

Lab 01 - Pine Valley Furniture Company Portal

Problem Statement

Consider the Pine Valley Furniture Company database designed and implemented using structured query language during previous semester. Try to recall major relations in the database (CUSTOMER_T, ORDER_T, ORDER_LINE_T, and PRODUCT_T).

There is a need to implement a web based solution for above mentioned database. The web based solution must incorporate following functionalities:

- i) New Customer Registration
- ii) Searching of Products
- iii) Products Selection and Order Placement
- iv) Product Catalog Update
- v) Payment Provision

As a first step design above mentioned (i) to (v) user interfaces using paper and pencil.

Next write appropriate html for creating (i) to (v) user interface prototypes.

Create links for navigation among above pages.

Design a menu using list and styles.

Add help pages for user guidance.

Either use table for layout or may opt for flow based layout.

Test user interface prototypes in browser.

Experiment with style sheets.

Moving towards Business Intelligence

- i) Try to transform order processing system into a customer segmentation analysis platform.
- ii) How user profiling can be added into basic order processing system?
- iii) How targeted marketing can be realized?

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Pine Valley Furniture Company</title>

  <style>
    :root{
      --purple:#5b3b9d;
      --purple2:#7a4fc2;
      --bg:#f4f0fb;
      --text:#222;
    }
  </style>
</head>
</html>
```

```
*{ box-sizing: border-box; margin:0; padding:0; }

body{
  font-family: Arial, Helvetica, sans-serif;
  background: var(--bg);
  color: var(--text);
  min-height: 100vh;
}

/* Top header bar */
header{
  background: var(--purple);
  color: #fff;
  padding: 32px 16px;
  text-align: center;
  font-size: 40px;
  font-weight: 700;
  letter-spacing: 0.5px;
}

/* Main container */
main{
  max-width: 900px;
  margin: 0 auto;
  padding: 70px 16px 40px;
  text-align: center;
}

main h2{
  font-size: 26px;
  margin-bottom: 40px;
  font-weight: 700;
}

/* Button grid */
nav ul{
  list-style: none;
  display: grid;
  grid-template-columns: 1fr 1fr;
  gap: 26px 32px;
  justify-content: center;
  align-items: center;
  padding: 0;
  margin: 0 auto;
  max-width: 780px;
}
```

```

nav a{
  display: block;
  background: var(--purple2);
  color: white;
  text-decoration: none;
  padding: 22px 18px;
  border-radius: 12px;
  font-size: 22px;
  font-weight: 600;
  box-shadow: 0 8px 14px rgba(0,0,0,0.18);
  transition: transform 0.15s ease, background 0.15s ease;
}

nav a:hover{
  background: #6f45b6;
  transform: translateY(-2px);
}

nav a:active{
  transform: translateY(0px);
  box-shadow: 0 5px 10px rgba(0,0,0,0.18);
}

@media (max-width: 700px){
  header{ font-size: 28px; padding: 24px 14px; }
  nav ul{ grid-template-columns: 1fr; }
  nav a{ font-size: 18px; }
}
</style>
</head>

<body>
<header>Pine Valley Furniture Company</header>

<main>
<h2>Choose an Option</h2>

<nav>
<ul>
<li><a href="register.html">New Customer Registration</a></li>
<li><a href="searchproduct.html">Search Products</a></li>
<li><a href="order.html">Place Order</a></li>
<li><a href="productcatalog.html">Update Catalog</a></li>
<li><a href="payment.html">Make Payment</a></li>
<li><a href="help.html">Help / Guide</a></li>
</ul>

```

```
</nav>
</main>
</body>
</html>
```

Pine Valley Furniture Company

Choose an Option

New Customer Registration

Search Products

Place Order

Update Catalog

Make Payment

Help / Guide

```
<!DOCTYPE html>
<html>
<head>
  <title>Place Order</title>

  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f3f0fa;
      padding: 40px;
    }

    h1 {
      color: #5b3b9d;
    }

    label {
      font-weight: bold;
    }

    input[type="text"],
    input[type="number"] {
      padding: 6px;
    }
  </style>
</head>
</html>
```

