



Front End Technologies Week 6 Coding Assignment

Points possible: 70

Category	Criteria	% of Grade
Functionality	Does the code work?	25
Organization	Is the code clean and organized? Proper use of white space, syntax, and consistency are utilized. Names and comments are concise and clear.	25
Creativity	Student solved the problems presented in the assignment using creativity and out of the box thinking.	25
Completeness	All requirements of the assignment are complete.	25

Instructions: In VS Code, or an IDE of your choice, write the code that accomplishes the objectives listed below. Ensure that the code compiles and runs as directed. Take screenshots of the code and of the running program (make sure to get screenshots of all required functionality) and paste them in this document where instructed below. Create a new repository on GitHub for this week's assignments and push this document, with your JavaScript project code, to the repository. Add the URL for this week's repository to this document where instructed and submit this document to your instructor when complete.

Coding Steps:

1. As a team, create a full CRUD application of your choice. If you can use an existing API, use AJAX to interact with it. However, you do not have to use an API. If you do not use an API, store the entities you will create, read, update, and delete in an array.
 - a. Application should have at least 1 entity per team member
 - b. Use a form to add new entities
 - c. Build a way for users to update or delete entities
 - d. Use Bootstrap and CSS to style your project



Screenshots of Code:

```
<> final FET project.html X JS final FET project.js # final FET project.css
<> final FET project.html > html > link
1  <!DOCTYPE html>
2
3  <html lang="en">
4
5  ... <meta charset="UTF-8">
6  ... <meta http-equiv="X-UA-Compatible" content="IE=edge">
7  ... <meta name="viewport" content="width=device-width, initial-scale=1.0">
8  ... <title>Zoo App</title>
9  ... <link rel="stylesheet" href="node_modules/bootstrap/dist/css/bootstrap.css">
10 ... <link rel="stylesheet" href="final FET project.css">
11 ...
12 </head>
13 <body class="container">
14 ... <div id="new-habitat" class="jumbotron text-white bg-dark mb-3">
15 ... <h2>New Habitat</h2> ...
16 ... <input type="text" id="new-habitat-name" class="form-control"> <br>
17 ... <button id="create-new-habitat" class="btn btn-primary form-control">Create</button>
18 ... </div>
19
20 ... <div id="app">
21
22 ... </div>
23
24
25 ... <script src="node_modules/jquery/dist/jquery.js"></script>
26 ... <script src="final FET project.js"></script>
27 ... <script src="node_modules/bootstrap/dist/js/bootstrap.bundle.js"></script>
28 </body>
29 </html>
```



PROMINEO TECH

```
final FET project.html JS final FET project.js X # final FET project.css
JS final FET project.js > HabitatService > createHabitat
1  class Habitat {
2    constructor(habitat) {
3      this.habitat = habitat;
4      this.animals = [];
5    }
6
7    addAnimal(name, number) {
8      console.log("in addAnimal")
9      console.log("Name" + name)
10     console.log.log("Number" + number)
11     this.animals.push(new Animal(name, number));
12   }
13 }
14
15 class Animal {
16   constructor(name, number) {
17     this.name = name;
18     this.number = number;
19   }
20 }
21
22 class HabitatService {
23   static url = "https://crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns";
24
25   static getAllHabitats() {
26     return $.get(this.url);
27   }
28
29   static getHabitat(id) {
30     return $.get(this.url + `/${id}`);
31   }
32
33   static createHabitat(habitat) {
34     console.log("habitat create" + habitat);
35     return $.ajax({
36       url: this.url,
37       dataType: 'json',
38       data: JSON.stringify(habitat),
```



