JavaScript Date & Time Cheatsheet

UTC (Coordinated Universal Time)

- Standard universal time, used in APIs, databases, and systems like ISS.
- 'Z' in ISO strings = UTC.

Basic Usage

const myDate = new Date();

Common Methods

- myDate.toISOString() -> UTC ISO string (e.g., 2025-05-02T19:34:51.292Z)
- myDate.toJSON() -> Same as toISOString()
- myDate.toLocaleString('en-GB') -> Local readable string (e.g., 03/05/2025, 06:30 PM)
- myDate.toLocaleDateString() -> Only date part
- myDate.toString() -> Full local time string
- myDate.toUTCString() -> Full UTC time string

Extracting Components

- getFullYear(), getMonth(), getDate(), getDay()
- getHours(), getMinutes(), getSeconds()
- getTimezoneOffset() -> Minutes difference from UTC

Real-World Use Cases

- Dates shown in user's locale **Timezone Management** - UTC storage, local display Scheduling - Alarms, calendars, reminders **Date Comparisons** - Subtracting dates to get duration Forms & Inputs - <input type="date"> uses Date parsing Logging - Store UTC time for consistency **Database Integration** - Store and parse UTC timestamps Note: - Always parse backend dates with new Date(isoDate) - Display using locale for best user experience

Backend Communication

UI Display

- Dates sent/received in UTC ISO format