**SMART-AI- BASED To-Do List Application**

**Program:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Smart AI To-Do List</title>

<style>

body {

font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;

margin: 0;

padding: 0;

background: linear-gradient(135deg, #ffecd2 0%, #fcb69f 100%);

color: #333;

}

h1 {

text-align: center;

margin-top: 30px;

font-size: 36px;

color: #2c3e50;

text-shadow: 1px 1px 2px #fff;

}

.container {

max-width: 900px;

margin: 0 auto;

padding: 20px;

}

.task-form, .task-list {

background: #ffffff;

padding: 25px;

margin-top: 30px;

border-radius: 15px;

border-left: 8px solid #6a11cb;

box-shadow: 0 6px 15px rgba(0, 0, 0, 0.1);

}

.task-list {

border-left-color: #2575fc;

}

input, select {

padding: 12px;

margin: 10px 15px 10px 0;

width: calc(100% - 22px);

max-width: 250px;

border: 2px solid #ddd;

border-radius: 8px;

transition: all 0.3s ease;

}

input[type="datetime-local"] {

max-width: 300px;

}

input:focus {

border-color: #6a11cb;

outline: none;

box-shadow: 0 0 5px rgba(106, 17, 203, 0.3);

}

button {

padding: 12px 25px;

background-image: linear-gradient(to right, #6a11cb 0%, #2575fc 100%);

color: white;

border: none;

border-radius: 30px;

font-weight: bold;

cursor: pointer;

margin-top: 15px;

transition: background 0.3s ease;

}

button:hover {

background-image: linear-gradient(to right, #2575fc 0%, #6a11cb 100%);

}

.task-item {

background: #f4f9ff;

border-left: 5px solid #2575fc;

margin-bottom: 20px;

padding: 15px;

border-radius: 8px;

box-shadow: 0 2px 5px rgba(0,0,0,0.05);

transition: transform 0.2s;

}

.task-item:hover {

background: #e9f3ff;

transform: scale(1.02);

}

.progress-bar {

height: 10px;

background-color: #ddd;

border-radius: 5px;

overflow: hidden;

margin-top: 8px;

}

.progress {

height: 100%;

background-color: #4CAF50;

width: 0%;

transition: width 1s;

}

strong {

color: #2c3e50;

font-size: 18px;

}

.suggestion {

font-size: 14px;

color: #6a11cb;

font-style: italic;

margin-top: 5px;

}

@media (max-width: 600px) {

input {

width: 100%;

margin-bottom: 10px;

}

}

</style>

</head>

<body>

<h1>Smart AI To-Do List</h1>

<div class="container">

<div class="task-form">

<h2 style="color:#6a11cb;">Add New Task</h2>

<input type="text" id="title" placeholder="Task Title" required>

<input type="number" id="urgency" placeholder="Urgency (1-5)" min="1" max="5">

<input type="number" id="importance" placeholder="Importance (1-5)" min="1" max="5">

<input type="number" id="time" placeholder="Estimated Time (min)">

<input type="datetime-local" id="deadline">

<br>

<button onclick="addTask()">Add Task</button>

</div>

<div class="task-list">

<h2 style="color:#2575fc;">Prioritized Task List</h2>

<div id="tasks"></div>

</div>

</div>

<script>

const tasks = [];

function calculatePriority(task) {

return (task.urgency \* 2) + (task.importance \* 3) - (task.time / 10);

}

function suggestTimeSlot(urgency, importance) {

if (urgency >= 4 && importance >= 4) {

return "Suggested: Do this task ASAP (High Priority)";

} else if (urgency >= 3 || importance >= 3) {

return "Suggested: Schedule for today or tomorrow.";

} else {

return "Suggested: Can be done later this week.";

}

}

function addTask() {

const title = document.getElementById('title').value;

const urgency = parseInt(document.getElementById('urgency').value);

const importance = parseInt(document.getElementById('importance').value);

const time = parseInt(document.getElementById('time').value);

const deadlineInput = document.getElementById('deadline').value;

if (!title || isNaN(urgency) || isNaN(importance) || isNaN(time) || !deadlineInput) {

alert("Please fill all fields correctly.");

return;

}

const deadline = new Date(deadlineInput);

const now = new Date();

const task = { title, urgency, importance, time, deadline };

task.priority = calculatePriority(task);

task.suggestion = suggestTimeSlot(urgency, importance);

task.createdAt = now;

tasks.push(task);

tasks.sort((a, b) => b.priority - a.priority);

displayTasks();

}

function displayTasks() {

const taskContainer = document.getElementById('tasks');

taskContainer.innerHTML = '';

tasks.forEach(task => {

const div = document.createElement('div');

div.className = 'task-item';

const deadlineFormatted = new Date(task.deadline).toLocaleString();

const now = new Date();

const timeDiff = new Date(task.deadline) - now;

const totalTime = new Date(task.deadline) - new Date(task.createdAt);

const percentageLeft = Math.max(0, Math.min(100, (timeDiff / totalTime) \* 100));

if (timeDiff <= 60000 && timeDiff > 0) {

alert(`Reminder: Task "${task.title}" is due soon!`);

}

div.innerHTML = `

<strong>${task.title}</strong><br>

Urgency: ${task.urgency}, Importance: ${task.importance}, Time: ${task.time} mins<br>

Priority Score: <b>${task.priority.toFixed(2)}</b><br>

Deadline: <b>${deadlineFormatted}</b><br>

<div class="suggestion">${task.suggestion}</div>

<div class="progress-bar"><div class="progress" style="width:${percentageLeft}%;"></div></div>

`;

taskContainer.appendChild(div);

});

}

setInterval(displayTasks, 60000); // Refresh every minute to update progress bars and reminders

</script>

</body>

</html>