

MAKING DECISIONS

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

```
<!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


```
<!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>
```