```
border: 1px solid #999;
border-radius: 4px;
width: 250px;
}

input[type="submit"] {
padding: 6px 12px;
background-color: #5b3b9d;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
}

input[type="submit"]:hover {
background-color: #4a2f80;
}

a {
color: #5b3b9d;
text-decoration: none;
}

a:hover {
text-decoration: underline;
}
</style>

</head>
<body>

<h1>Place Order</h1>

<form action="#" method="post">

<label>Product ID:</label><br><br>
<input type="text" name="product_id" required><br><br>

<label>Quantity:</label><br><br>
<input type="number" name="quantity" min="1" required><br><br>

<label>Customer ID:</label><br><br>
<input type="text" name="customer_id" required><br><br>

<input type="submit" value="Place Order">

</form>
```

```
<br>
<a href="index.html">Back to Homepage</a>

</body>
</html>
```

Place Order

Product ID:

Quantity:

Customer ID:

Place Order

[Back to Homepage](#)

```
<!DOCTYPE html>
<html>
<head>
  <title>Make Payment</title>

  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f3f0fa;
      padding: 40px;
    }

    h1 {
      color: #5b3b9d;
    }

    label {
      font-weight: bold;
    }

    input[type="text"],
    input[type="password"],
    input[type="month"] {
```

```
padding: 6px;
border: 1px solid #999;
border-radius: 4px;
width: 250px;
}

input[type="submit"] {
padding: 6px 12px;
background-color: #5b3b9d;
color: white;
border: none;
border-radius: 4px;
cursor: pointer;
}

input[type="submit"]:hover {
background-color: #4a2f80;
}

a {
color: #5b3b9d;
text-decoration: none;
}

a:hover {
text-decoration: underline;
}
</style>
</head>
<body>

<h1>Make Payment</h1>

<form action="#" method="post">

<label>Order ID:</label><br><br>
<input type="text" name="order_id" required><br><br>

<label>Card Number:</label><br><br>
<input type="text" name="card_number" required><br><br>

<label>Expiry Date:</label><br><br>
<input type="month" name="expiry" required><br><br>

<label>CW:</label><br><br>
<input type="password" name="cvv" required><br><br>
```

```
<input type="submit" value="Pay Now">

</form>

<br>
<a href="index.html">Back to Homepage</a>

</body>
</html>
```

Make Payment

Order ID:

Card Number:

Expiry Date:

 

CVV:

Pay Now

[Back to Homepage](#)

```
<!DOCTYPE html>
<html>
<head>
  <title>Update Catalog</title>

  <style>
    body {
      font-family: Arial, sans-serif;
      background-color: #f3f0fa;
      padding: 40px;
    }

    h1 {
      color: #5b3b9d;
```

```
}

label {
  font-weight: bold;
}

input[type="text"],
input[type="number"],
textarea {
  padding: 6px;
  border: 1px solid #999;
  border-radius: 4px;
  width: 250px;
}

textarea {
  resize: none;
}

input[type="submit"] {
  padding: 6px 12px;
  background-color: #5b3b9d;
  color: white;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}

input[type="submit"]:hover {
  background-color: #4a2f80;
}

a {
  color: #5b3b9d;
  text-decoration: none;
}

a:hover {
  text-decoration: underline;
}
</style>

</head>
<body>

  <h1>Update Product Catalog</h1>

  <form action="#" method="post">
```

```

<label>Product ID:</label><br><br>
<input type="text" name="product_id" required><br><br>

<label>New Name:</label><br><br>
<input type="text" name="new_name"><br><br>

<label>New Price:</label><br><br>
<input type="number" name="new_price" step="0.01"><br><br>

<label>New Description:</label><br><br>
<textarea name="description" rows="4" cols="30"></textarea><br><br>

