

## 3 – Control Structures

1. Create a popup box that asks for a yes or no answer.
  - Output the user's response to the console.
  - Test all possible user options (there are 3) to see what value is returned.

2. Create a popup that accepts a string of text.
  - Output the user's input to the console.
  - Test all possible user options to see what values are returned.
  - Next, add the following code line and enter 4 in the prompt box.

```
if(userInput == 4){alert();}
```

- Now, run the following line:

```
if(userInput === 4){alert();}
```

Why doesn't the popup appear?

3. Create a popup box that asks the user, "Are you sure you want to delete this file?"
  - If the user clicks OK, send a popup with the message, "File deleted", otherwise, nothing happens.
4. Create a series of `if/else if/ else` statements to handle the following:
  - The user is asked, "What is the probability of precipitation?"
  - If the number entered is less than 30, a popup message says, "Looks like a beautiful day."
  - If the number entered is 30 or greater and less than 60, a popup message says, "Better take an umbrella - just in case."
  - If the number is 60 or greater, a popup message says, "Looks like a beautiful day to stay inside."

NB: Because `prompt()` returns a string, we need to turn the character into a number. In JavaScript, we can do that with a special function: `parseInt()`. It turns a string into an integer. Here's how to use it:

```
var userNumber = prompt("Pick a number", "1-10");  
var userInteger = parseInt(userNumber);
```

Now, `userInteger` holds the string we got from the user, turned into a number.

5. Create the logic that accepts a course code (from Web Development) and returns the name of the teacher for that course.

- A popup asks the user, "Please enter the four digit course code from the HTTP program."
- The logic should check the input against the five known course codes and send a message that says, "NAMEOFTEACHER teaches COURSECODE" where the words in uppercase are the values for the entered course code.
- Your logic should also handle invalid input: "You have not entered a valid course code for the HTTP program."
- For an extra challenge, use variables for the teacher names.

My answers are below...

===== ANSWERS =====

1.

```
var userInput = confirm("Yes or no?");  
console.log(userInput);  
Cancel = false      X = false      OK = true
```

2.

```
var userInput = prompt("Enter text...");  
console.log(userInput);  
Cancel = null      X = null      OK (without text added) = an empty string : ""  
OK (with text added) = the string of entered characters - even a single space.
```

**Why doesn't the popup appear?** Knowing that `prompt()` returns a *string*, the first example works because there are only two equal signs. JavaScript assumes the input should be the

number 4. The second example has three equal signs and checks for data type. It compares the *string* 4 with the *number* 4 and returns *false*.

3.

```
var userConfirm = confirm("Are you sure you want to delete
this?");

if (userConfirm === true) {
    alert("File deleted");
}
```

4.

```
//VARIABLES
var outMessage;
var niceMessage = "Looks like a beautiful day.";
var maybeMessage = "Better take an umbrella - just in case.";
var rainMessage = "Looks like a beautiful day to stay inside.";
var popIn;

//LOGIC
//GET POP FROM USER
popIn = prompt("What is the probability of precipitation? ");
popInInt = parseInt(popIn);

//ASSIGN OUTPUT MESSAGE BASED ON VALUE
if ( popInInt < 30) {
    outMessage = niceMessage;
}
else if (popInInt >= 30 && popInInt < 60) {
    outMessage = maybeMessage;
} else {
    outMessage = rainMessage;
}

//SEND OUTPUT MESSAGE TO USER
alert(outMessage);
```

5.

```
//VARIABLES
var userCode;
var outMessage;
```

```
var teach1 = "Rajiv Verma";
var teach2 = "Bernie Monette";
var teach3 = "Sean Doyle";
var teach4 = "Joanna Kommala";
var teach5 = "Bill Wright";

//LOGIC
//GET COURSE CODE FROM USER
userCode = prompt("Please enter the four digit course code from
the HTTP program.");

//COMPARE CODE TO KNOWN CODES & ASSIGN TEACHER NAME IF VALID
switch (userCode) {
    case "5101":
        outMessage = teach1 + " teaches " + userCode + ".";
        break;

    case "5102":
        outMessage = teach2 + " teaches " + userCode + ".";
        break;

    case "5103":
        outMessage = teach3 + " teaches " + userCode + ".";
        break;

    case "5104":
        outMessage = teach4 + " teaches " + userCode + ".";
        break;

    case "5105":
        outMessage = teach5 + " teaches " + userCode + ".";
        break;

    default:
        outMessage = "You did not enter a valid code.";
        break;
} //END SWITCH

//SEND MESSAGE TO USER
alert(outMessage);
```