Department of Computer Science and Engineering

Lab Manual

for

UI AND UX DESIGN

CCS370

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ADHIPARASAKTHI ENGINEERING COLLEGE

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EX. NO.: 1	DESIGNING A RESPONSIVE LAYOUT FOR AN SOCIETAL APPLICATION

AIM:

To design responsive layouts for a societal application for resume building using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Societal App</title>
   <style>
      /* Reset some default styles for better consistency */
      body, h1, p {
         margin: 0;
         padding: 0;
      }
       body {
         font-family: Arial, sans-serif;
         background-color: #f0f0f0;
          }
```

```
header {
    background-color: #333;
    color: #fff;
    padding: 10px;
    text-align: center;
}
.container {
    max-width: 1200px;
    margin: 0 auto;
    padding: 20px;
    display: flex;
    flex-wrap: wrap;
}
.sidebar {
    flex: 1;
    background-color: #ddd;
    padding: 20px;
    margin: 10px;
    border-radius: 5px;
}
.main-content {
    flex: 3;
    background-color: #fff;
    padding: 20px;
    margin: 10px;
    border-radius: 5px;
}
@media screen and (max-width: 768px) {
    .container {
        flex-direction: column;
    }
    .sidebar, .main-content {
        flex: 1;
    }
```

```
    }
  </style>
</head>
<body>
  <header>
    <h1>Societal App</h1>
  </header>
  <div class="container">
    <div class="sidebar">
      <h2>Sidebar</h2>
      <ul>
        <li>Menu Item 1</li>
        <li>Menu Item 2</li>
        <li>Menu Item 3</li>
      </ul>
    </div>
    <div class="main-content">
      <h2>Main Content</h2>
      <p>Welcome to our societal app! This is the main content area where
you can see and interact with posts and updates from other users.</p>
    </div>
  </div>
</body>
</html>
```

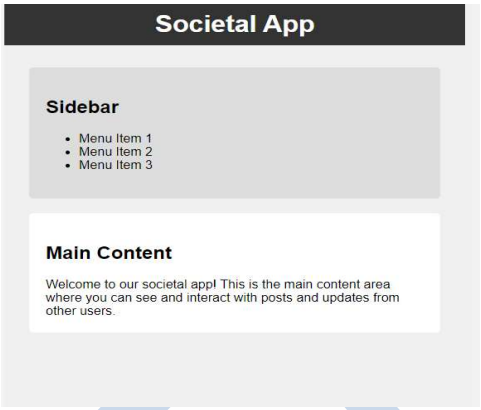
STYLE.CSS

```
/* Reset some default styles for better consistency */
body, h1, p, ul {
  margin: 0;
  padding: 0;
}
 body {
  font-family: Arial, sans-serif;
  background-color: #f0f0f0;
```

```
}
 header {
    background-color: #333;
    color: #fff;
    padding: 10px;
    display: flex;
    justify-content: space-between;
    align-items: center;
}
 nav ul {
    list-style: none;
}
 nav ul li {
    display: inline;
    margin-right: 10px;
}
main {
    max-width: 1200px;
    margin: 0 auto;
    display: flex;
}
.sidebar, .content {
    flex: 1;
    padding: 20px;
```

APEC

OUTPUT:



RESULT:

Thus for designing a responsive layout for a societal application for resume building using HTML and CSS is executed and verified successfully.

EX. NO.: 2	EXPLORING VARIOUS UI INTERAACTION PATTERNS

AIM:

To explore a various UI interaction using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <link rel="stylesheet" href="style.css">
        <title>UI Interaction Patterns</title>
</head>
<body>
        <button class="btn primary-btn">Click Me</button>
        <button class="btn secondary-btn">Hover Me</button>
        <div class="tooltip">Tooltip text</div>
        <button class="btn modal-btn">Open Modal</button>
        <div class="modal">
                <div class="modal-content">
```

```
                    <span class="close-btn">&times;</span>
                    <h2>Modal Title</h2>
                     <p>This is the content of the modal.</p>
                </div>
</div>
</body>
</html>
```

