

Library Management System

Milestone 1 – Code Review 11th September 2024

UT Number:UT01215

(Save file in this format – Library_UT No. eg: library_UT5000)

Instructions:

1. Please use **ONE** file for related HTML, CSS & JavaScript
2. Use **Copy & Paste** for inserting code








Q1.

1. Using the JSON data of members , Display the information shown there by using **only the HTML table and associated javascript code**.(no css required)

<< insert screenshot >>

All-Members

Add-Member

Id	firstName	lastName	dateOfBirth	image
M001	John	Doe	1990-05-15	
M002	Jane	Smith	1985-08-22	
M003	Michael	Johnson	1992-11-30	
M004	Emily	Williams	1995-04-10	
M005	Nelson	Mandella	1965-04-17	
M006	Fname	Lname	2024-09-01	
M007	Fname	Lname	2024-09-01	

<< Please insert code for Table view from visual studio with black background >>

```

function show_members(event) {
    read_members_local();
    let table = document.getElementById("member_table");
    table.innerHTML = ` <thead>
        <th>Id</th>
        <th>firstName</th>
        <th>lastName</th>
        <th>dateOfBirth</th>
        <th>image</th>
    </thead>`;
    members.forEach(m => {
        table.innerHTML += ` <tbody>
        <tr>
            <td>${m.id}</td>
            <td>${m.firstName}</td>
            <td>${m.lastName}</td>
            <td>${m.dateOfBirth}</td>
            <td></td>
        </tr>
        </tbody>`;
    });
}

```

2. Display the Books Data in GridView using loop (you can either use flex or grid in CSS)

<< insert screenshot >>

All-Books

Add-Book



bookId : B001

bookName : The Great Gatsby

dateOfPublish : 1925-04-10

isbn : 9780743273565



bookId : B002

bookName : To Kill a Mockingbird

dateOfPublish : 1960-07-11

isbn : 9780060935467



bookId : B003

bookName : 1984

dateOfPublish : 1949-06-08

isbn : 9780451524935



bookId : B004

bookName : Pride and Prejudice

dateOfPublish : 1813-01-28

isbn : 9780141040349



bookId : B009

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239



bookId : B010

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239

<< Please insert code for Grid view from visual studio with black background >>

```

function show_books() {
    read_books_local();
    let bookcad = document.getElementById("books_div");
    bookcad.innerHTML = '';
    books.forEach(b => {
        bookcad.innerHTML += `<div onclick="gonextpage('${b.bookId}')" class="Bcad">
        <div class="img_div">
        
        </div>
        <p>bookId : ${b.bookId}</p>
        <p>bookName : ${b.bookName}</p>
        <p>dateOfPublish : ${b.dateOfPublish}</p>
        <p>isbn : ${b.isbn}</p>
        </div>`;
    });
}

```

Q2.

1. Using the Modal window given in the code , and by utilizing Q1 -> 1 question , display the member table
 - a. You need to create a form in the modal window and put the SAVE button.

<< insert screenshot >>

Add-Member

Modal Title

Id

firstName

lastName

dateOfBirth 

image

Save

<< Please insert code from visual studio with black background >>

```
<!-- Modal Structure -->
<div id="myModal" class="modal">
  <div class="modal-content">
    <span class="close-btn">&times;</span>
    <h2 class="modal-title">Modal Title</h2>
```

```

<div class="modal-body">
  <div class="form_div">
    <form id="addmember_form">
      <div class="input_div">
        <label>Id</label>
        <input id="mid" type="text" placeholder="Id">
      </div>
      <div class="input_div">
        <label>firstName</label>
        <input id="firstName" type="text" placeholder="firstName">
      </div>
      <div class="input_div">
        <label>lastName</label>
        <input id="lastName" type="text" placeholder="lastName">
      </div>
      <div class="input_div">
        <label>dateOfBirth</label>
        <input id="dateOfBirth" type="date" placeholder="dateOfBirth">
      </div>
      <div class="input_div">
        <label>image</label>
        <input id="image" type="text" placeholder="image">
      </div>
      <br>
      <button type="submit">Save</button>
    </form>
  </div>
</div>
</div>

