Understanding the Rest of the switch Statement

Now that we've covered the basics of a switch statement, let's look at **why we use break; and default:.**

Why Do We Need break;?

- When a **match is found**, JavaScript executes the code **below that case**.
- However, **without break;**, JavaScript **keeps running all the cases** that follow—even if they don't match!

Example Without break; (Bad Code)

```
let dayOfWk = "Sat";

switch (dayOfWk) {
  case "Sat":
    alert("Whoopee!");
  case "Sun":
    alert("Whoopee!");
  case "Fri":
    alert("TGIF!");
  default:
    alert("Shoot me now!");
}
```

What Happens?

If dayOfWk = "Sat", **all alerts will run!**

- It will show "Whoopee!" (for "Sat").
- Then "Whoopee!" again (for "Sun").
- Then "TGIF!".
- Then "Shoot me now!".

This is called **"fall-through" behavior**, and it usually causes **bugs**.

How break; Fixes This

A break; **stops execution** after a matching case.

Fixed Code:

```
let dayOfWk = "Sat";

switch (dayOfWk) {
  case "Sat":
    alert("Whoopee!");
    break;
  case "Sun":
    alert("Whoopee!");
    break;
  case "Fri":
    alert("TGIF!");
    break;
  default:
    alert("Shoot me now!");
}
```

Now, if dayOfWk = "Sat", only **one** alert will show.

What is default:?

- The default: case **runs if no other case matches.**

- It works **like else in an if-else statement.**
- It usually **doesn't need a break;** because it's the last case.

Example:

let dayOfWk = "Monday";

switch (dayOfWk) {
  case "Sat":
  case "Sun":
    alert("Whoopee!");
    break;
  case "Fri":
    alert("TGIF!");
    break;
  default:
    alert("Shoot me now!");
}

☞ Since "Monday" doesn't match any case, the "Shoot me now!" alert will run.

When Should You Use switch?

✅ When checking **one variable** against **multiple values**.

✅ When you have **a lot of if-else conditions**.

✅ When all conditions **check for exact matches (===)**.

Final Summary

1. switch is cleaner than if-else for multiple conditions.
2. Use break; to **stop execution** after a match.
3. Use default: as a **fallback** (like else).
4. If you **forget break;**, all cases below the match will **run unintentionally**.