



**Maynooth
University**

National University
of Ireland Maynooth

**SEMESTER 2
2021-2022**

**CS230FZ
Web Information Processing**

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Time allowed: 2 hours

Answer at least three questions

Your marks will be based on your best *three* answers

All questions carry equal marks

Instructions

	Yes	No
Log Books Allowed	<input type="checkbox"/>	<input type="checkbox"/>
Formula Tables Allowed	<input type="checkbox"/>	<input type="checkbox"/>
Other Allowed (<i>enter details</i>)	<input type="checkbox"/>	<input type="checkbox"/>

General (*enter detail*)

QUESTION 1

- (a) Fill the numbered blanks below to achieve the following effects.

(6 marks)

Look! Styles and colors

This text is in Verdana and red

This text is **30** pixels high

```
<html>
<body>
<h1>Look! Styles and <__ 1 __>colors<__ 2 __></h1>
<p style="__ 3 __;color:red">
  This text is in Verdana and red</p>
<p style="__ 4 __">This text is <__ 5 __>30<__ 6 __> pixels high</p>
</body>
</html>
```

- (b) Show how to fill the numbered blanks below in order to complete the form as follows: (8 marks)

name:

FZU

gender: ☒ Male ☐ Female

hobbies: ☒ running ☒ swimming

Self-evaluation: (1 to 5) :

Submit

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<form>
```

```
  name:<br>
```

```
  <input type="_____ 1 _____" name="name" value="_____ 2 _____">
```

```
  <br>
```

```
  gender:
```

```
  <input type="_____ 3 _____" name="gender" value="male" _____ 4 _____>
```

```
  Male
```

```
  <input type="radio" name="gender" value="female"> Female
```

```
  <br>
```

```
  hobbies:
```

```
  <input type="checkbox" checked="">running
```

```
  <input type="_____ 5 _____" checked="">swimming
```

```
  <br>
```

```
  Self-evaluation: (1 to 5) :
```

```
  <input type="_____ 6 _____" name="quantity" _____ 7 _____="1" max="5">
```

```
  <br>
```

```
  <input type="_____ 8 _____" value="Submit">
```

```
</form>
```

```
</body>
```

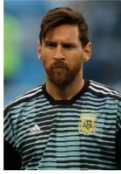
```
</html>
```

(c) Fill the numbered blanks to make the display appear as shown:

(6 marks)

Lionel Messi

Lionel Andrés Messi,also known as Leo Messi,is an Argentine professional footballer who plays as a forward for Ligue 1 club Paris Saint-Germain and captains the Argentina national team.



He won the 2021 Copa América,while winning the Golden Ball and Golden Boot award for the latter.This achievement would see him receive a record seventh Ballon d'Or in 2021.

[Go to Wikipedia to learn more](https://en.wikipedia.org/wiki/Lionel_Messi)

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <meta charset="utf-8">
```

```
    <title></title>
```

```
</head>
```

```
<body>
```

```
<h2>Lionel Messi</h2>
```

Lionel Andrés Messi,also known as Leo Messi,is an Argentine professional footballer who plays as a forward for Ligue 1 club Paris Saint-Germain and captains the Argentina national team.

```
<br/>
```

```
<____ 1 ____="images/messi.jpg">
```

```
<br/>
```

He won the 2021 Copa América,while winning the Golden Ball and Golden Boot award for the latter.This achievement would see him receive a record seventh Ballon d'Or in 2021.

```
<br/>
```

```
<____ 2 ____="https://en.wikipedia.org/wiki/Lionel_Messi">
```

```
    Go to Wikipedia to learn more <____ 3 ____>
```

```
</body>
```

```
</html>
```

QUESTION 2

- (a) Write html code to implement the content shown in the image. (6 marks)

title 1

title 2

Paragraph: FZU

- (b) Use HTML to implement the following definition list. (6 marks)

Coffee

- black hot drink

Milk

- white cold drink

```
<!DOCTYPE html>
<html>
<body>
/**Please write your code here**/
</body>
</html>
```

- (c) Use HTML to implement the following table. (8 marks)

Row1	Row2	Row3
• Coffee	Col2row1	Col2row3
• Milk	Col3row1	Col3row3
Col4		

```
<!DOCTYPE html>
<html>
<body>
/**Please write your code here**/
</body>
</html>
```

