MAKING DECISIONS

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AFTER THIS PRESENTATION

- You'll be able to make decisions using `if` statements

- You'll be able to make decisions using `switch` statements

WE WILL LOOK AT

if   switch … case

if … else   default

if … else if …

if … else if … else

MAKING DECISIONS

- `if` is used similar to regular English

- Lots of variations e.g.
  ```
  if
  if … else
  if … else if … else
  if … else if … else if … else
  ```

COMPARING THINGS

- <   is less than

- <=   is less than or equal to

- >   is greater than

- >=   is greater than or equal to

- ==   is equal to

- !=   is not equal to

EXAMPLE

```html
<!doctype html>
<html>
  <head><script>
    var user_name;

    user_name=prompt("What is your name?");
    if (user_name == "dave")
      alert("Great name!");
  </script></head>
</html>
```

USING BRACES

- You must use braces { } for more than 1 line of code:

```
if (user_name == "dave" ) {
    alert("Great name!");
    awesome_name=true;
}
```

- Braces are optional if there is only one line of code

IF ... ELSE

- `else` goes at the end of the `if`

- It handles any situation not already handled at that point

```
<!doctype html>
<html>
  <head><script>
    var user_name;

    user_name=prompt("What is your name?");
    if (user_name == "dave")
      alert("Great name!");
    else
      alert("Your name isn't great...");
  </script></head>
</html>
```

IF ... ELSE IF

- Use `else if` to add another test

- You can do this as many times as you like

```
<!doctype html>
<html>
  <head><script>
    var user_name;

    user_name=prompt("What is your name?");
    if (user_name == "dave")
      alert("Great name!");
    else if (user_name == "jogesh")
      alert("Pretty good name!");
  </script></head>
</html>
```

IF ... ELSE IF ... ELSE

- Here's an example of everything working together

```
<!doctype html>
<html><head><script>
  var user_name;

  user_name=prompt("What is your name?");
  if (user_name == "dave")
    alert("Great name!");
  else if (user_name == "jogesh")
    alert("Pretty good name!");
  else if (user_name == "oz")
    alert("Excellent name!");
  else
    alert("Your name isn't great, never mind...");
</script></head></html>
```

SWITCH

- Used for a series of comparisons:

```
switch(variable_name) {
    case "option_1": do_something_1();
                     break;


            . . .  :  . . .

    case "option_n": do_something_n();
                     break;

            default:  do_something_default();
}
```

```
<!doctype html>
<html>
    <head>
        <script>
        var user_name=prompt("What is your name?");

        switch(user_name) {
            case "dave":
                alert("Great name!");
                break;
            case "jogesh":
                alert("Pretty good name!");
                break;
            default:
                alert("Your name isn't great, never mind...");
        }
        </script>
    </head>
</html>
```

SWITCH

- break is used to stop any more `case` comparisons

- Sometimes break is appropriate, sometimes it isn't

```html
<!doctype html>
<html>
    <head>
        <script>
        var user_name=prompt("What country would you like to visit?");
        switch(user_name) {
            case "Canada":
            case "France":
                alert("Take me also!");
                break;
            case "Japan":
            case "Philippines":
                alert("Great! Have fun!");
                break;
            case "North Korea":
                alert("Oh! Good luck!");
                break;
            default:
                alert("I am sure you will have a great time");
        }
        </script>
    </head>
</html>
```