <button type="submit" class="btn btn-primary">Create</button>
      </div>
    </form>
  </div>
  {{#if projects.length}}
  <div class="col-md-6 project-list">
    <h3>Current Projects:</h3>
    {{#each projects as |project| }}
    <div class="row mb-2">
      <div class="col-md-8">
        <h4><a href="/project/{{project.id}}">{{project.name}}</a></h4>
      </div>
      <div class="col-md-4">
        <button class="btn btn-sm btn-danger" data-id="{{project.id}}">DELETE</button>
      </div>
    </div>
    {{/each}}
  </div>
  {{/if}}
</div>
<script src="/js/profile.js"></script>
```

```
<div class="row">
  <div class="col-md-6">
    <h2>Login</h2>
    <form class="form login-form">
      <div class="form-group">
        <label for="email-login">email:</label>
        <input class="form-input" type="text" id="email-login" />
      </div>
      <div class="form-group">
        <label for="password-login">password:</label>
        <input class="form-input" type="password" id="password-login" />
      </div>
      <div class="form-group">
        <button class="btn btn-primary" type="submit">login</button>
      </div>
    </form>
  </div>
  <div class="col-md-6">
    <h2>Signup</h2>
    <form class="form signup-form">
      <div class="form-group">
        <label for="name-signup">name:</label>
        <input class="form-input" type="text" id="name-signup" />
      </div>
      <div class="form-group">
        <label for="email-signup">email:</label>
        <input class="form-input" type="text" id="email-signup" />
      </div>
      <div class="form-group">
        <label for="password-signup">password:</label>
        <input class="form-input" type="password" id="password-signup" />
      </div>
      <div class="form-group">
        <button class="btn btn-primary" type="submit">signup</button>
      </div>
    </form>
  </div>
</div>
<script src="/js/login.js"></script>
```

```
<div class="text-center">
  <h2>{{name}}</h2>
  <p>{{{get_emoji}}}</p>
  <p>{{{description}}}</p>
  <p>Created by {{user.name}} on {{format_date date_created}}</p>
  <p>
    <span for="img" aria-label="money">❌</span>
    <span class="dollar-amount">{{format_amount needed_funding}}</span>
    needed
  </p>
  <p>
    <button class="btn btn-primary">Fund this Project!</button>
  </p>
</div>
```

```
const path = require('path');
const express = require('express');
const session = require('express-session');
const exphbs = require('express-handlebars');
const routes = require('./controllers');
const helpers = require('./utils/helpers');

const sequelize = require('./config/connection');
const SequelizeStore = require('connect-session-sequelize')(session.Store);
```

```
const app = express();
const PORT = process.env.PORT || 3001;
```

```
// Set up Handlebars.js engine with custom helpers
```

```
const hbs = exphbs.create({ helpers });
const sess = {
  secret: 'Super secret secret',
  cookie: {},
  resave: false,
  saveUninitialized: true,
  store: new SequelizeStore({
    db: sequelize
  })
};
```

```
app.use(session(sess));
```

```
// Inform Express.js on which template engine to use
```

```
app.engine('handlebars', hbs.engine);
app.set('view engine', 'handlebars');
```

```
app.use(express.json());
app.use(express.urlencoded({ extended: true }));
app.use(express.static(path.join(__dirname, 'public')));
```

```
app.use(routes);
```

```
sequelize.sync({ force: false }).then(() => {
  app.listen(PORT, () => console.log('Now listening'));
});
```

Mini-Project pt.6

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Fund My Project!</title>
  <link rel="stylesheet" href="/css/jass.css">
  <link rel="stylesheet" href="/css/style.css">
</head>
<body>
  <div class="flex-column justify-space-around">
    <header class="display-flex justify-space-between align-center p-2">
      <h1>
        <span role="img" aria-label="money">💰</span>
        <a href="/">Fund My Project!</a>
      </h1>
      <nav>
        <!-- Conditionally render login or logout links -->
        {{#if logged_in}}
        <a href="/profile">profile</a> |
        <button class="no-button" id="logout">logout</button>
        {{else}}
        <a href="/login">login</a>
        {{/if}}
      </nav>
    </header>
    <main class="container container-fluid mt-5">
      <!-- Render the sub layout -->
      {{{ body }}}
    </main>
    <footer>

    </footer>
  </div>
  <!-- Render script for logged in users only -->
  {{#if logged_in}}
  <script src="/js/logout.js"></script>
  {{/if}}
</body>
</html>
```

```
{
  "name": "crowd-funding",
  "version": "1.0.0",
  "description": "",
  "main": "server.js",
  "scripts": {
    "test": "echo \\\"Error: no test specified\\\" && exit 1",
    "start": "node server.js",
    "seed": "node seeds/seed.js"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "dependencies": {
    "bcrypt": "^5.0.0",
    "connect-session-sequelize": "^7.0.4",
    "dotenv": "^8.2.0",
    "express": "^4.17.1",
    "express-handlebars": "^5.2.0",
    "express-session": "^1.17.1",
    "mysql2": "^2.2.5",
    "sequelize": "^6.3.5"
  },
  "devDependencies": {
    "eslint": "^7.12.1",
    "eslint-config-prettier": "^6.15.0",
    "prettier": "^2.1.2"
  }
}
```