

# DAY 12

## INDEX.HTML

**<body> content:**

### **Dark Mode Toggle:**

```
<div class="toggle-wrapper">
  <button id="toggleTheme" class="emoji-toggle">🌑</button>
</div>
```

- This is the moon emoji button (🌑)
- When you click it, it **switches between light and dark themes**

### **Main Layout:**

```
<div class="container">
  <div class="age-container">
```

This is the **main box** holding two parts: **left column** and **right stack**.

### **LEFT COLUMN (Info Display Boxes):**

```
<div class="circle-box">
  <p>COMPLETED</p>
  <div class="progress" id="completed">---%</div>
</div>
```

- Shows how much of your current **age year is completed** as a percentage

```
<div class="circle-box">
  <p>NEXT BIRTHDAY</p>
  <div class="progress" id="next-birthday">--- days</div>
</div>
```

- Shows **how many days are left** until your next birthday

### **RIGHT STACK (User Input & Results):**

#### **Age Circles:**

```
<div class="black-circle">
  <span class="years">---</span>
  <p>Years</p>
</div>
```

- Shows your **age** in black circular indicators: years, months, and days

### ***Date Input & Buttons:***

```
<input type="date" id="dob" />
<button onclick="calculateAge()">Calculate Age</button>
```

- Lets the user **enter their date of birth**
- Then they click the button to calculate age

```
<button onclick="copyToClipboard()">Copy it</button>
<button onclick="window.print()">Print it</button>
```

- **Copy it:** Copies your age results to clipboard
- **Print it:** Opens the browser's print dialog to print the result

### **Results Section:**

```
<p id="age-result">YOUR AGE IS: --</p>
<p id="age-months-result">YOUR AGE IN MONTH IS: --</p>
```

- Displays the final calculated age results

### **JavaScript:**

```
<script src="SCRIPT.JS"></script>
```

This line connects the JavaScript file (SCRIPT.JS) which:

- Calculates your age
- Updates the text and indicators
- Manages the dark mode switch
- Handles copy and print features

## **STYLE.CSS**

```
body {
  font-family: Arial, sans-serif;
  background-color: #f4f4f4;
  margin: 0;
}
```

- Uses **Arial font**
- Sets a **light gray background**
- Removes default margin for a cleaner layout

## **DARK MODE TOGGLE BUTTON (Moon Emoji)**

```
.emoji-toggle {
  position: absolute;
  top: 20px;
  right: 20px;
```

```

background: none;
border: none;
font-size: 28px;
cursor: pointer;
transition: transform 0.2s ease;
}
.emoji-toggle:hover {
  transform: scale(1.1);
}

```

- Places the moon emoji button in the **top-right corner**
- Makes it look clean (no background/border)
- Adds a **zoom effect** when you hover over it

```

.toggle-wrapper {
  display: flex;
  justify-content: flex-end;
  margin-bottom: 10px;
}

```

- Aligns the toggle button to the **right side**

## DARK MODE STYLING

```

.dark-mode {
  background: linear-gradient(135deg, #0a0a0a, #041e14, #033023);
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-size: cover;
  color: white;
}

```

- Changes the **page background** to a dark green/black gradient
- Sets **text color** to white

```

.dark-mode .container {
  background-color: rgb(5, 33, 33);
  box-shadow: none;
}
.dark-mode .black-circle {
  background-color: black;
}
.dark-mode input[type="date"],
.dark-mode button {
  background-color: black;
  color: white;
  border-color: #444;
}
.dark-mode .circle-box {
  background-color: black;
  color: white;
}

```

- Adjusts container, buttons, circles, and date input to match **dark mode**

## MAIN CONTAINER

```
.container {  
  max-width: 550px;  
  margin: 30px auto;  
  padding: 20px;  
  background-color: whitesmoke;  
  border-radius: 12px;  
  box-shadow: 0 0 15px rgba(0, 0, 0, 0.2);  
}
```

- Creates a **white card** in the center
- Adds padding, rounded corners, and shadow for a modern look

## LAYOUT STRUCTURE

```
.age-container {  
  display: flex;  
  align-items: flex-start;  
  gap: 15px;  
}  
.left-column {  
  display: flex;  
  flex-direction: column;  
  gap: 20px;  
  width: 180px;  
}  
.right-stack {  
  display: flex;  
  flex-direction: column;  
  align-items: center;  
  flex: 1;  
}
```

- Makes the layout a **two-column design** (left for stats, right for input/results)
- Uses flex to space and stack items properly

## STATS BOXES (LEFT COLUMN)

```
.circle-box {  
  background: white;  
  padding: 15px;  
  border-radius: 10px;  
  text-align: center;  
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);  
}
```

- White box with soft shadow and rounded corners for **Completed %** and **Next Birthday**

```
.progress {
  margin-top: 10px;
  margin-left: 20px;
  border: 2px solid #aaa;
  border-radius: 50%;
  width: 100px;
  height: 100px;
  display: flex;
  align-items: center;
  justify-content: center;
  font-weight: bold;
}
```

- Creates **round progress indicators**

## BLACK AGE CIRCLES (Years, Months, Days)

```
.black-circles {
  display: flex;
  justify-content: center;
  gap: 15px;
  margin-bottom: 5px;
}
.black-circle {
  width: 100px;
  height: 100px;
  background-color: black;
  color: white;
  border-radius: 50%;
  display: flex;
  flex-direction: column;
  align-items: center;
  justify-content: center;
  font-size: 20px;
}
```