```

- b. Once you click save data should be stored inside local storage

<< insert screenshot of local Storage>>

Add-Member

Modal Title

Id

M007

firstName

Fname

lastName

Lname


dateOfBirth

09/01/2024

image








0.jpg

Save

Na		
Joe		
mit		
ns		
liams	1995-04-10	

All-Members

Add-Member

Id	firstName	lastName	dateOfBirth	image
M001	John	Doe	1990-05-15	
M002	Jane	Smith	1985-08-22	
M003	Michael	Johnson	1992-11-30	
M004	Emily	Williams	1995-04-10	
M005	Nelson	Mandella	1965-04-17	
M006	Fname	Lname	2024-09-01	
M007	Fname	Lname	2024-09-01	

<< Please insert code from visual studio with black background >>








```
function add_member(event) {  
    event.preventDefault();  
    let form = document.getElementById("addmember_form");  
    let member = {  
        "id": form.mid.value,  
        "firstName": form.firstName.value,  
        "lastName": form.lastName.value,  
        "dateOfBirth": form.dateOfBirth.value,  
        "image": form.image.value  
    }  
    members.push(member);  
    save_members_local();  
    show_members();  
    modal.style.display = "none";  
}
```

- c. The list of members should be updated.

<< insert screenshot >>

All-Mem

Add-Meml

Id	firstName	lastName	dateOfBirth	image
M001	John	Doe	1990-05-15	
M002	Jane	Smith	1985-08-22	
M003	Michael	Johnson	1992-11-30	
M004	Emily	Williams	1995-04-10	
M005	Nelson	Mandella	1965-04-17	
M006	Fname	Lname	2024-09-01	
M007	Fname	Lname	2024-09-01	

