

## **Month 2 Summary — Days 1–3**

### **JavaScript Foundations: Execution, Events, and State**

#### **Core Mental Model**

HTML creates structure. CSS controls appearance. JavaScript controls behavior over time.

JavaScript waits, listens, and reacts.

#### **Day 1 — JavaScript Execution**

JavaScript does not run by itself. HTML is the entry point.

JS executes top to bottom when loaded.

console.log is for developers, not users.

Errors stop execution and provide information.

#### **Day 2 — Events**

An event is a signal that something happened.

JavaScript listens for events and reacts.

querySelector returns null if nothing is found.

Acting on null causes runtime errors.

#### **Day 3 — State**

State is memory.

State allows behavior to change over time.

Booleans are commonly used for toggles.

let allows reassignment; const does not.

#### **The Core Interactivity Loop**

Event → runs logic

Logic → checks state

State → decides behavior

Behavior → updates the DOM

## **Outcome**

You can now predict JavaScript behavior, debug calmly, design simple interactions, and explain why code works or fails.