<input type="submit" value="Update Product">

</form>

<br>
<a href="index.html">Back to Homepage</a>

</body>
</html>

```

Update Product Catalog

Product ID:

New Name:

New Price:

New Description:

```

<!DOCTYPE html>
<html>
<head>
  <title>New Customer Registration</title>
  <style>

```

```
body {
  font-family: Arial, sans-serif;
  background-color: #f3f0fa;
  padding: 40px;
}

h1 {
  color: #5b3b9d;
  font-size: 48px;
  margin-bottom: 25px;
}

label {
  font-weight: bold;
  display: block;
  margin-top: 18px;
  margin-bottom: 6px;
}

input[type="text"],
input[type="tel"],
input[type="email"],
input[type="password"] {
  padding: 10px;
  border: 1px solid #999;
  border-radius: 4px;
  width: 420px;
  max-width: 100%;
}

input[type="submit"] {
  margin-top: 22px;
  padding: 8px 14px;
  background-color: #5b3b9d;
  color: white;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}

input[type="submit"]:hover {
  background-color: #4a2f80;
}

a {
  display: inline-block;
  margin-top: 18px;
  color: #5b3b9d;
}
```

```
    text-decoration: none;
    font-size: 18px;
}

a:hover {
    text-decoration: underline;
}
</style>
</head>

<body>

<h1>New Customer Registration</h1>

<form action="#" method="post">

    <label for="name">Name:</label>
    <input type="text" id="name" name="name" required>

    <label for="phone">Phone:</label>
    <input type="tel" id="phone" name="phone" required>

    <label for="email">Email:</label>
    <input type="email" id="email" name="email" required>

    <label for="username">User Name:</label>
    <input type="text" id="username" name="username" required>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required>

    <br>
    <input type="submit" value="Submit">

</form>

<a href="index.html">Back to Homepage</a>

</body>
</html>
```



```

        cursor: pointer;
    }

    input[type="submit"]:hover {
        background-color: #4a2f80;
    }

    a {
        color: #5b3b9d;
        text-decoration: none;
    }

    a:hover {
        text-decoration: underline;
    }
</style>

</head>
<body>

<h1>Search Products</h1>

<form action="#" method="get">
    <label>Search by Product Name:</label><br><br>
    <input type="text" name="product" placeholder="e.g., Chair" required><br><br>
    <input type="submit" value="Search">
</form>

<br>
<a href="index.html">Back to Homepage</a>

</body>
</html>

```

Search Products

Search by Product Name:

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```

<!DOCTYPE html>
<html>
<head>

```

```
<title>Help / Guide</title>

<style>
  body {
    font-family: Arial, sans-serif;
    background-color: #f3f0fa;
    padding: 40px;
  }

  h1 {
    color: #5b3b9d;
  }

  p {
    font-size: 16px;
  }

  ul {
    margin-top: 15px;
  }

  li {
    margin-bottom: 8px;
  }

  a {
    color: #5b3b9d;
    text-decoration: none;
  }

  a:hover {
    text-decoration: underline;
  }
</style>

</head>
<body>

  <h1>Help / User Guide</h1>

  <p>Welcome to the Pine Valley Furniture system.</p>

  <ul>
    <li><strong>Registration:</strong> Create a new customer account.</li>
    <li><strong>Search:</strong> Look for furniture products by name.</li>
    <li><strong>Order:</strong> Place orders for one or more items.</li>
    <li><strong>Update:</strong> Update product details in the catalog.</li>
    <li><strong>Payment:</strong> Securely pay for your orders.</li>
  </ul>

```

```
</ul>

<br>
<a href="index.html">Back to Homepage</a>

</body>
</html>
```

Help / User Guide

Welcome to the Pine Valley Furniture system.

- **Registration:** Create a new customer account.
- **Search:** Look for furniture products by name.
- **Order:** Place orders for one or more items.
- **Update:** Update product details in the catalog.
- **Payment:** Securely pay for your orders.

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