**3 complete beginner-friendly examples** using **HTML, CSS, and JavaScript**, covering **all core concepts** from your document, including:

* HTML structure
* CSS styling
* JavaScript: DOM, variables, functions, conditions, loops, events, arrays, objects, date, string, math, etc.

**✅ Example 1: Interactive Profile Card**

**🌟 Concepts Used:**

* Variables, Functions, Events, DOM, CSS styling, String methods

**📁 Folder: profile-card**

**index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Profile Card</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<div class="card">

<img src="https://via.placeholder.com/150" alt="Profile Picture">

<h2 id="username">Guest</h2>

<input type="text" id="nameInput" placeholder="Enter your name" />

<button onclick="updateName()">Update Name</button>

</div>

<script src="script.js"></script>

</body>

</html>

**style.css**

body {

font-family: Arial, sans-serif;

background: #f0f0f0;

display: flex;

justify-content: center;

padding: 50px;

}

.card {

background: white;

padding: 30px;

border-radius: 10px;

text-align: center;

box-shadow: 0 0 10px gray;

}

img {

border-radius: 50%;

}

input, button {

margin-top: 10px;

padding: 8px;

font-size: 16px;

}

**script.js**

function updateName() {

let input = document.getElementById("nameInput").value.trim();

if (input.length > 0) {

document.getElementById("username").textContent = input.toUpperCase();

} else {

alert("Please enter a valid name!");

}

}

**✅ Example 2: Student Grade Checker**

**🌟 Concepts Used:**

* Variables, Conditions, DOM, Events, Input handling, Object

**📁 Folder: grade-checker**

**index.html**

<!DOCTYPE html>

<html>

<head>

<title>Grade Checker</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<h2>Student Grade Checker</h2>

<input type="number" id="markInput" placeholder="Enter Marks (0-100)">

<button onclick="checkGrade()">Check Grade</button>

<p id="result"></p>

<script src="script.js"></script>

</body>

</html>

**style.css**

body {

font-family: sans-serif;

padding: 50px;

text-align: center;

}

input, button {

padding: 10px;

font-size: 18px;

margin: 10px;

}

#result {

font-weight: bold;

font-size: 20px;

}

**script.js**

function checkGrade() {

const marks = parseInt(document.getElementById("markInput").value);

const result = document.getElementById("result");

if (isNaN(marks) || marks < 0 || marks > 100) {

result.textContent = "Please enter valid marks!";

return;

}

if (marks >= 90) result.textContent = "Grade: A (Excellent)";

else if (marks >= 75) result.textContent = "Grade: B (Good)";

else if (marks >= 50) result.textContent = "Grade: C (Average)";

else result.textContent = "Grade: F (Fail)";

}

**✅ Example 3: To-Do List with Date**

**🌟 Concepts Used:**

* Arrays, DOM Manipulation, Events, Loops, Date

**📁 Folder: todo-list**

**index.html**

<!DOCTYPE html>

<html lang="en">

<head>

<title>Simple To-Do</title>

<link rel="stylesheet" href="style.css">

</head>

<body>

<h2>📝 To-Do List</h2>

<input type="text" id="taskInput" placeholder="Enter task" />

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

<ul id="taskList"></ul>

<p id="dateDisplay"></p>

<script src="script.js"></script>

</body>

</html>

**style.css**

body {

font-family: Arial;

padding: 30px;

text-align: center;

}

input, button {

padding: 10px;

font-size: 16px;

}

ul {

list-style: none;

padding: 0;

}

li {

padding: 5px;

border-bottom: 1px solid #ccc;

}

p {

color: green;

margin-top: 20px;

}

**script.js**

let tasks = [];

function addTask() {

const input = document.getElementById("taskInput");

const task = input.value.trim();

if (task) {

tasks.push(task);

displayTasks();

input.value = "";

}

}

function displayTasks() {

const list = document.getElementById("taskList");

list.innerHTML = "";

tasks.forEach((t, i) => {

const li = document.createElement("li");

li.textContent = `${i + 1}. ${t}`;

list.appendChild(li);

});

}

window.addEventListener("DOMContentLoaded", () => {

const now = new Date();

document.getElementById("dateDisplay").textContent =

"Today: " + now.toDateString();

});