**Лабораторна робота**

**З дисципліни:**

**Програмування WEB додатків**

**На тему:** React

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**Лабораторна робота**

**Тема:** React

**Мета:** Навчитись використувати React .

Хід роботи

1. Сервер був взятий з минулих лабораторних робот
2. Фронтенд був написаний за допомогою React

Лістинг Фронтенду

Файл index.html:

<html>

<head>

<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css" integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh" crossorigin="anonymous"/>

<meta charset="utf-8" />

<title>Hello React</title>

</head>

<body>

<div id="app"></div>

<script crossorigin src="https://unpkg.com/react@18/umd/react.production.min.js"></script>

<script crossorigin src="https://unpkg.com/react-dom@18/umd/react-dom.production.min.js"></script>

<script src="https://unpkg.com/@babel/standalone/babel.min.js"></script>

<script type="text/babel" src="App.jsx"></script>

</body>

</html>

Файл App.jsx:

import React from 'react';

import ReactDOM from 'react-dom/client'

import { Nav } from './Nav';

export const rootNode = document.getElementById("app");

const root = ReactDOM.createRoot(rootNode);

root.render(

<>

<Nav/>

</>

);

Файл index.js:

import React from 'react';

import ReactDOM from 'react-dom/client';

import App from './App';

const root = ReactDOM.createRoot(document.getElementById('root'));

root.render(

<React.StrictMode>

</React.StrictMode>

);

Файл Nav.jsx:

import {Button, input} from "react-bootstrap";

import React, { useState } from "react";

export const Nav = () => {

///////brend//////////////////

const Getbrend = () => {

fetch('http://127.0.0.1:8081/brend')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

console.log(itemList);

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Назва Бренду</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_brend + '</td><td>' + itemList[i].name\_brend+'</td></tr>';

}

});

}

const delbrend = () => {

let table\_name = brenddel

fetch('http://127.0.0.1:8081/delbrend?table='+ brenddel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const addbrend = () => {

fetch('http://127.0.0.1:8081/addbrend?id\_brend='+id\_brend+ '&name\_brend='+name\_brend+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

console.log(id\_brend);

console.log(name\_brend);

}

const [brenddel, setbrenddel] = useState("");

const [id\_brend, setid\_brend] = useState("");

const [name\_brend, setname\_brend] = useState("");

////////Client////////

const Client = () => {

fetch('http://127.0.0.1:8081/client')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">ПІБ клієнта</th> <th scope="col">Телефон</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+=

'<tr><td>' + itemList[i].id\_client

+ '</td><td>' + itemList[i].pib\_client

+ '</td><td>'+ itemList[i].teleph +'</tr>';

}

});

}

const addclient = () => {

fetch('http://127.0.0.1:8081/addclient?id\_client=' + id\_client + '&PIB\_client=' + pib\_client + '&teleph='+ teleph)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const delclient = () => {

fetch('http://127.0.0.1:8081/delclient?table='+ clientdel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [clientdel, setclientdel] = useState("");

const [id\_client, setid\_client] = useState("");

const [pib\_client, setpib\_client] = useState("");

const [teleph, setteleph] = useState("");

////////CPU////////

const Cpu = () => {

fetch('http://127.0.0.1:8081/cpu')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Назва процесору</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+=

'<tr><td>' + itemList[i].id\_cpu

+'</td><td>'+itemList[i].name\_cpu+'</td></tr>';

}

});

}

const addcpu = () => {

fetch('http://127.0.0.1:8081/addcpu?id\_cpu=' + id\_cpu + '&name\_cpu=' + name\_cpu)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const delcpu = () => {

fetch('http://127.0.0.1:8081/delcpu?table='+ cpudel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [cpudel, setcpudel] = useState("");

const [id\_cpu, setid\_cpu] = useState("");

const [name\_cpu, setname\_cpu] = useState("");

////////////////Operation//////////////

const Operation = () => {

fetch('http://127.0.0.1:8081/operation')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Клієнт</th> <th scope="col">Телефон</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_operation + '</td><td>' + itemList[i].id\_client+ '</td><td>' + itemList[i].id\_teleph + '</td></tr>';

}

});

}

const addoperation = () => {

fetch('http://127.0.0.1:8081/addoperation?id\_operation=' + id\_operation + '&id\_client=' + id\_client + '&id\_teleph='+ id\_teleph)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const deloperation = () => {

fetch('http://127.0.0.1:8081/deloperation?table='+ operationdel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [operationdel, setoperationdel] = useState("");

const [id\_operation, setid\_operation] = useState("");