<< Please insert code from visual studio with black background >>

```
function show_members(event) {  
  read_members_local();  
  let table = document.getElementById("member_table");  
  table.innerHTML = `<thead>
```

```

        <th>Id</th>
        <th>firstName</th>
        <th>lastName</th>
        <th>dateOfBirth</th>
        <th>image</th>
    </thead>`;
    members.forEach(m => {
        table.innerHTML += ` <tbody>
        <tr>
            <td>${m.id}</td>
            <td>${m.firstName}</td>
            <td>${m.lastName}</td>
            <td>${m.dateOfBirth}</td>
            <td></td>
        </tr>
        </tbody>`;
    });

}

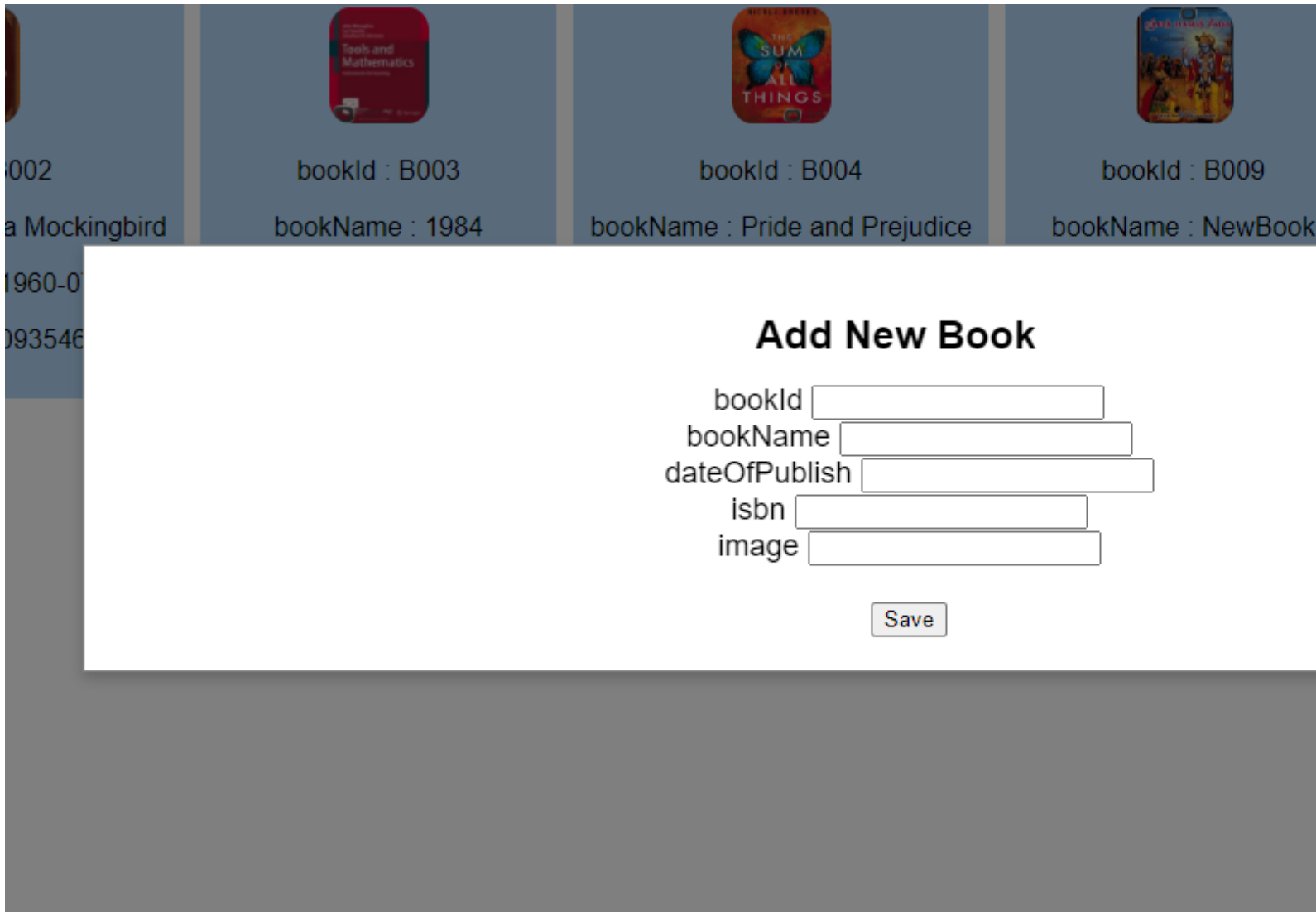
function save_members_local() {
    localStorage.setItem("members", JSON.stringify(members));
}
function read_members_local() {
    members = [];

    olddata = JSON.parse(localStorage.getItem("members"));
    olddata.forEach(data => {
        members.push(data);
    });
}

```

2. For the books data , add a modal window to the Q1 -> 2 code ,
 - a. Add associated form data for books with a save button.

<< insert screenshot >>



<< Please insert code from visual studio with black background >>

```
<!-- Modal Structure -->
<div id="myModal" class="modal">
  <div class="modal-content">
    <span class="close-btn">&times;</span>
    <h2 class="modal-title"> Add New Book</h2>
    <div class="modal-body">
      <div class="book_formdiv">
        <form id="add_bookform">
          <div class="input_div">
            <label>bookId</label>
            <input id="bookId" type="text">
          </div>
          <div class="input_div">
            <label>bookName</label>
```

```
        <input id="bookName" type="text">
    </div>
    <div class="input_div">
        <label>dateOfPublish</label>
        <input id="dateOfPublish" type="text">
    </div>
    <div class="input_div">
        <label>isbn</label>
        <input id="isbn" type="text">
    </div>
    <div class="input_div">
        <label>image</label>
        <input id="image" type="text">
    </div>
    <br>
    <button type="submit">Save</button>
</form>
</div>
</div>
```

