About Conditionals

Module1 – JS - Handout 4

If..else

- The if...else is a type of conditional statement that will execute a block of code when the condition in the if statement is true.
- If the condition is false, then the else block will be executed
- Any value that is not defined as false would be considered true in JavaScript.
- Here is a list of values that would evaluate to false:
    - false
    - 0 (zero)
    - -0 (negative zero)
    - "", '', `` (empty string)
    - null
    - undefined
    - NaN (not a number)

Example

```
const age = 18;

if (age >= 18) {
  console.log("You can vote!");
} else {
  console.log("Sorry , you cannot vote.");
}
```

If ..elseif..else

- When we want to test multiple conditions.
- if statement is false, then the pointer will move onto the else if statement. If that is also false, then it will move onto the else block

Syntax

```
if (condition 1 is true) {
  // code is executed
} else if (condition 2 is true) {
  // code is executed
} else {
  // code is executed
}
```

Examples

```
const age = 18;
if (age < 18) {
  console.log("Alice is under 18 years old.");
} else if (age >= 18 && age <= 21) {
  console.log("Alice is between the ages of 18 and 21.");
} else {
  console.log("Alice is over 21 years old.");
}
```

Switch or If/Else (which one to choose)

- switch statements can have a cleaner syntax over complicated if else statements.
- if you feel like the if else statements are long and complicated, then a switch statement could be an alternative option.

Examples

```
const pet = "dog";
if (pet === "lizard") {
  console.log("I own a lizard");
} else if (pet === "dog") {
  console.log("I own a dog");
} else if (pet === "cat") {
  console.log("I own a cat");
} else if (pet === "snake") {
  console.log("I own a snake");
} else if (pet === "parrot") {
  console.log("I own a parrot");
} else {
  console.log("I don't own a pet");
}
```

Instead go for switch -

```
const pet = "dog";
switch (pet) {
  case "lizard":
    console.log("I own a lizard");
    break;
  case "dog":
    console.log("I own a dog");
    break;
  case "cat":
    console.log("I own a cat");
    break;
  case "snake":
    console.log("I own a snake");
    break;
  case "parrot":
    console.log("I own a parrot");
    break;
  default:
    console.log("I don't own a pet");
    break;
}
```

Ternary

- The ternary operator is a conditional operator which evaluates either of two expressions – a true expression and a false expression – based on a conditional expression that you provide

Syntax

condition ? trueExpression : falseExpression

Examples

Example1 --

```
const score = 80

const scoreRating =

 score > 70 ? "Excellent" : "Do better"

console.log(scoreRating)

// Excellent
```

Example2—

```
function printPoor() {

 console.log("Poor result")

 return "poor"

}

function printSuccess() {

 console.log("Nice result")

 return "success"

}

const pass = false;

const result = pass ? printSuccess() : printPoor()

// Poor result (console.log executed)

console.log(result)

// poor
```