// const [id\_client, setid\_client] = useState("");

// const [id\_teleph, setid\_teleph] = useState("");

/////////////Sklad////////////////

const Sklad = () => {

fetch('http://127.0.0.1:8081/sklad')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Код телефону</th> <th scope="col">К-сть на складі</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_poz + '</td><td>' + itemList[i].id\_teleph + '</td><td>' + itemList[i].k\_st + '</td></tr>';

}

});

}

const addsklad = () => {

fetch('http://127.0.0.1:8081/addsklad?id\_poz=' + id\_poz+ '&id\_teleph=' + id\_teleph + '&k\_st='+ k\_st)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const delsklad = () => {

fetch('http://127.0.0.1:8081/delsklad?table='+ skladdel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [skladdel, setskladdel] = useState("");

const [id\_poz, setid\_poz] = useState("");

const [id\_teleph, setid\_teleph] = useState("");

const [k\_st, setk\_st] = useState("");

////////////////Screen/////////////////

const Skreen = () => {

fetch('http://127.0.0.1:8081/screen')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Тип екрану</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_screen + '</td><td>' + itemList[i].name\_screen+ '</td></tr>';

}

});

}

const addscreen = () => {

fetch('http://127.0.0.1:8081/addscreen?id\_screen=' + id\_screen + '&name\_screen=' + name\_screen)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const delscreen = () => {

fetch('http://127.0.0.1:8081/delscreen?table='+ screendel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [screendel, setscreendel] = useState("");

// const [id\_screen, setid\_screen] = useState("");

const [name\_screen, setname\_screen] = useState("");

////////////////Teleph/////////////////

const Teleph = () => {

fetch('http://127.0.0.1:8081/teleph')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Назва моделі</th> <th scope="col">код бренду</th> <th scope="col">код процесору</th><th scope="col">код типу екрану</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_teleph + '</td><td>' + itemList[i].model\_teleph + '</td><td>' + itemList[i].id\_brend + '</td><td>' + itemList[i].id\_cpu + '</td><td>' + itemList[i].id\_screen + '</td></tr>';

}

});

}

const addteleph = () => {

fetch('http://127.0.0.1:8081/addteleph?id\_teleph=' + id\_teleph + '&model\_teleph=' + model\_teleph+ '&id\_brend='+ id\_brend+ '&id\_id\_cpu='+ id\_cpu+ '&id\_screen='+ id\_screen)

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const delteleph = () => {

fetch('http://127.0.0.1:8081/delteleph?table='+ telephdel+'&')

.then((response) => {

return response.json();

})

.then((data) => {

console.log(data);

});

let items\_table = document.getElementById('table');

items\_table.innerHTML='';

console.log('Успіх');

}

const [telephdel, settelephdel] = useState("");

// const [id\_teleph, setid\_teleph] = useState("");

const [model\_teleph, setmodel\_teleph] = useState("");

// const [id\_brend, setid\_brend] = useState("");

// const [id\_cpu, setid\_cpu] = useState("");

const [id\_screen, setid\_screen] = useState("");

/////////////View\_teleph///////////////

const View\_teleph = () => {

fetch('http://127.0.0.1:8081/teleph\_view')

.then((response) => {

return response.json();

})

.then((data) => {

let itemList = data;

let items\_table = document.getElementById('table');

items\_table.innerHTML = '<th scope="col">Код</th> <th scope="col">Назва бренду</th> <th scope="col">модель</th><th scope="col">Процесор</th><th scope="col">Дисплей</th>';

for(let i = 0; i < itemList.length; i++)

{

items\_table.innerHTML+= '<tr><td>' + itemList[i].id\_teleph + '</td><td>'+ itemList[i].name\_brend + '</td><td>'+ itemList[i].model\_teleph+ '</td><td>'+ itemList[i].name\_cpu + '</td><td>' + itemList[i].name\_screen+ '</td></tr>';

}

});

}

/////////////////////

return(

<>

<div>

<nav class="navbar navbar-expand-lg navbar-light bg-light">

<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarTogglerDemo01" aria-controls="navbarTogglerDemo01" aria-expanded="false" aria-label="Toggle navigation">

