НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ УКРАЇНИ «КИЇВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ імені Ігоря Сікорського» ФАКУЛЬТЕТ ПРИКЛАДНОЇ МАТЕМАТИКИ

Кафедра системного програмування та спеціалізованих комп'ютерних систем

Лабораторна робота №2

з дисципліни

«Web-дизайн»

тема «Розробка функціональності Web-додатка мовою Javascript»

Виконав: студент III курсу ФПМ групи КВ-94 Іус І. О. Перевірив(-ла):______ **Мета:** ознайомитись із засобами мови Javascript та навчитись їх застосовувати побудови Web-інтерфейсу користувача.

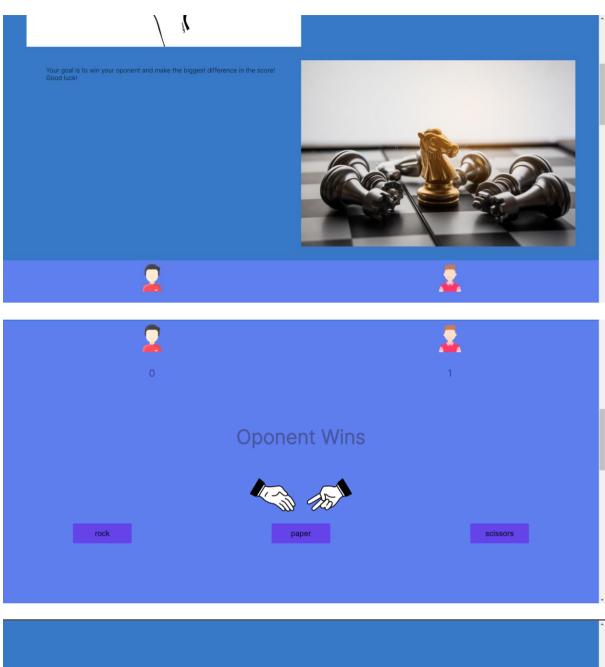
Загальне завдання: розробити функціональність для статичних сторінок Webдодатку першої лабораторної роботи із використанням шаблону MVC

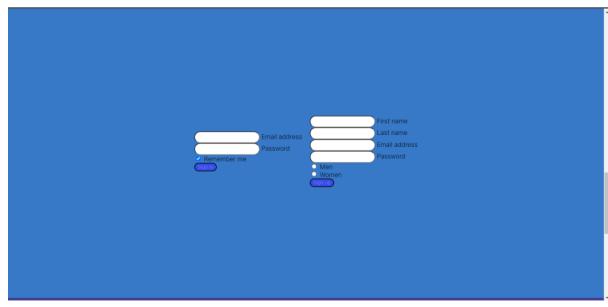
Тема - Сайт гра (камінь ножиці папір)

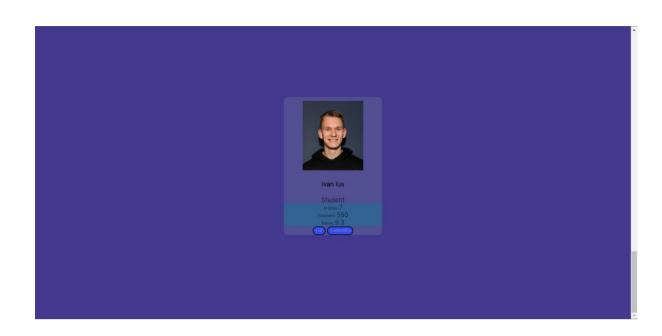
Посилання на GitHub репозиторій: https://github.com/van2ivan?tab=repositories

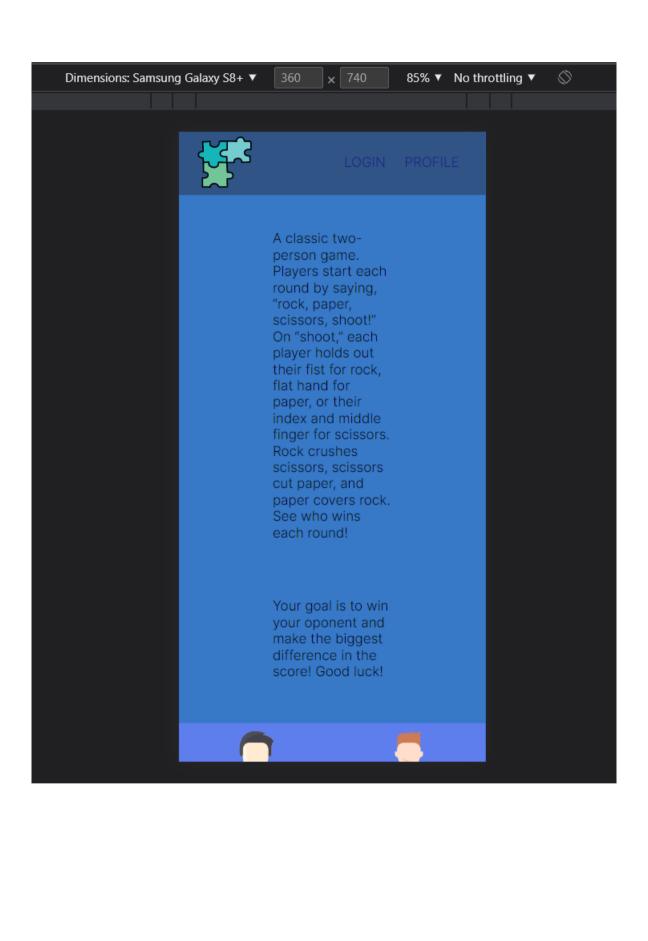
Копії екрана усіх сторінок статичного Web-додатка