QUESTION 3

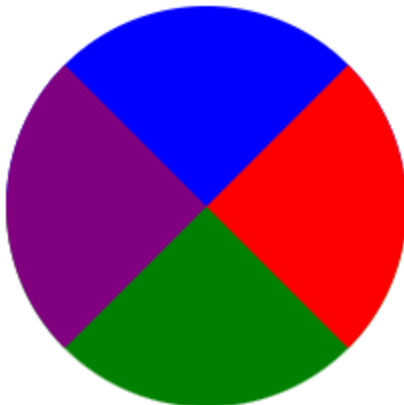
- (a) Use the **border** and **margin** attributes to complete the CSS code below in order to center the rectangle horizontally. (Note that the colour of the rectangle is red.) (6 marks)

Result:



```
<style>
.mid {
/** Please write your code here **/
height: 50px;
width: 80
}
</style>
<div class="mid"></div>
```

- (b) Complete the CSS code below to draw a circle as shown in the figure below. (You can use **border-*** to achieve it.) (6 marks)



```
<div class="circle"></div>
<style>
.circle {
/** Please write your code here. **/
border-color: blue red green purple;
}
</style>
```

- (c) Using Flexible Box to implement a web page layout as shown in the figure (8 marks)
below, Unspecified sizes are all 100%. (the background colours of the three
areas on the left, middle and right are green, red and pink respectively.)



```
<body>
<div class="container">
  <div class="left">Left</div>
  <div class="main">Mid</div>
  <div class="right">Right</div>
</div>
</body>
<style>
  /** Please write your code here. **/
</style>
```

QUESTION 4

- (a) What is the colour of the `<p>` tag in the CSS code given below. (4 marks)

```
<style>
  body {color: #333;}
  #text {color: #368;}
  .content {color: #f00;}
</style>
</head>
<body>
  <p id='text' class="content">Hello,world!</p>
</body>
```

- (b) Complete the following CSS code to center the floating element horizontally as shown in the following figure (Note that the colour of outer is #CCC) (6 marks)



```
<div class="outer">
  <span>Hello World</span>
</div>
<style>
  .outer {
    /** Write your code here. */
  }
  Span{
    float: left;
    position: ____;
    top: 50%;
    left: 50%;
    transform: translate(-50%, -50%);
  }
</style>
```

- (c) Please use the <a> tag related attributes to complete the following requirements. When the link is visited before and after, the link is not underlined; when the mouse is hovered over or clicked on the link, the link is underlined. (10 marks)

```
<style>
/** Please write your code here */
</style>
<body>
<a href=" " >This is a link.</a >
</body>
```


QUESTION 5

- (a) Add appropriate code to the following code snippet to make the program run as shown.

- (i) Please loop through the properties of the object "person" and display the result. (5 marks)

Result:

MichaelJackson111-111-111Queen54

```
<script>
function myFunction(){
    var x;
    var txt="";
    var
person={ fname:"Michael",lname:"Jackson",phoneNUmber:"111-111-
111",address:"Queen54"};
    for ("____1____"){
        "____2____";
    }
    document.getElementById("demo").innerHTML=txt;
}
</script>
```

- (ii) Please add "oranges" at the end of the array, then reverse the array and remove the last element. (5 marks)

Orange,Pear,Strawberry,Apple

```
<script>
var fruits = ["Watermelon", "Apple", "Strawberry", "Pear"];
function myFunction(){
    [____1____]; // write your code here
    [____2____]; // write your code here
    [____3____]; // write your code here
    var x=document.getElementById("demo");
    x.innerHTML=fruits;
}
</script>
```

- (b) Extend the JavaScript code given below to achieve the following effects: (10 marks)

When the mobile phone box loses focus, determine whether the data in the input box satisfies the following three conditions: (1) The mobile phone number cannot be empty, if not, it will prompt "Mobile phone number cannot be empty" below the input box. (2) The mobile phone number is composed of eleven digits, if not, it will prompt "Please enter a valid mobile phone number with eleven digits" at the bottom of the input box. (3) The mobile phone number can only start with the numbers 13, 15, and 18, if not, it will prompt "Please enter a valid mobile phone number" at the bottom of the input box.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Test</title>
</head>
<body>
<label for="phone">Mobile phone:</label><br>
<input id="phone" type="text" onblur="validatemobile()">
<br>
<p id="msg"></p>  <!-- Prompt text is here -->
</body>
</html>
<script type="text/javascript">
  // write your code here ...
  //...
</script>
```