PROMINEO TECH

```
final FET project.html JS final FET project.js X # final FET project.css
JS final FET project.js > HabitatService > updateHabitat > data
30 .....return $.get(this.url + "/" + id, {});
31 .....}
32 .....
33 .....static createHabitat(habitat) {
34 .....  console.log("habitat create" + habitat);
35 .....  return $.ajax({
36 .....    url: this.url,
37 .....    dataType: 'json',
38 .....    data: JSON.stringify(habitat),
39 .....    contentType: 'application/json',
40 .....    type: "POST"
41 .....  });
42 .....}
43 .....
44 .....
45 .....static updateHabitat(habitat) {
46 .....  console.log("habitat update" + habitat);
47 .....  return $.ajax({
48 .....    url: this.url + "/" + habitat.id,
49 .....    dataType: 'json',
50 .....    data: JSON.stringify({
51 .....      "habitat": habitat,
52 .....      "animals": habitat.animals
53 .....    }),
54 .....    contentType: 'application/json',
55 .....    type: 'PUT'
56 .....  });
57 .....}
58 .....
59 .....
60 .....static deleteHabitat(id) {
61 .....  return $.ajax({
62 .....    url: this.url + "/" + id,
63 .....    type: "DELETE"
64 .....  });
65 .....}
66 .....}
67 .....}
```

```
final FET project.html JS final FET project.js X # final FET project.css
JS final FET project.js > DOMManager > deleteHabitat
66 .....}
67 .....
68 .....class DOMManager {
69 .....  static habitats;
70 .....
71 .....  static getAllHabitats() {
72 .....    console.log("inside getAllHabitats")
73 .....    HabitatService.getAllHabitats().then(habitats => this.render(habitats));
74 .....  }
75 .....
76 .....  static createHabitat(name) {
77 .....    console.log("inside DOMManager createHabitat")
78 .....    HabitatService.createHabitat(new Habitat(name))
79 .....    .then(() => {
80 .....      return HabitatService.getAllHabitats();
81 .....    })
82 .....    .then(habitats => this.render(habitats));
83 .....  }
84 .....
85 .....  static deleteHabitat(id) {
86 .....    HabitatService.deleteHabitat(id)
87 .....    .then(() => {
88 .....      return HabitatService.getAllHabitats();
89 .....    })
90 .....    .then(habitats => this.render(habitats));
91 .....  }
92 .....
93 .....  static addAnimal(id) {
94 .....    console.log(this.habitat + "this.habitat in static AddAnimal")
95 .....    console.log("This is the type of variable" + typeof this.habitat)
96 .....    console.log(this.habitat)
97 .....    //OG this.habitats
98 .....    for (let habitat of this.habitats) {
99 .....      console.log("Hooray in the for loop")
100 .....      if (habitat.id == id) {
101 .....        console.log("Hooray in the for-if")
102 .....        habitat.animals.push(new Animal(`${habitat.id}-animal-name`).val(), `${habitat.id}-animal-number`.val());
103 .....        HabitatService.updateHabitat(habitat);
104 .....      }
105 .....    }
106 .....  }
107 .....}
```



PROMINEO TECH

```
final FET project.html JS final FET project.js X # final FET project.css
JS final FET project.js > DOMManager > deleteHabitat
//this is the type of variable I expect this habitat
96 console.log(this.habitat)
97 //OG this.habitats
98 for (let habitat of this.habitats) {
99 console.log("Hooray in the for loop")
100 if (habitat._id == id) {
101 console.log("Hooray in the for if")
102 habitat.animals.push(new Animal(`${#${habitat._id}-animal-name`}.val()), `${#${habitat._id}-animal-number`}.val());
103 HabitatService.updateHabitat(habitat)
104 .then(() => {
105 return HabitatService.getAllHabitats();
106 })
107 .then(habitats => this.render(habitats));
108 console.log(this.habitats);
109 console.log("Hooray bottom of if statement")
110 }
111 }
112 console.log("bottom of addAnimal method")
113 }
114
115 static deleteAnimal(habitatId, animalName) {
116 for (let habitat of this.habitats) {
117 if (habitat._id == habitatId) {
118 //to ensure that it will not give a value back
119 habitat.animals = habitat.animals.filter(function(e) {
120 //returning correct animal name and confirming that it is not another
121 return e.name != animalName;
122 });
123 HabitatService.updateHabitat(habitat)
124 .then(() => {
125 return HabitatService.getAllHabitats();
126 })
127 .then(habitats => this.render(habitats));
128 //}
129 //}
130 }
131 }
132 }
```