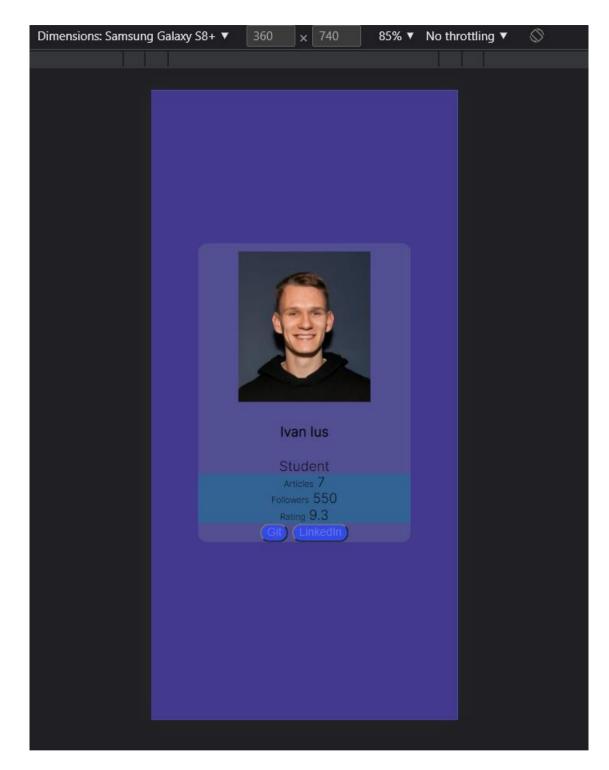












Код програми

```
<link rel="icon" href="images/game-controller.svg">
   <link rel="preconnect" href="https://fonts.gstatic.com">
href="https://fonts.googleapis.com/css2?family=Inter:wght@300&display=swap"
rel="stylesheet">
   <link rel="stylesheet" href="style.css">
</head>
<body>
   <header class="header">
       <div class="header wrapper">
           <div class="logo">
              <img src="images/icon.svg" alt="gamecube" class="logo_image">
          </div>
           <nav class="menu">
              <a href="#login id"</pre>
class="menu list-link">LOGIN</a>
                  <a href="#profile__id"</pre>
class="menu list-link">PROFILE</a>
              </nav>
       </div>
   </header>
   <section class="about raccoon">
       <div class="wrapper">
           <div class="about top">
              <img class="about_image-top" src="images/rules.jpg"</pre>
alt="raccon 1" >
              A classic two-person game. Players start each round by
saying,
                "rock, paper, scissors, shoot!" On "shoot," each player
holds
                out their fist for rock, flat hand for paper, or their index
                and middle finger for scissors. Rock crushes scissors,
scissors cut paper,
                and paper covers rock. See who wins each round!
              </div>
           <div class="about bottom">
              Your goal is to win your oponent and make the biggest
difference in the score!
                Good luck!
              <img class="about__image-bottom" src="images/rules-2.jpg"</pre>
alt="raccon_2" >
          </div>
```

```
</div>
    </section>
    <section class="game">
        <div class="score">
          <div class="player-score">
              <img src="images/man.svg" alt="" class="player-icon" >
            0
          </div>
          <div class="computer-score">
            <img src="images/man-2.svg" alt="" class="player-icon" >
            0
          </div>
        </div>
        <div class="intro">
          <button>Play</putton>
        </div>
        <div class="match fadeOut">
          <h2 class="winner">Choose an option</h2>
          <div class="hands">
            <img class="player-hand" src="images/rock.png" alt="" />
            <img class="computer-hand" src="images/rock.png" alt="" />
          </div>
          <div class="options">
            <button class="rock">rock</button>
            <button class="paper">paper</button>
            <button class="scissors">scissors
          </div>
        </div>
      </section>
      <section class="login" id="login__id">
        <div class="login_wrapper" id="log_wrap">
          <div class="sign__in">
            <form>
              <!-- Email input -->
              <div class="form-outline mb-4">
                <input type="email" id="form1Example1" class="form-control" />
                <label class="form-label" for="form1Example1">Email
address</label>
              </div>
              <!-- Password input -->
              <div class="form-outline mb-4">
                <input type="password" id="form1Example2" class="form-control"</pre>
                <label class="form-label" for="form1Example2">Password</label>
              </div>
```

```
<!-- 2 column grid layout for inline styling -->
              <div class="row mb-4">
                <div class="col d-flex justify-content-center">
                  <!-- Checkbox -->
                  <div class="form-check">
                    <input</pre>
                       class="form-check-input"
                       type="checkbox"
                      value=""
                      id="form1Example3"
                       checked
                    <label class="form-check-label" for="form1Example3">
Remember me </label>
                  </div>
                </div>
                <div class="col">
                  <!-- Simple link -->
                  <a href="#!"></a>
                </div>
              </div>
              <!-- Submit button -->
              <button type="submit" class="btn btn-primary btn-block">Sign
