HMI EXPERIMENT 3

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Class: BE-A	Batch: A3
Date of Experiment: 09-03-2022	Date of Submission
Grade :	

B.1 Domain selected by student:

Selected Domain- **ERP Softwares**
➔ Enterprise resource planning (ERP) is the integrated management of main business processes, often in real-time and mediated by software and technology.
➔ ERP is usually referred to as a category of business management software—typically a suite of integrated applications—that an organization can use to collect, store, manage, and interpret data from many business activities.
➔ ERP Systems can be local-based or Cloud-based. Cloud-based applications have grown in recent years due to information being readily available from any location with internet access.

Selected Softwares-
1. Oracle NetSuite
NetSuite ERP is an all-in-one cloud business management solution that helps organizations operate more effectively by automating core processes and providing real-time visibility into operational and financial performance.

2. SAP ERP
SAP ERP is an enterprise resource planning software developed by the German company SAP SE. SAP ERP incorporates the key business functions of an organization.

3. Microsoft Dynamics 365
Microsoft Dynamics 365 is a product line of enterprise resource planning and customer relationship management intelligent business applications announced by Microsoft

B.2. Source Code of GUI :

Index.html

```html
<!DOCTYPE html>
<html lang="en" dir="ltr">
  <head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width">
    <meta name="description" content="form">
        <meta name="keywords" content="ERP Regisrtration form">
      <meta name="author" content="Janmejay Patil">
    <title>Janmejay Patil</title>
    <link rel="stylesheet" href="style.css">
    </head>
  <body>

    <br>
    <aside id="sidebar">
                <p>
                <table border="0" bgcolor="#000000" align="center"
cellspacing= "20">
                <tr style="color:#000dff">
                <th >Name</th>
                <th>Department</th>
                <th>Division</th>
                <th>Roll Number</th>

                </tr>
                <tr style="color:#ff0000">
                <td>Janmejay Patil</td>
                <td>Computer Engineering</td>
                <td>A</td>
                <td>52</td>
                </tr>
                </table>
              </p>
              </aside>

              <center><p style="color:#000dff">Regisation for
ERP</p></center>

<form name="RegForm" action="#" onsubmit="return ValidationForm()"
method="post" class="docs">
<table border="0" bgcolor="#000000" align="center" cellspacing= "20">
<div>
  <tr>
    <td>First Name</td>
```

```html
      <td><input type="text" placeholder="First Name" size="25" id="fname"
name="fname"></td>
   </tr>
</div>
<div>
   <tr>
      <td>Last Name</td>
      <td><input type="text" placeholder="Last Name" size="25" id="lname"
name="lname"</td>
   </tr>
</div>
<div>
   <tr>
      <td>Email ID</td>
      <td><input type="email" placeholder="Email" size="25" id="email"
name="email"></td>
   </tr>
</div>
<div>
   <tr>
      <td>Contact Number</td>
      <td><input type="number" placeholder="Phone Number" size="25" id="phone"
name="phone"></td>
   </tr>
</div>
<div>
   <tr>
      <td>Address</td>
      <td><textarea rows="4" cols="25" placeholder="Address" id="address"
name="address"></textarea></td>
   </tr>
</div>
<div>
   <td>Pin Code</td>
   <td><input type="number" placeholder="Pin Code" size="25" id="pin"
name="pin"></td>
</tr>
</div>
<div>
   <tr>
      <td>Gender</td>
      <td>
         <input type="radio" id="r1" name="r1">Male
         <input type="radio" id="r1"name="r1">Female
      </td>
   </tr>
</div>
<div>
<tr>
```

```html
  <td>Date of birth</td>
  <td>
    <select value="" name="Subject">
      <option>Day</option>

<option>1</option><option>2</option><option>3</option><option>4</option><option
>5</option><option>6</option><option>7</option>

<option>8</option><option>9</option><option>10</option><option>11</option><opti
on>12</option><option>13</option><option>14</option>

<option>15</option><option>16</option><option>17</option><option>18</option><op
tion>19</option><option>20</option><option>21</option>

<option>22</option><option>23</option><option>24</option><option>25</option><op
tion>26</option><option>27</option><option>28</option>
      <option>29</option><option>30</option><option>31</option>
    </select>

    <select value="" name="Subject">
      <option>Month</option>

<option>January</option><option>February</option><option>March</option><option>
April</option><option>May</option><option>June</option>