<span class="navbar-toggler-icon"></span>

</button>

<div class="collapse navbar-collapse" id="navbarTogglerDemo01">

<ul class="navbar-nav mr-auto mt-2 mt-lg-0">

<li class="nav-item">

<a class="nav-link" onClick={Getbrend}>Brend</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Client}>Client</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Cpu}>Cpu</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Teleph}>Teleph</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Skreen}>Screen</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Sklad}>Sklad</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={Operation}>Operation</a>

</li>

<li class="nav-item">

<a class="nav-link" onClick={View\_teleph}>Teleph\_view</a>

</li>

</ul>

</div>

</nav>

<table id="table" class="table table-dark"></table>

<div id="brend">

<input type="text" value={brenddel} placeholder="brenddel" onChange={(e) => setbrenddel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delbrend}/> <br/><br/>

<input type="text" value={id\_brend} placeholder="id\_brend" onChange={(e) => setid\_brend(e.target.value)} />

<input type="text" value={name\_brend} placeholder="name\_brend" onChange={(e) => setname\_brend(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addbrend}/> <br/><br/>

</div>

<div id="client">

<input type="text" value={clientdel} placeholder="clientdel" onChange={(e) => setclientdel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delclient}/> <br/><br/>

<input type="text" value={id\_client} placeholder="id\_client" onChange={(e) => setid\_client(e.target.value)} />

<input type="text" value={pib\_client} placeholder="pib\_client" onChange={(e) => setpib\_client(e.target.value)} />

<input type="text" value={teleph} placeholder="teleph" onChange={(e) => setteleph(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addclient}/> <br/><br/>

</div>

<div id="cpu">

<input type="text" value={cpudel} placeholder="cpudel" onChange={(e) => setcpudel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delcpu}/> <br/><br/>

<input type="text" value={id\_cpu} placeholder="id\_cpu" onChange={(e) => setid\_cpu(e.target.value)} />

<input type="text" value={name\_cpu} placeholder="name\_cpu" onChange={(e) => setname\_cpu(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addcpu}/> <br/><br/>

</div>

<div id="operation">

<input type="text" value={operationdel} placeholder="operationdel" onChange={(e) => setoperationdel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={deloperation}/> <br/><br/>

<input type="text" value={id\_operation} placeholder="id\_operation" onChange={(e) => setid\_operation(e.target.value)} />

<input type="text" value={id\_client} placeholder="id\_client" onChange={(e) => setid\_client(e.target.value)} />

<input type="text" value={id\_teleph} placeholder="id\_teleph" onChange={(e) => setid\_teleph(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addoperation}/> <br/><br/>

</div>

<div id="sklad">

<input type="text" value={skladdel} placeholder="skladdel" onChange={(e) => setskladdel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delsklad}/> <br/><br/>

<input type="text" value={id\_poz} placeholder="id\_poz" onChange={(e) => setid\_poz(e.target.value)} />

<input type="text" value={id\_teleph} placeholder="id\_teleph" onChange={(e) => setid\_teleph(e.target.value)} />

<input type="text" value={k\_st} placeholder="k\_st" onChange={(e) => setk\_st(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addsklad}/> <br/><br/>

</div>

<div id="screen">

<input type="text" value={screendel} placeholder="screendel" onChange={(e) => setscreendel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delscreen}/> <br/><br/>

<input type="text" value={id\_screen} placeholder="id\_screen" onChange={(e) => setid\_screen(e.target.value)} />

<input type="text" value={name\_screen} placeholder="name\_screen" onChange={(e) => setname\_screen(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addscreen}/> <br/><br/>

</div>

<div id="teleph">

<input type="text" value={telephdel} placeholder="telephdel" onChange={(e) => settelephdel(e.target.value)} />

<input button type="button" id="btn" value="Видалити запис" onClick={delteleph}/> <br/><br/>

<input type="text" value={id\_teleph} placeholder="id\_teleph" onChange={(e) => setid\_teleph(e.target.value)} />

<input type="text" value={model\_teleph} placeholder="model\_teleph" onChange={(e) => setmodel\_teleph(e.target.value)} />

<input type="text" value={id\_brend} placeholder="id\_brend" onChange={(e) => setid\_brend(e.target.value)} />

<input type="text" value={id\_cpu} placeholder="id\_cpu" onChange={(e) => setid\_cpu(e.target.value)} />

<input type="text" value={id\_screen} placeholder="id\_screen" onChange={(e) => setid\_screen(e.target.value)} />

<input button type="button" id="btn" value="додати запис" onClick= {addteleph}/> <br/><br/>

</div>

</div>

</>

)

}

export default Nav;

**Виконання програми**

Для початку потрібно запустити сервер бекенду.

