## SUBJECT: HUMAN MACHINE INTERACTION

## **Experiment No.02**

Roll No.: A-40	Name: Nahush Kulkarni
Class: BE-A	Batch: A3
Date of Experiment:	Date of Submission:
Grade:	

## **B.1** Tools used to develop application:

Visual Studio Code, Notepad ++, Google Chrome

### **B.2** Choice of User Interface Elements:

Tables, Buttons, Images

## **B.3 Sample Source code of application:**

### **Index.html**

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initialscale=1.0">
<title>HMI EXPT 02</title>
<style>
#heading{
text-align: center;
color: blue;
border: 1px solid black;
padding: 10px;
}
h2{
text-align: center;
}
```

```
.question{
display: inline-block;
button{
margin-top: 10px;
margin-left: 20px;
background-color: rgb(82, 160, 34);
border: 1px solid rgb(82, 160, 34);
color: white;
padding: 8px 40px;
border-radius: 5%;
font-size: medium;
}
.left{
float: left;
margin-left: 20px;
}
.circle {
height: 200px;
width: 200px;
background-color: #8FBC8F;
border-radius: 50%;
.rectangle {
height: 150px;
width: 300px;
background-color: #CC99FF;
}
#table1{
width: 10%;
margin-left: 70%;
#table1 table, th, td {
border: 1px solid rgb(82, 160, 34);
border-collapse: collapse;
#table1 th{
background-color:rgb(82, 160, 34);
color: white;
```

```
#table1 td{
text-align: center;
height: 60px;
#table2{
width: 10%;
margin-left: 70%;
#table2 table, th, td {
/* border: 1px solid rgb(14, 14, 184); */
border-collapse: collapse;
#table2 th{
background-color: rgb(14, 14, 184);
color: white;
}
#table2 td{
text-align: center;
height: 60px;
}
</style>
</head>
<body>
<div>
<h1 style="text-align: center;">
<span id="heading" >
CLASS 1 - MATHS
</span>
</h1>
<h2>
Name the two dimensional shapes
</h2>
```

```
</div>
<div class="left">
<svg height="21" version="1.1" width="27"</pre>
xmlns="http://www.w3.org/2000/svg" class="practice-audio-
buttonsvg"><desc>Created with Snap</desc><defs></defs><!--?xml
version="1.0"
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1" xmlns="http://www.w3.org/2000/svg"</pre>
xmlns;xlink="http://www.w3.org/1999/xlink" x="0px" v="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-3.6c2.1-</pre>
2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8$1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8I-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3,6.9-11.9,6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-2.7,0.1-
3.810.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<h2 class="question"> &nbsp;1.What is the name of following shapes
?</h2>
<div class="circle">
</div>
<hr/>
<br/>br/>
<div class="answer-box">
<svg height="21" version="1.1" width="27"</pre>
```

```
xmlns="http://www.w3.org/2000/svg" class="practice-audio-
buttonsvg"><desc>Created with Snap</desc><defs></defs><!--?xml
version="1.0"
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1"</pre>
xmlns="http://www.w3.org/2000/svg"
xmlns;xlink="http://www.w3.org/1999/xlink" x="0px" v="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-</pre>
3.6c2.1-2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8s1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8I-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3.6.9-11.9.6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-
2.7,0.1-3.8I0.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<span>
<label for="answer"
style="font-size: 25px;"
>  Enter the answer in the below box :</label>
<br/>br/>
<br/>br/>
<input type="text" id="answer" name="answer"> &nbsp; Shape </span>
</div>
<br/>br/>
<br/>br/>
```

