

Roll No. \_\_\_\_\_

Exam No. \_\_\_\_\_

Dr D Y Patil Educational Enterprises Charitable Trust's

**DR D Y PATIL SCHOOL OF MCA**

Dr. D.Y. Patil Knowledge City, Charholi (Bk.), Via Lohegaon, Pune – 412105



**CERTIFICATE**

*This is to certify that*

*Mr./ Miss \_\_\_\_\_, Of Class  
MCA – First year (Sem- II) Div. \_\_\_\_\_ Roll No. \_\_\_\_\_ Has completed all the  
practical work in the subject Advanced Internet Technologies (IT23L)  
satisfactorily in the Department of MCA as prescribed by University of Pune, in  
the academic year 2022 – 2023.*

*University Seat No. \_\_\_\_\_*

Staff In-charge

Head of the Department

Director



Dr D Y Patil Educational Enterprises Charitable Trust's

## DR D Y PATIL SCHOOL OF MCA

Dr. D.Y. Patil Knowledge City, Charholi (Bk.), Via Lohegaon, Pune – 412105

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**LAB INNOVATION/ ADDITIONAL WORK IF ANY**

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**Assignment No.: 1**

**Title of Assignment: Create Resume by using HTML and HTML5 tags**

**Date:**

**Remark:**

**Sign :**

### **Problem Statement:**

Create an web base Application like create Resume by using all basic Html and HTML5 Tags.

### **Objective:**

- What is HTML5 ?
- What is basic Structure of HTML5 ?
- Understand and use the different basic Html tags in HTML5

### **Theory:**

#### **Basic Concept Html**

##### Evolution of Markup Languages

- Hypertext Markup Language (HTML) is a syntax used to format a text document on the web.
- These documents are interpreted by web browsers such as Internet Explorer and Netscape Navigator.
- HTML can be created as standard ASCII text with "tags" included to pass on extra information about character formatting and page layout to a web browser.
- What is HTML5?
- HTML5 is the latest and most enhanced version of HTML. Technically, HTML is not a programming language, but rather a markup language. In this tutorial, we will discuss the features of HTML5 and how to use it in practice.
- HTML5 is a cooperation between the World Wide Web Consortium (W3C) and the Web Hypertext Application Technology Working Group (WHATWG).
- The new standard incorporates features like video playback and drag-and-drop that have been previously dependent on third-party browser plug-ins such as Adobe Flash, Microsoft Silverlight, and Google Gears.

## ■ HTML5 Elements

- HTML5 elements are marked up using start tags and end tags. Tags are delimited using angle brackets with the tag name in between.
- HTML5 tag names are case insensitive and may be written in all uppercase or mixed case, although the most common convention is to stick with lowercase.
- Most of the elements contain some content like `<p>...</p>` contains a paragraph. Some elements, however, are forbidden from containing any content at all and these are known as void elements. For example, **br**, **hr**, **link**, **meta**, etc.
- Elements of an HTML document are denoted using HTML tags. An HTML tag usually consists of a left angle bracket (`<`) a tag name and a right angle bracket (`>`).
- Tags are also usually paired (e.g. `<P>` and `</P>`), the first is used to identify the beginning of the element and the second (usually `</tag name>`) identifies the end of the element.
- Some tags may also contain additional information. This information should be placed inside the angle brackets. For example, to display a paragraph using full justification use `<P ALIGN="justify">`.
- HTML documents have a minimum requirement of tags.
- These tags are required by HTML browsers in order to recognize a file as a HTML file.
- **The following is a summary of the required HTML tags:**

Begin Tag	End Tag	Summary
<code>&lt;html&gt;</code>	<code>&lt;/html&gt;</code>	This element informs HTML browsers that the following code contains HTML-coded information. The file extension .html also indicates an HTML document and must be used. You may replace.html by .htm if you are restricted to three digit file extensions.
<code>&lt;head&gt;</code>	<code>&lt;/head&gt;</code>	This element identifies the first section of your html. HTML is broken into two sections, the head and the body. The head section contains the title of your document, search engine information, and more advanced information such as Java functions.
<code>&lt;title&gt;</code>	<code>&lt;/title&gt;</code>	The title is not part of the document text. The title is usually used by the browser to label the display window. Some search engines also use the title to search on. The title should be kept short and sufficient to identify the document.
<code>&lt;body&gt;</code>	<code>&lt;/body&gt;</code>	The body element contains the contents of the document. Any information to be displayed in the document and any necessary formatting tags should be contained inside the body tags.