Потім запускаємо сервер React і отримуємо результат:

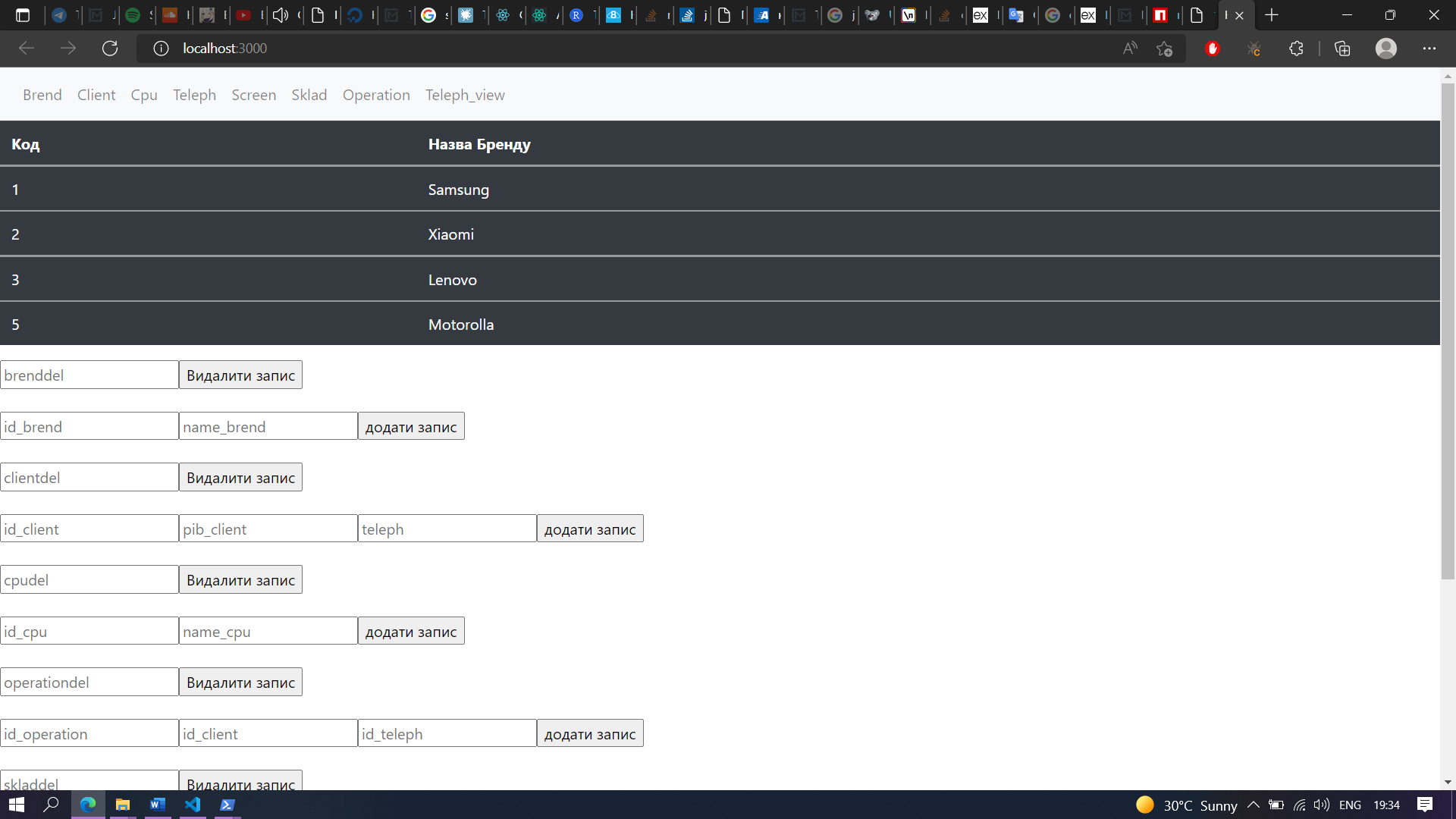


Рисунок 1 – результат роботи програми

Отже, я навчився використовувати React для створення фронтенду.