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Кафедра «Системы обработки информации и управления»

Лабораторная работа №7
по курсу «Разработка интернет-приложений»
«Разработка пользовательского интерфейса для работы с REST API»

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Задание:

На основе [методических указаний](#) разработайте пользовательский интерфейс для работы с REST API. Используйте REST API, разработанный Вами в предыдущей лабораторной работе.

Текст программы:

ArtistComponent.js

```
1 export class ArtistComponent {
2   constructor(parent) {
3     this.parent = parent
4   }
5
6   getHTML(data) {
7     return (
8       <div class="card" style="...">
9         <div class="card-body">
10           <h5 class="card-title">Карточка с художником </h5>
11           <p class="card-text"> </p>
12         </div>
13       </div>
14     )
15   }
16
17   render(data) {
18
19     const html = this.getHTML(data)
20     this.parent.insertAdjacentHTML( position: 'beforeend', html)
21   }
22 }
23
```

ArtistCardComponent.js

```
1 export class ArtistCardComponent
2 {
3   constructor(parent)
4   {
5     this.parent=parent;
6   }
7   getHTML(data) {
8     return (
9       <div class="card text-white bg-success mb-3" style="...">
10         <!--img class="card-img-top" src="${data.src}" alt="картинка" -->
11         <div class="card-body">
12           <h5 class="card-title">${data.name}</h5>
13           <p class="card-text">${data.country}</p>
14           <p class="card-text">Известные работы художника: ${data.arts}</p>
15           <button class="btn btn-primary bg-warning mb-3" id="click-card-${data.id}" data-id="${data.id}">Нажми на м
16         </div>
17       </div>
18     )
19   }
20
21   addListeners(data, listner){
22     document
23
```

```

20     )
21   }
22   addListeners(data, listner){
23     document
24       .getElementById( elementId: `click-card-${data.id}`)
25       .addEventListener( type: "click", listner)
26   }
27
28   render(data, listner)
29   {
30     const html = this.getHTML(data)
31     this.parent.insertAdjacentHTML( position: 'beforeend', html)
32     this.addListeners(data, listner)
33
34
35   }
36
37 }

```

BackButtonComponent.js

```

index.html × main.js × BackButtonComponent.js × ArtistPage.js × ArtistCardComponent.js × ArtistComponent.js × ajax.js × MainPage.js × index.js ×
1  export class BackButtonComponent {
2    constructor(parent) {
3      this.parent = parent;
4    }
5
6    addListeners(listener) {
7      document
8        .getElementById( elementId: "back-button")
9        .addEventListener( type: "click", listener)
10   }
11
12   getHTML() {
13     return (
14       <button id="back-button" class="btn btn-primary" type="button">Назад</button>
15     )
16   }
17
18   render(listener) {
19     const html = this.getHTML()
20     this.parent.insertAdjacentHTML( position: 'beforeend', html)
21     this.addListeners(listener)
22   }
23 }
BackButtonComponent

```

```

14   <button id="back-button" class="btn btn-primary" type="button">Назад</button>
15
16   )
17 }
18
19
20 render(listener) {
21   const html = this.getHTML()
22   this.parent.insertAdjacentHTML( position: 'beforeend', html)
23   this.addListeners(listener)
24 }
25
26

```

Ajax.js

```
index.html × main.js × BackButtonComponent.js × ArtistPage.js × ArtistCardComponent.js × ArtistComponent.js × ajax.js × MainPage.js × index.js ×
1 class Ajax {
2   async get(url)
3   {
4     const response = await fetch(url, {
5       method: "GET"
6     });
7     const responseData = await response.json();
8
9     return {
10      status: response.status,
11      data: responseData
12    };
13  }
14 }
15
16 export const ajax = new Ajax();
```

Urls.js

```
index.html × main.js × BackButtonComponent.js × ArtistPage.js × ArtistCardComponent.js × ArtistComponent.js × ajax.js × urls.js ×
1 class Urls {
2   constructor() {
3     this.url = 'http://localhost:8000/';
4   }
5
6   artists() {
7     return `${this.url}artist/`
8   }
9
10  artist(id) {
11    return `${this.url}artist/${id}/`
12  }
13 }
14
15 export const urls = new Urls()
16
```

