TO-DO LIST APP

Here's a basic outline of how you could develop a simple to-do list app:

**User Interface:**

**Homepage**: Display existing to-do lists and options to create a new list.

**To-Do List Page**: Display tasks within the selected list and options to add, delete, or mark tasks as complete.

**Task Form**: Form to add new tasks.

**Backend:**

**Database**: Store user information and their to-do lists/tasks.

**Server**: Handle requests from the frontend, such as adding/deleting tasks or creating new lists.

**API Endpoints**: CRUD (Create, Read, Update, Delete) operations for lists and tasks.

**Frontend:**

**HTML/CSS**: Design and layout for the user interface.

**JavaScript**: Handle user interactions and make requests to the backend API.

**Implementation Steps:**

**Backend:**

=>Set up a database (e.g., SQLite, MongoDB) to store user data, lists, and tasks.

=>Create API endpoints using a framework like Flask (Python), Express (Node.js), or Django (Python) to handle CRUD operations.

=>Implement authentication mechanisms if required to manage user sessions securely.

**Frontend:**

=>Design the user interface using HTML/CSS.

=>Use JavaScript to make AJAX requests to the backend API and handle responses.

=>Implement functionality for adding, deleting, and marking tasks as complete.

=>Handle user authentication and session management if required.

**Integration:**

=>Connect the frontend and backend by making API requests from the frontend to perform CRUD operations on the backend.

=>Ensure proper error handling and validation on both the frontend and backend to enhance user experience and security.

**Example Technologies:**

**Frontend**: HTML, CSS, JavaScript (with frameworks like React, Vue.js, or Angular)

**Backend**: Flask (Python), Express (Node.js), Django (Python)

**Database**: SQLite, MongoDB

**Authentication**: JWT (JSON Web Tokens), OAuth

Program:

// Create a "close" button and append it to each list item// var myNodelist = document.getElementsByTagName("LI"); var i;

for (i = 0; i < myNodelist.length; i++) {

var span = document.createElement("SPAN"); var txt = document.createTextNode("\u00D7"); span.className = "close"; span.appendChild(txt); myNodelist[i].appendChild(span);

}

/ /Create a "close" button and append it to each list item// var myNodelist = document.getElementsByTagName("LI"); var i;

for (i = 0; i < myNodelist.length; i++) {

var span = document.createElement("SPAN"); var txt = document.createTextNode("\u00D7"); span.className = "close"; span.appendChild(txt); myNodelist[i].appendChild(span);

} }

// Add a "checked" symbol when clicking on a list item var list = document.querySelector('ul'); list.addEventListener('click', function(ev) { if (ev.target.tagName === 'LI') {

ev.target.classList.toggle('checked');

}

}, false);

// Create a new list item when clicking on the "Add" button function newElement() {

var li = document.createElement("li"); var inputValue = document.getElementById("myInput").value; var t = document.createTextNode(inputValue); li.appendChild(t); if (inputValue === '') {

alert("You must write something!");

} else { document.getElementById("myUL").appendChild(li);

} document.getElementById("myInput").value = "";

var span = document.createElement("SPAN"); var txt = document.createTextNode("\u00D7");

span.className = "close"; span.appendChild(txt); li.appendChild(span);

for (i = 0; i < close.length; i++) { close[i].onclick = function() { var div = this.parentElement; div.style.display = "none";

}

}

}