b. Once clicked save button , books data should update inside local storage

<< insert screenshot >>

All-Books

Add-Book



bookId : B001

bookName : The Great Gatsby

dateOfPublish : 1925-04-10

isbn : 9780743273565



bookId : B004

bookName : Pride and Prejudice

dateOfPublish : 1813-01-28

isbn : 9780141040349



bookId : B009

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239

Add New Book

bookId

bookName

dateOfPublish

isbn

image

Save

All-Books

Add-Book



bookId : B001

bookName : The Great Gatsby

dateOfPublish : 1925-04-10

isbn : 9780743273565



bookId : B002

bookName : To Kill a Mockingbird

dateOfPublish : 1960-07-11

isbn : 9780060935467



bookId : B003

bookName : 1984

dateOfPublish : 1949-06-08

isbn : 9780451524935



bookId : B004

bookName : Pride and Prejudice

dateOfPublish : 1813-01-28

isbn : 9780141040349



bookId : B009

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239



bookId : B010

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239

<< Please insert code from visual studio with black background >>

```
function add_book(event) {
    event.preventDefault();
    let form = document.getElementById("add_bookform");
    let book = {
        "bookId": form.bookId.value,
        "bookName": form.bookName.value,
        "dateOfPublish": form.dateOfPublish.value,
        "isbn": form.isbn.value,
        "image": form.image.value
    };
    books.push(book);
    save_books_local();
    show_books();
    modal.style.display = "none";
}
function save_books_local() {
    localStorage.setItem("books", JSON.stringify(books));
}
function read_books_local() {
    books = [];
    olddata = JSON.parse(localStorage.getItem("books"));
    olddata.forEach(data => {
        books.push(data);
    });
}
```

c. Newly added data should be available in GridView.

<< insert screenshot >>

All-Books

Add-Book



bookId : B001

bookName : The Great Gatsby

dateOfPublish : 1925-04-10

isbn : 9780743273565



bookId : B002

bookName : To Kill a Mockingbird

dateOfPublish : 1960-07-11

isbn : 9780060935467



bookId : B003

bookName : 1984

dateOfPublish : 1949-06-08

isbn : 9780451524935



bookId : B004

bookName : Pride and Prejudice

dateOfPublish : 1813-01-28

isbn : 9780141040349



bookId : B009

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239



bookId : B010

bookName : NewBook

dateOfPublish : 2000-01-01

isbn : 32425239

<< Please insert code from visual studio with black background >>

```
function show_books() {
  read_books_local();
  let bookcad = document.getElementById("books_div");
  bookcad.innerHTML = '';
  books.forEach(b => {
    bookcad.innerHTML += `<div onclick="gonextpage('${b.bookId}')" class="Bcad">
      <div class="img_div">

      </div>
<p>bookId : ${b.bookId}</p>
<p>bookName : ${b.bookName}</p>
<p>dateOfPublish : ${b.dateOfPublish}</p>
<p>isbn : ${b.isbn}</p>
</div>`;
  });
}
```

Q3.

1. Utilizing Q2->2 , once clicked on the book card (Grid View)

Data structure : books_lend: [[Member , lending date , number of lending days]

a. It should navigate to a page called **books_lends.html?bookId={id}**

<< insert screenshot 1 of URL 1 >>

<< insert screenshot 2 of URL 2>>

<<Please insert code for to link the above view on the GRID page>>

b. Introduce a heading bookTile : {bookTitle} , it should change according to dynamic bookId in url

<< insert screenshot >>

<< Please insert code from visual studio with black background >>

c. on their you have to utilize the inline table given in the code guide and modify associated Column headings and fields

<< insert screenshot >>

Dynamic Inline Table

member-name	lent_date (Date)	count(Number)	Actions
<input type="text" value="John"/>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="0"/>	<input type="button" value="Delete"/> <input type="button" value="Save"/>

Add Row

<< Please insert code from visual studio with black background >

```
<div id="table-container">
  <div class="table-header">
    <div class="table-cell">member-name</div>
    <div class="table-cell">lent_date (Date)</div>
    <div class="table-cell">count(Number)</div>
    <div class="table-cell">Actions</div>
  </div>
  <!-- First row -->

</div>
```

- d. You have to associate lending details such as [Member , lending date , number of lending days] here Members should populate in dropdown