Ln 89, Col 15 Spaces: 4 UTF-8 CRLF

```
final FET project.html JS final FET project.js X # final FET project.css
JS final FET project.js > DOMManager > deleteHabitat
132 }
133
134 static render(habitats) {
135 this.habitats = habitats;
136 $("#app").empty();
137 for (let habitat of habitats) {
138 $("#app").prepend(
139 <div id="${habitat._id}" class="card text-white bg-dark mb-3">
140 <div class="card-header">
141 <h2>${habitat.habitat}</h2>
142 <button class="btn btn-danger" onclick="DOMManager.deleteHabitat('${habitat._id}')">Delete</button>
143 </div>
144 <div class="card-body">
145 <div class="card text-white bg-dark mb-3">
146 <div class="row">
147 <div class="col-sm">
148 <input type="text" id="${habitat._id}-animal-name" class="form-control" placeholder="Animal Name">
149 </div>
150 <div class="col-sm">
151 <input type="text" id="${habitat._id}-animal-number" class="form-control" placeholder="Number of Animals">
152 </div>
153 </div>
154 <button id="${habitat._id}-new-animal" onclick="DOMManager.addAnimal('${habitat._id}')" class="btn btn-primary form-control">Add</button>
155 </div>
156 </div>
157 </div>
158 </div>
159 <br>
160 );
161 for (let animal of habitat.animals) {
162 <div id="${habitat._id}">.find(".card-body").append(
163 <p>
164 <span id="name-${animal.name}"><strong>Name: </strong> ${animal.name}</span>
165 <span id="number-${animal.number}"><strong>Number: </strong> ${animal.number}</span><br>
166 <button class="btn btn-danger" onclick="DOMManager.deleteAnimal('${habitat._id}', '${animal.name}')">Delete Animals</button>
167 </p>
168 )
169 }
```



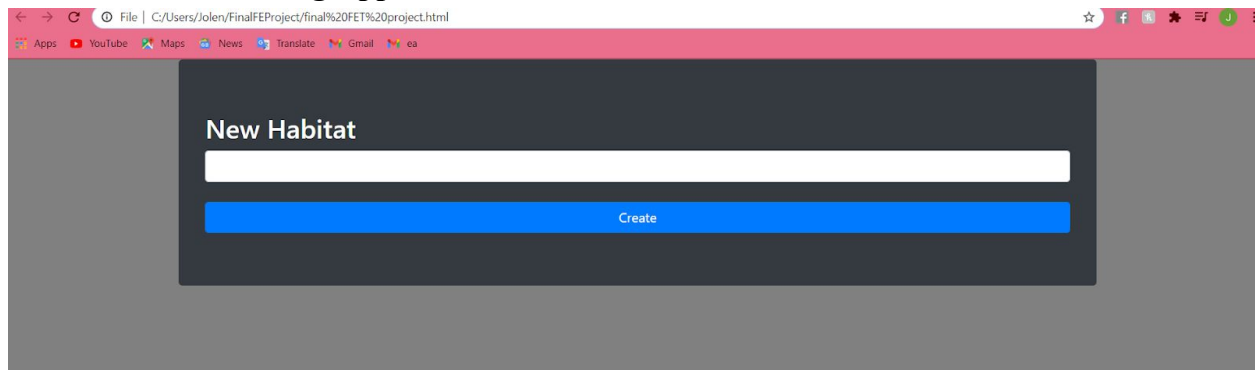

PROMINEO TECH

```
final FET project.js > deleteHabitat
151 .....<input type="text" id="${habitat._id}-animal-number" class="form-control" placeholder="Number of Animals">
152 .....</div>
153 .....</div>
154 .....<button id="${habitat._id}-new-animal" onclick="DOMManager.addAnimal('${habitat._id}')" class="btn btn-primary form-control">Add</button>
155 .....</div>
156 .....</div>
157 .....</div>
158 .....</div>
159 .....<br>
160 .....);
161 .....for (let animal of habitat.animals) {
162 .....  $('#${habitat._id}').find(".card-body").append(
163 .....    <p>
164 .....      <span id="name-${animal.name}"><strong>Name: </strong> ${animal.name}</span>
165 .....      <span id="number-${animal.number}"><strong>Number: </strong> ${animal.number}</span><br>
166 .....      <button class="btn btn-danger" onclick="DOMManager.deleteAnimal('${habitat._id}', '${animal.name}')">Delete Animal</button>
167 .....    );
168 .....  }
169 .....}
170 .....}
171 .....}
172 .....
173 .....
174 .....$('#create-new-habitat').click(() => {
175 .....  DOMManager.createHabitat($('#new-habitat-name').val());
176 .....  $('#new-habitat-name').val('');
177 .....  console.log("new habitat name")
178 .....  console.log($('#new-habitat-name').val(''))
179 .....});
180 .....
181 .....
182 .....
183 .....DOMManager.getAllHabitats();
```

```
# final FET project.css > ...
1  body {
2    background-color: # gray;
3  }
4
5
6
```