in</button>
            </form>
          </div>
          <div class="register" id= "register">
              <!-- 2 column grid layout with text inputs for the first and
last names -->
              <div class="row mb-4">
                <div class="col">
                  <div class="form-outline">
                     <input type="text" id="form3Example1" class="form-control"</pre>
                    <label class="form-label" for="form3Example1">First
name</label>
                  </div>
                </div>
                <div class="col">
                  <div class="form-outline">
                    <input type="text" id="form3Example2" class="form-control"</pre>
                    <label class="form-label" for="form3Example2">Last
name</label>
```

```
</div>
                </div>
              </div>
              <!-- Email input -->
              <div class="form-outline mb-4">
                 <input type="email" id="form3Example3" class="form-control" />
                <label class="form-label" for="form3Example3">Email
address</label>
              </div>
              <!-- Password input -->
              <div class="form-outline mb-4">
                 <input type="password" id="form3Example4" class="form-control"</pre>
                <label class="form-label" for="form3Example4">Password</label>
              </div>
              <!-- Checkbox -->
              <div class="form-check d-flex justify-content-center mb-4">
                <div class="form-check form-check-inline">
                  <input
                     class="form-check-input"
                    type="radio"
                    name="inlineRadioOptions"
                     id="inlineRadio1"
                    value="option1"
                   <label class="form-check-label"</pre>
for="inlineRadio1">Men</label>
                </div>
                <div class="form-check form-check-inline">
                  <input</pre>
                    class="form-check-input"
                    type="radio"
                    name="inlineRadioOptions"
                     id="inlineRadio2"
                     value="option2"
                  <label class="form-check-label"</pre>
for="inlineRadio2">Women</label>
                 </div>
              </div>
              <!-- Submit button -->
              <button type="submit" class="btn btn-primary btn-block mb-</pre>
4">Sign up</button>
```

```
</form>
          </div>
        </div>
      </section>
      <section class="profile" id="profile__id" >
        <div class="container mt-5 d-flex justify-content-center">
          <div class="card p-3">
              <div class="d-flex align-items-center">
                   <div class="image"> <img src="images\profile.jpg"</pre>
class="rounded" width="155"> </div>
                  <div class="ml-3 w-100">
                       <h4 class="mb-0 mt-0">Ivan Ius</h4> <span>Student</span>
                       <div class="p-2 mt-2 bg-primary d-flex justify-content-</pre>
between rounded text-white stats">
                           <div class="d-flex flex-column"> <span</pre>
class="articles">Articles</span> <span class="number1">7</span> </div>
                           <div class="d-flex flex-column"> <span</pre>
class="followers">Followers</span> <span class="number2">550</span> </div>
                           <div class="d-flex flex-column"> <span</pre>
class="rating">Rating</span> <span class="number3">9.3</span> </div>
                       </div>
                       <div class="button mt-2 d-flex flex-row align-items-</pre>
center"> <button class="btn btn-sm btn-outline-primary w-100">Git</button>
<button class="btn btn-sm btn-primary w-100 ml-2">LinkedIn</button> </div>
                  </div>
              </div>
          </div>
      </div>
      </section>
    <script src="script.js"></script>
    <script src="MVC/base.js"></script>
    <script src="MVC/controller.js"></script>
    <script src="MVC/model.js"></script>
    <script src="MVC/src.js"></script>
    <script src="MVC/view.js"></script>
</body>
</html>
```