- Displays **3 black circular boxes** in a row
- Shows the user's **years, months, and days**

## INPUT & BUTTON SECTION

```
.right-column {
  display: flex;
  flex-direction: column;
  align-items: center;
  gap: 10px;
  margin-top: 0;
  flex: 1;
}
.input-group {
  display: flex;
  gap: 10px;
  margin-bottom: 10px;
}
```

```
input[type="date"] {
  padding: 10px;
  font-size: 16px;
  width: 200px;
  border: 2px solid #000;
  border-radius: 8px;
}
```

- Styles the **date input** and makes it look neat

```
button {
  padding: 10px 20px;
  font-size: 16px;
  background-color: #007bff;
  color: white;
  border: none;
  border-radius: 8px;
  cursor: pointer;
}
button:hover {
  background-color: #0056b3;
}
```

- Styles the **buttons** (blue background, white text)
- On hover, button turns **darker blue**

```
.btn-group {
  display: flex;
  gap: 10px;
  margin: 10px 0;
}
.result {
  font-size: 18px;
  font-weight: bold;
  text-align: center;
}
```

- Arranges the **Copy/Print buttons**
- Styles the **result text** that shows your age

## SCRIPT.JS

### 1. Function: `calculateAge()`

This is the main function that runs when the user selects a date and clicks the button.

```
const dob = document.getElementById("dob").value;
```

- Grabs the birthdate selected by the user.

```
if (!dob) return alert("Please select your date of birth!");
```

- If no date is selected, it shows an alert: "Please select your date of birth!"

## Step-by-step Age Calculation

```
const birthDate = new Date(dob);
const today = new Date();
```

- Converts the user's birthdate into a real Date object.
- Gets today's date.

```
let years = today.getFullYear() - birthDate.getFullYear();
let months = today.getMonth() - birthDate.getMonth();
let days = today.getDate() - birthDate.getDate();
```

- Calculates **difference in years, months, and days** between today and the birthdate.

## Handling Negative Days or Months

```
if (days < 0) {
  months--;
  days += new Date(today.getFullYear(), today.getMonth(), 0).getDate();
}
```

- If the **day is negative**, borrow days from the previous month.

```
if (months < 0) {
  years--;
  months += 12;
}
```

- If **months are negative**, subtract a year and adjust months.

## Convert Age to Total Months

```
const totalMonths = years * 12 + months;
```

- Just multiplying years by 12 and adding extra months = total age in months.

## Display the Results on Screen

```
document.querySelector(".years").textContent = years;
document.querySelector(".months").textContent = months;
document.querySelector(".days").textContent = days;
```

- Sets values inside the black circles for Years, Months, and Days.

```
document.getElementById("age-result").textContent = `YOUR AGE IS: ${years} Years ${months} Months
${days} Days`;
document.getElementById("age-months-result").textContent = `YOUR AGE IN MONTH IS: ${totalMonths}
Months`;
```

- Shows age results in full sentence form under the input.

## Next Birthday Countdown

```
const nextBirthday = new Date(today.getFullYear(), birthDate.getMonth(), birthDate.getDate());
if (nextBirthday < today) nextBirthday.setFullYear(today.getFullYear() + 1);
```

- Creates a date for your **next birthday**.
- If this year's birthday already passed, move it to next year.

```
const diffTime = nextBirthday - today;
const diffDays = Math.ceil(diffTime / (1000 * 60 * 60 * 24));
document.getElementById("next-birthday").textContent = `${diffDays} days`;
```

- Calculates how many **days are left** until your next birthday and displays it.

## Percentage of Year Completed Since Last Birthday

```
const yearStart = new Date(today.getFullYear(), birthDate.getMonth(), birthDate.getDate());
const nextYear = new Date(yearStart);
nextYear.setFullYear(yearStart.getFullYear() + 1);
```

- yearStart: the birthday this year.
- nextYear: birthday next year.

```
const completedPercent = ((1 - (nextBirthday - today) / (nextYear - yearStart)) * 100).toFixed(1);
document.getElementById("completed").textContent = `${completedPercent}%`;
```

- Calculates how much of the year has passed **since your last birthday** (in %).
- Example: If it says 70%, it means 70% of the year is completed from your birthday to the next one.

## 2. Function: `copyToClipboard()`

```
const ageText = document.getElementById("age-result").textContent + '\n' + document.getElementById("age-months-result").textContent;
navigator.clipboard.writeText(ageText);
alert("Copied to clipboard!");
```

- Combines the age in words and months.
- **Copies** that text to your clipboard.
- Shows alert: *Copied to clipboard!*

## 3. Dark Mode Toggle Button

```
const toggleBtn = document.getElementById('toggleTheme');
const body = document.body;
```

```
toggleBtn.addEventListener('click', () => {
  body.classList.toggle('dark-mode');
```



- When you **click the moon or sun emoji**, it adds or removes the dark-mode class to the body.
- This changes the theme.

```
if (body.classList.contains('dark-mode')) {  
  toggleBtn.textContent = "☀️"; // Light mode emoji  
} else {  
  toggleBtn.textContent = "🌙"; // Dark mode emoji  
}
```

- Switches the emoji to **for light mode** or **for dark mode**.