<option>July</option><option>August</option><option>September</option><option>O
ctober</option><option>November</option><option>December</option>
    </select>

    <select value="" name="Subject">
      <option>Year</option>

<option>1990</option><option>1991</option><option>1992</option><option>1993</op
tion><option>1994</option><option>1995</option><option>1996</option><option>199
7</option><option>1998</option><option>1999</option>

<option>2000</option><option>2001</option><option>2002</option><option>2003</op
tion><option>2004</option><option>2005</option><option>2006</option><option>200
7</option><option>2008</option><option>2009</option>

<option>2010</option><option>2011</option><option>2012</option><option>2013</op
tion><option>2014</option><option>2015</option><option>2016</option><option>201
7</option><option>2018</option><option>2019</option><option>2020</option>
    </select>
  </td>
  </tr>
</div>
<div>
    <td>Languages Known</td>
```

```html
    <td>
      <input type="checkbox" id="r1" name="r1">Marathi
      <input type="checkbox" id="r1" name="r1">Hindi
      <input type="checkbox" id="r1" name="r1">English
    </td>
  </div>
<div>
<tr>
  <td colspan="2" align="center">
    <input type="reset" value="Reset" name="reset" id="button">&nbsp &nbsp
&nbsp &nbsp &nbsp
    <input type="submit" value="Submit" name="submit" id=""="button"></td>
</tr>
</div>
</table>
</form>

<script>
function ValidationForm(){
        let username = document.forms["RegForm"]["fname"];
        let name = document.forms["RegForm"]["lmame"];
        let email = document.forms["RegForm"]["email"];
        let phoneNumber = document.forms["RegForm"]["phone"];
        let address = document.forms["RegForm"]["address"];}
        let pin = document.forms["RegForm"]["pin"];}
        let select = document.forms["RegForm"]["Subject"];

        if(username.value == "") {
          alert("Kindly enter your first name");
          username.focus();
          return false;
        }
        if(name.value == "") {
          alert("Kindly enter your last name");
          name.focus();
          return false;
        }
        if(email.value == "") {
          alert("Kindly enter a valid e-mail address");
          email.focus();
          return false;
        }
        if(email.value.indexOf("@", 0) < 0) {
          alert("Kindly enter a valid e-mail address");
          email.focus();
          return false;
        }
        if(email.value.indexOf(".", 0) < 0) {
          alert("Kindly enter a valid e-mail address");
```

```
          email.focus();
          return false;
        }
        if(phoneNumber.value == "") {
          alert("Kindly enter your contact number");
          phoneNumber.focus();
          return false;
        }
        if(address.value == "") {
          alert("Kindly enter your address");
          address.focus();
          return false;
        }
        if(pin.value == "") {
          alert("Kindly enter your address");
          pin.focus();
          return false;
        }
        if(select.selectedIndex < 1) {
          alert("Kindly select your date of birth");
          select.focus();
          return false;
        }
        return true;
      }
    </script>


    <footer>
        <center><p style="color:#f70000">Janmejay Patil A-52</p></center>
    </footer>
  </body>
</html>
```
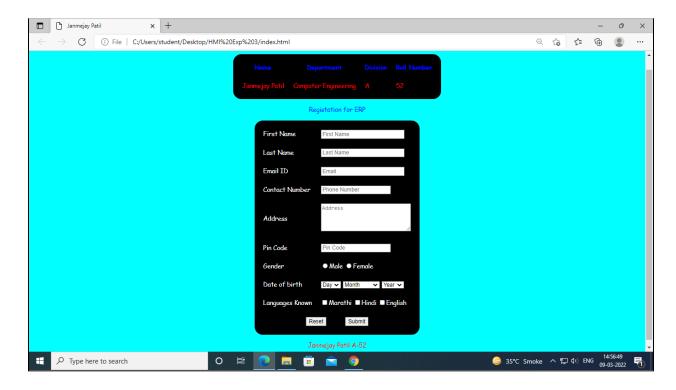
Style.css

```
table{
  color: #ffffff;
  border-radius: 20px;
}

body{
  font: 15px/1.5 cursive;
  padding:0;
  margin:0;
  background-color:aqua;
}
```

```
button{
  height:38px;
  background:#263dd4;
  border:0;
  padding-left: 20px;
  padding-right:20px;
  color:#000dff;
}
```

B.3 Screen Snapshot of GUI Design:

B.4 Direct Manipulation

In computer science, direct manipulation is a type of human-computer interaction that incorporates continuous representation of the item of interest as well as quick, reversible, and incremental actions and feedback.
Pros or Advantages of Direct manipulation:

1. It's simple to learn and remember.
2. It is simple to remember.
3. Visually present the work notion.
4. Enables the avoidance of errors.
5. It has a reversible and flexible activity.
6. Requires little typing.
7. Encourages experimentation.
8. High level of subjective contentment.
9. Predictable and manageable.
10.Allows for high subjective pleasure.
11.Simultaneous visual feedback.
12.The user's learning time is short.
13.Users have a sense of control over their computers and are less prone to be scared by them.

B.4 Conclusion:

As a result, I created a graphical user interface for the ERP signup form, which I then analyzed and validated.