```
<hr/>
<br/>br/>
<br/>br/>
<svg height="21" version="1.1" width="27"</pre>
xmlns="http://www.w3.org/2000/svg" class="practice-audio-
buttonsvg"><desc>Created with Snap</desc><defs></defs><!--?xml
version="1.0"
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1" xmlns="http://www.w3.org/2000/svg"</pre>
xmlns:xlink="http://www.w3.org/1999/xlink" x="0px" y="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-3.6c2.1-</pre>
2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8$1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8I-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3,6.9-11.9,6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-2.7,0.1-
3.810.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<h2 class="question"> &nbsp;2.Name the two dimensional shape
?</h2>
<div class="rectangle"></div>
<br/>br/>
<hr/>
<div class="answer-box">
```

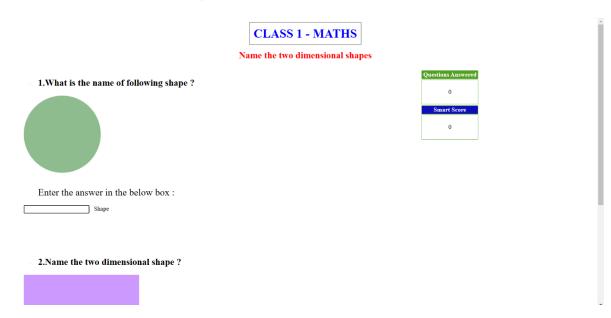
```
<svg height="21" version="1.1" width="27"</pre>
xmlns="http://www.w3.org/2000/svg" class="practice-audio-button-
svg"><desc>Created with Snap</desc><defs></defs><!--?xml version="1.0"
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1"</pre>
xmlns="http://www.w3.org/2000/svg"
xmlns;xlink="http://www.w3.org/1999/xlink" x="0px" v="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-</pre>
3.6c2.1-2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8s1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8I-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3,6.9-11.9,6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-
2.7,0.1-3.8I0.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<span>
<label for="answer"</pre>
style="font-size: 25px;"
>  Enter the answer in the below box :</label>
<br/>br/>
<br/>br/>
<input type="text" id="answer" name="answer"> &nbsp; Shape
</span>
</div>
<svg height="21" version="1.1" width="27"</pre>
```

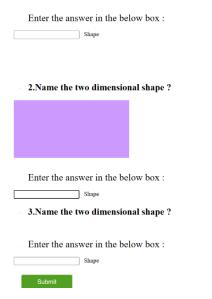
```
xmlns="http://www.w3.org/2000/svg" class="practice-audio-
buttonsvg"><desc>Created with Snap</desc><defs></defs><!--?xml
version="1.0"
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1" xmlns="http://www.w3.org/2000/svg"</pre>
xmlns:xlink="http://www.w3.org/1999/xlink" x="0px" y="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-3.6c2.1-</pre>
2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8$1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8l-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3,6.9-11.9,6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-2.7,0.1-
3.810.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<h2 class="question"> &nbsp;3.Name the two dimensional shape
?</h2>
<div class="Circle">
</div>
<hr/>
<br/>br/>
<div class="answer-box">
<svg height="21" version="1.1" width="27"</pre>
xmlns="http://www.w3.org/2000/svg" class="practice-audio-
buttonsvg"><desc>Created with Snap</desc><defs></defs><!--?xml
version="1.0"
```

```
encoding="utf-8"?-->
<!-- Generator: Adobe Illustrator 19.2.1, SVG Export Plug-In . SVG
Version: 6.00 Build 0) -->
<svg version="1.1" id="Layer 1"</pre>
xmlns="http://www.w3.org/2000/svg"
xmlns;xlink="http://www.w3.org/1999/xlink" x="0px" v="0px"
viewBox="0 0 60.6 48.1" width="27px" height="21px"
style="enablebackground:new 0 0 60.6 48.1;" xml:space="preserve">
<g class="audio speaker" style="fill: #00aeef">
<path d="M30.3,42.9c0,1.1-0.6,2-1.6,2.5c-0.4,0.2-0.8,0.3-1.2,0.3c0.6,0-1.2-0.2-</pre>
1.8-0.6l-15-12.4h-8
C1.2,32.7,0,31.5,0,30V18.9c0-1.5,1.2-2.7,2.7-2.7h8l15-12.4c0.8-
0.7,2-0.8,2.9-0.4c1,0.5,1.6,1.4,1.6,2.5L30.3,42.9z"></path>
</g>
<g class="audio waves" style="fill: #00aeef">
<path d="M40.7,38.5c-0.6,0-1.3-0.1-2.3-1c-1-0.9-1.1-2.5-0.3-</pre>
3.6c2.1-2.8,3.1-6.1,3.1-9.5c0-3.7-1.2-7.2-3.6-10.1
c-0.9-1.1-0.8-2.7,0.2-3.710.4-0.4c0.5-0.5,1.3-0.8,2.1-
0.8$1.5,0.4,2,1c3.2,4,4.9,8.8,4.9,13.9c0,4.8-1.5,9.3-4.4,13.1
C42.3,38.1,41.3,38.5,40.7,38.5z">
</path>
<path d="M52.2,47.1c-0.5,0.6-1.2,0.9-2,1h-0.1c-0.7,0-1.4-0.3-1.9-</pre>
0.8I-0.4-0.4c-1-1-1.1-2.6-0.2-3.7
c4.4-5.3,6.9-11.9,6.9-18.8c0-7.2-2.6-14-7.3-19.4c-1-1.1-0.9-
2.7,0.1-3.810.4-0.4c0.5-0.5,1.2-0.8,2-0.8s1.5,0.4,2,0.9
c5.7,6.4,8.9,14.8,8.9,23.4C60.5,32.7,57.6,40.8,52.2,47.1L52.2,47.1z">
</path>
</g>
</svg></svg>
<span>
<label for="answer"</pre>
style="font-size: 25px;"
>  Enter the answer in the below box :</label>
<br/>br/>
<br/>br/>
<input type="text" id="answer" name="answer"> &nbsp; Shape
</span>
<div style="margin-top: 15px;">
<button type="submit">Submit</button>
</div>
</div>
```

```
</div>
<div>
Questions Answered
Smart Score
</div>
</body>
</html>
```

# **B.4** User Interface Designs:





### **B.5** Conclusion:

The web application developed asks user to observe the given picture and to identify which of the following picture graph gives correct count of the objects asked in the question above. This mathematical application is made especially for children between ages 4-7 to teach them the basics of mathematics. Based on the correct answers, the user can also check his/her score out of 100.