Most styling was done through bootstrap

Screenshots of Running Application:





PROMINEO TECH

File | C:/Users/Jolen/FinalFEProject/final%20FET%20project.html

Apps YouTube Maps News Translate Gmail ea

New Habitat

Asia

Create

File | C:/Users/Jolen/FinalFEProject/final%20FET%20project.html

Apps YouTube Maps News Translate Gmail ea

New Habitat

Create

Asia

Delete

Animal Name Number of Animals

Add

New Habitat

Create

Africa

Delete

Animal Name Number of Animals

Add

Asia

Delete



PROMINEO TECH

China

Delete

Animal Name

Number of Animals

Add

Japan

Delete

Animal Name

Number of Animals

Add

Africa

Delete

Animal Name

Number of Animals

crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns

```
[{"_id": "603b088b13120c03e81c71dc", "habitat": "Asia", "animals": []}, {"_id": "603b08fb13120c03e81c71dd", "habitat": "Africa", "animals": []}, {"_id": "603b098e13120c03e81c71df", "habitat": "Japan", "animals": []}, {"_id": "603b099513120c03e81c71e0", "habitat": "China", "animals": []}]
```

Create

China

Delete

Panda

3

Add

China

Delete

Animal Name

Number of Animals

Add

Name: Panda Number: 3

Delete Animal

crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns

```
[{"_id": "603b088b13120c03e81c71dc", "habitat": "Asia", "animals": []}, {"_id": "603b08fb13120c03e81c71dd", "habitat": "Africa", "animals": []}, {"_id": "603b098e13120c03e81c71df", "habitat": "Japan", "animals": []}, {"_id": "603b099513120c03e81c71e0", "habitat": "China", "animals": [{"name": "Panda", "number": "3"}]}]
```




PROMINEO TECH

Japan

Delete

Red Panda

4

Add

Japan

Delete

Animal Name

Number of Animals

Add

Name: Red Panda **Number:** 4

Delete Animal

Africa

Delete

Black Mamba

60

Add



PROMINEO TECH

Japan

Delete

Animal Name

Number of Animals

Add

Name: Red Panda Number: 4

Delete Animal

Africa

Delete

Animal Name

Number of Animals

Add

Name: Black Mamba Number: 60

Delete Animal

← → ↻

crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns

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f

📧

★

☰

🔊

📱 Apps

📺 YouTube

🗺 Maps

📰 News

🌐 Translate

✉ Gmail

👤 ea

```
[{"_id":"603b088b13120c03e81c71dc","habitat":"Asia","animals":[]},{ "_id":"603b08fb13120c03e81c71dd","habitat":"Africa","animals":[{"name":"Black Mamba","number":"60"}]}, {"_id":"603b098e13120c03e81c71df","habitat":"Japan","animals":[{"name":"Red Panda","number":"4"}]},{ "_id":"603b099513120c03e81c71e0","habitat":"China","animals":[{"name":"panda","number":"1"}]}
```