<< insert screenshot >>

Dynamic Inline Table

member-name	lent_date (Date)	count(Number)	Actions
<div>John</div>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="0"/>	<div>DeleteSave</div>
<div>John</div>	<input type="text" value="mm/dd/yyyy"/>	<input type="text" value="0"/>	<div>DeleteSave</div>

Add Row

<< Please insert code from visual studio with black background >>

```
addRowBtn.addEventListener("click", () => {  
  
    let newRowhtml = `  
<div class="table-row ">  
  
    <div id="seloption" class="table-cell">  
    </div>  
  
    <div class="table-cell">  
        <input type="date" />  
    </div>  
  
    <div class="table-cell">  
        <input type="number" placeholder="0" />  
    </div>  
  
    <div class="table-cell">  
        <button class="delete-btn">Delete</button>  
        <button class="save-btn">Save</button>  
    </div>  
    `
```

```

    </div>
</div>

`;






const newRow = document.createElement("div");
newRow.innerHTML = newRowhtml;
let select = document.createElement("select");
members.forEach(m => {
    let option = document.createElement("option");
    option.value = m.id;
    option.textContent = m.firstName;
    select.appendChild(option);
});
newRow.querySelector("#seloption").appendChild(select);
tableContainer.appendChild(newRow);

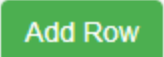
// Attach event listener to the new delete button
newRow.querySelector(".delete-btn").addEventListener("click", () => {
    newRow.remove();
});

```


- e. Data should persist to local storage and make sure the data get loaded even after refresh

<< insert screenshot of UI>>

member-name	lent_date (Date)	count(Number)	Actions
Jane ▼	09 / 02 / 2024 	2 	Delete 
John ▼	mm / dd / yyyy 	0	Delete 



Dynamic Inline Table

member-name	lent_date (Date)	count(Number)	Actions
Jane ▼	09 / 02 / 2024	2	Delete
John ▼	mm / dd / yyyy 	0	Delete S

Add Row

<< insert screenshot of LocalStorage>>

Application

- Manifest
- Service workers
- Storage

Storage

- Local storage
- http://127.0.0.1:5500

- Session storage
- IndexedDB
- Cookies
- Private state tokens
- Interest groups
- Shared storage
- Cache storage
- Storage buckets

Background services

- Back/forward cache
- Background fetch
- Background sync
- Bounce tracking mitigations
- Notifications
- Payment handler
- Periodic background sync
- Speculative loads
- Push messaging
- Reporting API

Frames

- top



Filter



http://127.0.0.1:5500

Origin http://127.0.0.1:5500

Key

books

lentrecode

members

Value

[{"bo

[{"Me

[{"id"

```
▼ [{"Meberid": "M001", Lentdate: "", Count: ""}, {"Meberid": "M001"  
  ► 0: {"Meberid": "M001", Lentdate: "", Count: ""}  
  ► 1: {"Meberid": "M001", Lentdate: "", Count: ""}  
  ► 2: {"Meberid": "M005", Lentdate: "", Count: ""}  
  ► 3: {"Meberid": "M001", Lentdate: "", Count: ""}  
  ► 4: {"Meberid": "M001", Lentdate: "", Count: ""}  
  ► 5: {"Meberid": "M002", Lentdate: "2024-09-02", Count: "2"}]
```

Console

Issues



<< Please insert code from visual studio with black background >>

```
newRow.querySelector(".save-btn").addEventListener("click", () => {
    read_lendrecode_local();
    let meberid = newRow.querySelector("select").value;
    let lentdate = newRow.querySelector('input[type="date"]').value;
    let count = newRow.querySelector('input[type="number"]').value;
    console.log(meberid);
    console.log(lentdate);
    console.log(count);

    let recode = {
        Meberid: meberid,
        Lentdate: lentdate,
        Count: count
    }
    lentRecod.push(recode);
    save_recode_local();

    newRow.querySelector(".save-btn").textContent = "Saved";
    newRow.querySelector(".save-btn").style.display = "none";
    newRow.querySelector("select").disabled = true;
    newRow.querySelector('input[type="date"]').disabled = true;
    newRow.querySelector('input[type="number"]').disabled = true;
});
```