**Assignment No.:** 2

**Title of Assignment:** Program to implement Audio and Video features for your web page.

**Date:**

**Remark:**

**Sign :**

### **Problem Statement:**

Create an web base Program to implement Audio and Video features for your web page.

### **Objective:**

- What is Audio and video element in HTML5 ?
- What is basic Structure of Audio element in HTML5 ?
- What is basic Structure of Video element in HTML5 ?

### HTML5 - Audio Tag

The HTML5 <audio> and <video> tags make it simple to add media to a website. You need to set src attribute to identify the media source and include a controls attribute so the user can play and pause the media.

```
<html>
```

```
<body>
```

```
<audio controls autoplay>
```

```
<source src = "/html5/audio.ogg" type = "audio/ogg" />
```

```
<source src = "/html5/audio.wav" type = "audio/wav" />
```

Your browser does not support the <audio> element.

```
</audio>
```

```
</body>
```

```
</html>
```

## HTML5 video Element

The newly introduced HTML5 <video> element provides a standard way to embed video in web pages. However, the video element is relatively new, but it works in most of the modern web browsers.

Inserting video onto a web page was not relatively easy, because web browsers did not have a uniform standard for defining embedded media files like video.

To demonstrate some of the many ways of adding videos on web pages, from the latest HTML5 <video> element to the popular YouTube videos.

```
<video controls="controls" src="media/shuttle.mp4">
```

Your browser does not support the HTML5 Video element.

```
</video>
```

```
<video controls="controls">
```

```
<source src="media/mysong.mp4" type="video/mp4">
```

```
<source src="media/mysong.ogv" type="video/ogg">
```

Your browser does not support the HTML5 Video element.

```
</video>
```



**Assignment No.:** 3

**Title of Assignment:** Write HTML Programs design different geometrical shapes using Canvas and SVG (minimum 5 Shapes).

**Date:**

**Remark:**

**Sign :**

### **Problem Statement:**

Create HTML Programs to design different geometrical shapes using Canvas and SVG (minimum 5 Shapes)..

### **Objective:**

## Canvas

HTML5 element `<canvas>` gives you an easy and powerful way to draw graphics using JavaScript. It can be used to draw graphs, make photo compositions or do simple (and not so simple) animations.

- HTML5 element `<canvas>` gives you an easy and powerful way to draw graphics using JavaScript. It can be used to draw graphs, make photo compositions or do simple (and not so simple) animations.
- Here is a simple `<canvas>` element which has only two specific attributes width and height plus all the core HTML5 attributes like id, name and class, etc.
- `<canvas id = "mycanvas" width = "100" height = "100"></canvas>`
- You can easily find that `<canvas>` element in the DOM using `getElementById()` method as follows
- `var canvas = document.getElementById("mycanvas");`

```

<!DOCTYPE HTML>

<html>
  <head>

    <style>
      #mycanvas{border:1px solid red;}
    </style>
  </head>

  <body>
    <canvas id = "mycanvas" width = "100" height = "100"></canvas>
  </body>
</html>

```

## HTML5 – SVG

SVG stands for **Scalable Vector Graphics** and it is a language for describing 2D-graphics and graphical applications in XML and the XML is then rendered by an SVG viewer.

SVG is mostly useful for vector type diagrams like Pie charts, Two-dimensional graphs in an X,Y coordinate system etc.

```

<svg xmlns = "http://www.w3.org/2000/svg">
...
</svg>

<html>
  <head>

    <style>
      #svgelem {
        position: relative;
        left: 50%;
        -webkit-transform: translateX(-20%);
        -ms-transform: translateX(-20%);
        transform: translateX(-20%);
      }
    </style>
    <title>SVG</title>
    <meta charset = "utf-8" />
  </head>

```

```
<body>  
  <h2 align = "center">HTML5 SVG Circle</h2>  
  
  <svg id = "svgelem" height = "200" xmlns = "http://www.w3.org/2000/svg">  
    <circle id = "redcircle" cx = "50" cy = "50" r = "50" fill = "red" />  
  </svg>  
</body>  
</html>
```