PROMINEO TECH

Africa

Delete

Animal Name

Number of Animals

Add

Name: Black Mamba **Number:** 60

Delete Animal

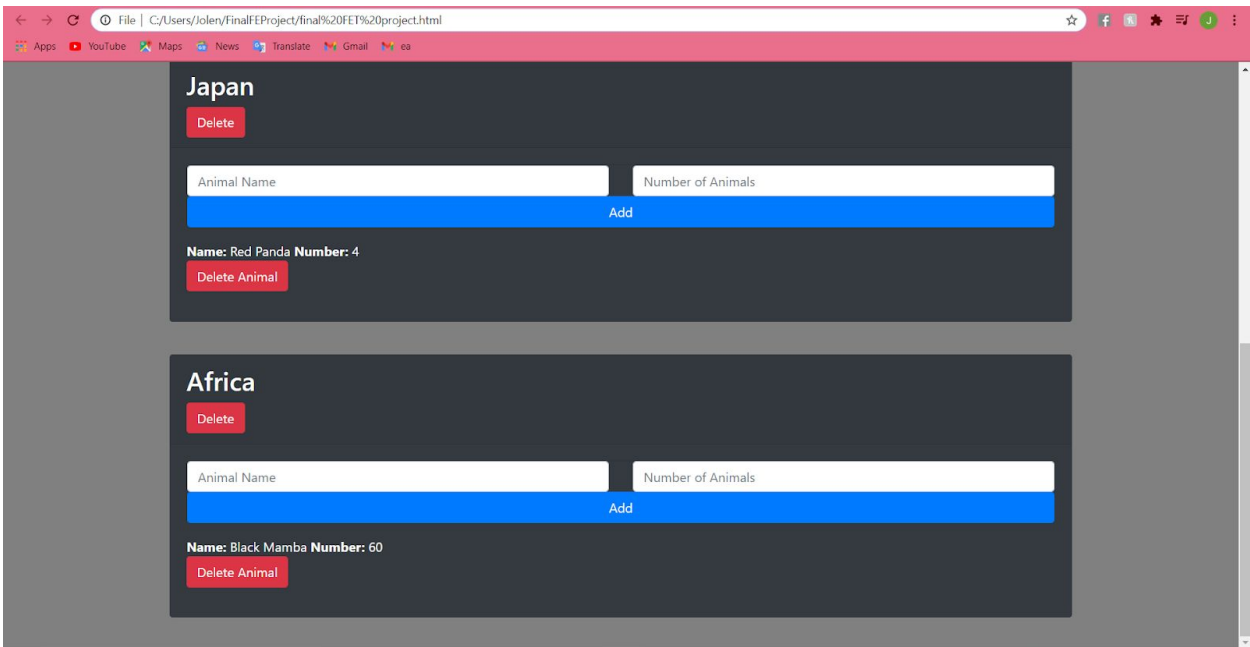
Asia

Delete

Animal Name

Number of Animals

Add





PROMINEO TECH

now Asia is deleted!

China

Delete

Pallas's Cat

16

Add

Name: panda Number: 1

Delete Animal

China

Delete

Animal Name

Number of Animals

Add

Name: panda Number: 1

Delete Animal

Name: Pallas's Cat Number: 16

Delete Animal

Japan

Delete

crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns

Apps YouTube Maps News Translate Gmail ea

```
[{"_id": "603b08fb13120c03e81c71dd", "habitat": "Africa", "animals": [{"name": "Black Namba", "number": "60"}]}, {"_id": "603b098e13120c03e81c71df", "habitat": "Japan", "animals": [{"name": "Red Panda", "number": "4"}]}, {"_id": "603b099513120c03e81c71e0", "habitat": "China", "animals": [{"name": "panda", "number": "1"}, {"name": "Pallas's Cat", "number": "16"}]}
```



PROMINEO TECH

New Habitat

China

Name: Pallas's Cat Number: 16

Japan

New Habitat

China

crudcrud.com/api/9051bd1a13694487827985406b3bbb0e/unicorns

Apps YouTube Maps News Translate Gmail ea

```
[{"_id": "603b08fb13120c03e81c71dd", "habitat": "Africa", "animals": [{"name": "Black Mamba", "number": "60"}]}, {"_id": "603b098e13120c03e81c71df", "habitat": "Japan", "animals": [{"name": "Red Panda", "number": "4"}]}, {"_id": "603b099513120c03e81c71e0", "habitat": "China", "animals": []}]
```

now China has no animals

Note that the addAnimal and Delete animal needs a refresh to properly perform the action but does work.

URL to GitHub Repository:

<https://github.com/NashuaFESDFET/Week6-FinalProject-HJS>



PROMINEO TECH

<https://github.com/JoleneMel/Final/tree/update>