Base

```
'use strict'
const persons = [
    {
```

```
firstName : 'Ivan',
        lastName : 'Ius',
        email : 'ius6130@gmail.com',
        password : '12345',
        gender : 'Men',
    },
        firstName : 'Anton',
        lastName : 'Potapenko',
        email : 'potap_enko@gmail.com',
        password : '54321',
        gender : 'Man',
    },
        firstName : 'Michael',
        lastName : 'Mykolenko',
        email : 'mchl_mklnk@gmail.com',
        password: '67890',
        gender : 'Man',
if(!localStorage.getItem('allPersons')){
    localStorage.setItem('allPersons', JSON.stringify(persons));
if(!localStorage.getItem('currentUserPosition')){
    localStorage.setItem('currentUserPosition',-1);
```

Controller

```
class Controller {
   constructor() {
     this.view = new View();
     this.model = new Model();
}

profileRegisterHandler = () => {
   const RegBtn = document.querySelector('.reg-button');
   RegBtn.addEventListener('click', (e) => {
        e.preventDefault();
        console.log('here');
        this.model.registrProfile();
    });
};
```

```
profileLoginHandler = () => {
   const LogBtn = document.querySelector('.log-button');
   LogBtn.addEventListener('click', (e) => {
      e.preventDefault();
      this.model.loginProfile();
   });
  };
};
const myApp = new Controller();
```

Model

```
function validate_name(fname,lname){
    if(fname.length <=0 || lname <=0 ){</pre>
        alert("Input name...");
        return false;
    return true;
function validate_password(password){
    if(password.length<=3 || password.length > 9){
        alert("Incorect password input");
        return false;
    return true;
function validate_email(email){
    if(email.indexOf("@")== -1){
        alert("Incorect email input");
        return false;
    return true;
class Model{
    constructor(){
        this.currentPersonIndex = localStorage.getItem("currentPersonIndex");
        this.allPersons =JSON.parse(localStorage.getItem("allPersons"));
```

```
loginProfile = () => {
    let currentAcc = -1;
    let currentAccIndex = -1;
    const LoginEmail = document.getElementById("logEmail");
    const LoginPassword = document.getElementById("logPassword");
    currentAcc = this.allPersons.find((acc)=>{
      acc.email === LoginEmail.value;
    })
    if (typeof currentAcc === "undefined") {
      alert("Acc with this email dosen't exist ");
      return;
    }else {
      currentAccIndex = this.allPersons.findIndex((acc) => acc.email ===
LoginEmail.value);
        if (currentAcc.password === LoginPassword.value) {
          localStorage.setItem("currentUserIndex", currentAccIndex);
          document.location.href = "./index.html";
        } else {
          alert("Wrong password");
          LoginPassword.value = "";
          return;
 };
  registrProfile = () => {
    const RegisterEmail = document.getElementById("reg-email");
    const RegisterPassword = document.getElementById("u-password");
    const FirstName = document.getElementById("fName");
    const LastName = document.getElementById("sName");
    const RegisterMale = document.getElementById("inlineRadio1");
    const RegisterFemale = document.getElementById("inlineRadio2");
    const newProfile = {};
    const checked = (RegisterMale.checked | RegisterFemale.checked) ? true :
false;
    if(validate email(RegisterEmail)&&validate password(RegisterPassword)&&val
idate name(FirstName, LastName)&&checked){
      newProfile.email = RegisterEmail.value;
      newProfile.fname = FirstName.value;
      newProfile.lname = LastName.value;
      newProfile.password = RegisterPassword.value;
      newProfile.gender = RegisterMale.checked ? "male" : "female";
      this.allUsers.push(newProfile);
      localStorage.setItem("allPersons", JSON.stringify(this.allUsers));
      document.location.href = "./index.html";
```

```
};
```

Src

```
'use strict';
myApp.view.showProfile(myApp.model.currentUserIndex, myApp.model.allUsers);
myApp.profileRegisterHandler();
localStorage.setItem('currentUserIndex', -1);
myApp.profileLoginHandler();
```

View

```
class View{
    constructor(){
        this.firstName = document.getElementById('fName');
        this.lastName = document.getElementById('lName');
        this.email = document.getElementById('address_email');
        this.password = document.getElementById('u_password');
        this.gender = document.getElementById('inlineRadio1');
    showProfile = (currentUserPosition, allPersonsView) => {
        if (+currentUserIndexView === -1) {
          return;
        } else {
          this.profileName.forEach((element) => element.innerHTML =
allUsersView[currentUserPosition].firstName + " " +
allUsersView[currentUserPosition].lastName)
          this.profileEmail.innerHTML =
allUsersView[currentUserPosition].email;
          this.profileGender.innerHTML =
allUsersView[currentUserPosition].gender;
          this.profileId.innerHTML = allUsersView[currentUserPosition].userId;
      };
```