ArtistPage.js

```
index.html x main.js x BackButtonComponent.js x ArtistPage.js x ArtistCardComponent.js x ArtistComponent.js x ajax.js x urls.js x MainF
1 import {ArtistComponent} from "../../components/artist/ArtistComponent.js";
2 import {BackButtonComponent} from "../../components/back-button/BackButtonComponent.js";
3 import {MainPage} from "../main/MainPage.js";
4 import {ajax} from "../../modules/ajax.js";
5 import {urls} from "../../modules/urls.js";
6
7 export class ArtistPage {
8   constructor(parent, id) {
9     this.parent = parent
10    this.id = id
11  }
12
13  async getData(){
14    return ajax.get(urls.artist(this.id))
15  }
16
17  get page() {
18    return document.getElementById( elementId: 'artist-page')
19  }
20
21  getHTML() {
22    return (
23
```

```
index.html x main.js x BackButtonComponent.js x ArtistPage.js x ArtistCardComponent.js x ArtistComponent.js x ajax.js x urls.js
19   }
20
21   getHTML() {
22     return (
23       `
24       <div id="artist-page">
25       </div>
26       `
27     )
28   }
29   clickBack() {
30     const mainPage = new MainPage(this.parent)
31     mainPage.render()
32   }
33
34   async render() {
35     this.parent.innerHTML = ''
36     const html = this.getHTML()
37     this.parent.insertAdjacentHTML( position: 'beforeend', html)
38
39     const backButton = new BackButtonComponent(this.page)
40     backButton.render(this.clickBack.bind(this))
41
```

```

26     }
27     )
28 }
29 clickBack() {
30     const mainPage = new MainPage(this.parent)
31     mainPage.render()
32 }
33
34 async render() {
35     this.parent.innerHTML = ''
36     const html = this.getHTML()
37     this.parent.insertAdjacentHTML( position: 'beforeend', html)
38
39     const backButton = new BackButtonComponent(this.page)
40     backButton.render(this.clickBack.bind(this))
41
42     const data = this.getData()
43     const artist = new ArtistComponent(this.page)
44     artist.render(data.data)
45 }
46 }

```

MainPage.js

```

index.html x main.js x BackButtonComponent.js x ArtistPage.js x ArtistCardComponent.js x ArtistComponent.js x ajax.js x urls.js x MainPage.js x
1 import {ArtistPage} from "../artist/ArtistPage.js";
2 import {ArtistCardComponent} from "../../components/artist-card/ArtistCardComponent.js";
3 import {ajax} from "../../modules/ajax.js";
4 import {urls} from "../../modules/urls.js";
5
6 export class MainPage
7 {
8     constructor(parent)
9     {
10         this.parent = parent;
11     }
12     clickCard(e) {
13         const cardId = e.target.dataset.id
14
15         const artistPage = new ArtistPage(this.parent, cardId)
16         artistPage.render()
17     }
18     get page()
19     {
20         return document.getElementById( elementId: 'main-page')
21     }
22     getHTML()
23     {

```

MainPage → render()

```

22     getHTML()
23     {
24         return(
25             .
26             <div id="main-page" class="d-flex flex-wrap"><div/>
27             .
28         )
29     }
30
31     async getData(){
32         return ajax.get(urls.artists())
33     }
34
35     async render() {
36         this.parent.innerHTML = ''
37         const html = this.getHTML()
38         this.parent.insertAdjacentHTML( position: 'beforeend', html)
39
40         const data = await this.getData()
41         data.data.forEach((item) => {
42             const artistCard = new ArtistCardComponent(this.page)
43             artistCard.render(item, this.clickCard.bind(this))
44
45         })
46
47     }
48
49
50 }
51

```

Index.html

```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Lab 7</title>
6      <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.1/dist/css/bootstrap.min.css">
7  </head>
8  <body>
9      <div id="root"></div>
10     <script src="main.js" type="module"></script>
11     <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.1/dist/js/bootstrap.bundle.min.js"></script>
12 </body>
13 </html>

```

Main.js

```
index.html × main.js × BackButtonComponent.js × ArtistPage.js × ArtistCardComponent.js × ArtistComponent.js × ajax.js × urls.js × MainPage.js × In
1 import {MainPage} from "../pages/main/MainPage.js";
2
3 const root=document.getElementById( elementId: 'root');
4
5 const mainPage=new MainPage(root)
6 mainPage.render()
7
```

Экранные формы:

