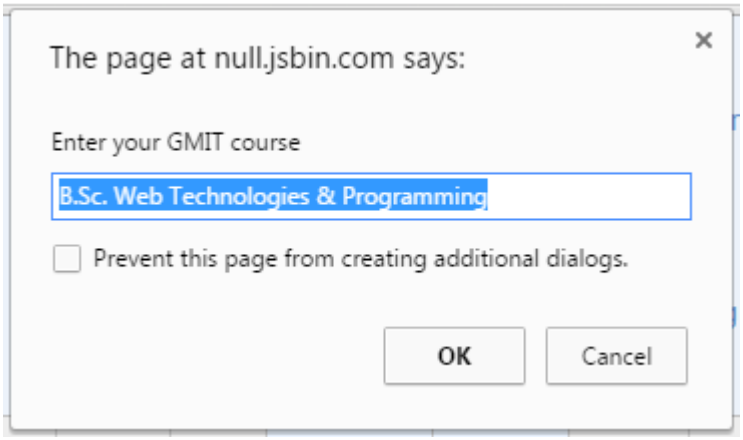
Cross-Platform Mobile Application Development

Lab 1 JavaScript

Exercise 1

- Use the following website to write your JavaScript code:
  https://jsbin.com/?js,console
  You should save all your work yourself.

- Output the length of your name.
  console.log("James".length);
- Output the result of the following sum: 3+3+1.
  console.log(3+3+1);
- Put the following comment in the above code: This is my first comment.
  // This is my first comment
- Display a message box saying “Hello World”.
  confirm("Hello World");
- Display a message box asking the user to enter his or her GMIT course.
  prompt("Enter your GMIT course");
- Display a message box asking the user to enter his or her GMIT course, but this time the default course displayed should be “B.Sc. Web Technologies & Programming” as shown:




```
prompt("Enter your GMIT course","B.Sc. Web Technologies & Programming");
```

- Using the code above, print out the user's course to the console.
  console.log(prompt("Enter your GMIT course","B.Sc. Web Technologies & Programming"));
- If the user presses Cancel instead of OK on the message box, print out "The user didn't answer the question" to the console.
  var a= prompt("Enter your GMIT course","B.Sc. Web Technologies & Programming");

  if (a===null)
  {console.log("The user didn't answer the question");}
- Add code so that if a user enters an empty string "The user didn't enter any course" is written to the console.
  ……
  else if (a===""){
  console.log("The user didn't enter any course");
  }
- Print out the length of the following string "The quick brown fox jumps over the lazy dog" in a message box.
  The message box shouldn't allow the user to enter any information.
  alert("The quick brown fox jumps over the lazy dog".length);
- Modify the above code so that the message box is only shown if the length of the string is between 40 and 42 characters
  var a=("The quick brown fox jumps over the lazy dg".length);

  if (a>=40 && a<=42)
  {
  alert(a);
  }

- Fill in the following code so that the statements always print "true".

```
console.log(15 > 4);
console.log("Galway, Co. Galway,
Ireland".length<122);
console.log("The year is 2016".length > 8);
console.log(8*2 === 16);
```

- Write some JavaScript code that asks the user to enter a string.
  If the length of the string is less than 5 characters inform the user that he or she entered a small string.
  If the length of the string is greater than 5 characters inform the user that he or she entered a big string.
  If the length of the string is 5 characters, inform the user that he or she entered a 5 character string.
  If the length of the string is greater than 10 characters, inform the user that he or she entered a very large string.
  What can happen when running this program that can cause it to crash? Solve the issue.

```
var string = prompt("Please enter string here").length

if (string < 5)
  {
    console.log("You entered a small string");
  }
else if (string==5)
  {
    console.log("You entered a 5 character string");
  }
else if (string >10)
  {
    console.log("You entered a very large string");
  }
else {
  console.log("You entered a big string");
}
```

- Correct the errors in the code below. Assume that the user always enters a number for age.

```
var name = prompt("Enter your Name");
var age = prompt("Enter your Age");
var college = prompt("Enter your college");

if (name.length > 10)
 {
 console.log("You have a long name");
 }
else
 {
 console.log("You have a short name");
 }

if (college === "GMIT") {
 console.log("Welcome to GMIT " + name);
 age++;
 console.log("You will graduate when you are " +
                                        age + " years old");
} else {
 console.log("Welcome to another college " + name);
}
```

- Ask the user to enter a number (assume it will always be an integer (a whole number)) and tell him or her if it is odd or even.
    - HINT: Prompt always returns a String. To convert this to an integer use parseInt().
    - HINT: For determining odd or even use the modulus (%) operator.

```
var num = parseInt(prompt("Please enter a whole num here"));
if (num%2)
 {
   console.log("The num is odd");
 }
else
 {
   console.log("The num is even");
 }

console.log(num);
```

- Extend the above program to handle the case where the user enters a string. Assume only integer numbers will be entered.
    - HINT: Use the isNaN() (is Not A Number) function.

```
var x=prompt("Please enter a whole num here");
var num = parseInt(x);
var check=isNaN(num);

while(check)
 {
  alert("Please enter a whole number only, Not a string like "+x);
  x=prompt("Please enter a whole num here");
  num = parseInt(x);
  check=isNaN(num);
  // noprotect
 }
if (num%2)
 {
  console.log(num+" is odd");
 }
else
 {
  console.log(num+" is even");
 }
```