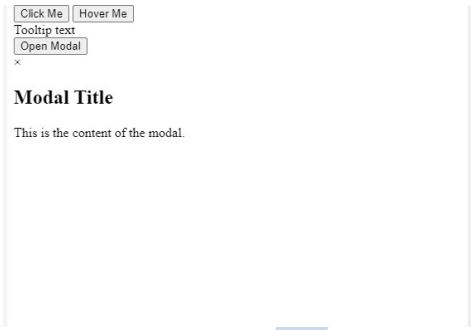
STYLE.CSS

```
body {
font-family: Arial, sans-serif;text-align: center;
}
.btn {
padding: 10px 20px;font-size: 16px; cursor: pointer; border: none;
border-radius: 5px;
}
.primary-btn {
background-color: #007BFF;color: #fff;
}
.secondary-btn {
background-color: #17A2B8;color: #fff;
}
.tooltip {
position: absolute; display: none; background-color: #333;color: #fff;
padding: 5px; border-radius: 5px;
}
.modal { display: none;
position: fixed;
top: 0;
left: 0;
width: 100%;
height: 100%;
background-color: rgba(0, 0, 0, 0.7);
z-index: 1;
text-align: center;
```

```
}

.modal-content {
background-color: #fff;
width: 80%;
max-width: 600px;
 margin: 100px auto;
padding: 20px; border-radius: 5px;
position: relative;
}
.close-btn  {
position: absolute;
top: 10px;
right: 10px;
cursor: pointer;
font-size: 24px;
color: #333;
}
/* Hover effect for the secondary button */
.secondary-btn:hover + .tooltip {
display: block;
}
/* Show and hide the modal */
.modal-btn {
background-color: #DC3545;
color: #fff;
}
.modal-btn:hover + .modal {
display: block;
}
```

OUTPUT:



APEC

RESULT:

Thus exploring a various UI interaction using HTML and CSS is executed and verified successfully.

EX. NO. : 3	DEVELOPING AN INTERFACE WITH PROPER UI STYLE GUIDES

AIM:

To develop an interface with proper UI style guides using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <link rel="stylesheet" href="style.css">
        <title>UI Style Guide</title>
</head>
<body>
        <header class="header">
                <h1>My App</h1>
        </header>
<nav class="navbar">
<ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">About</a></li>
        <li><a href="#">Services</a></li>
        <li><a href="#">Contact</a></li>
</ul>
```

```
 </nav>
<main class="content">
 <section class="section">
   <h2 class="section-title">Section Title</h2>
  <p>This is a paragraph of text in the section.</p>
  <a href="#" class="btn primary-btn">Learn More</a>
 </section>
</main>
<footer class="footer">
        <p>&copy; 2023 My App. All rights reserved.</p>
</footer>
</body>
</html>
```

STYLE.CSS

```
/* Reset some default styles for better consistency */
body, h1, p, ul {
margin: 0;
padding: 0;
}
body {
font-family: Arial, sans-serif;
background-color: #f0f0f0;
}
/* Header Styles */
.header {
background-color: #333;
color: #fff;
padding: 10px;
text-align: center;
}
.header h1 {
   font-size: 32px;
}
```

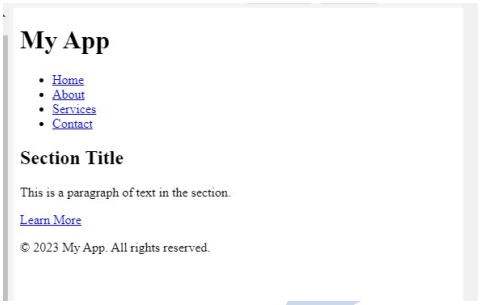
```
/* Navbar Styles */
.navbar ul {
   list-style: none;
  display: flex;
  justify-content: center;
}
.navbar li {
      margin: 0 15px;
}
.navbar a {
    text-decoration: none; color: #333;
    font-weight: bold;
}
/* Content Styles */
.content {
    max-width: 1200px;
margin: 0 auto;
padding: 20px;
text-align: center;
}
/* Section Styles */
.section {
background-color: #fff;
padding: 20px;
margin: 20px 0;
border-radius: 5px;
box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
}
.section-title {
font-size: 24px;
margin-bottom: 10px;
}

/* Button Styles */
```

```
.btn {
  display: inline-block;
  padding: 10px 20px;
  font-size: 16px;
  cursor: pointer;
  border: none;
  border-radius: 5px;
}
.primary-btn {
  background-color: #007BFF;
  color: #fff;
  text-decoration: none;
}
/* Footer Styles */
.footer {
background-color: #333;
color: #fff;
padding: 10px;
text-align: center;
}
/* Responsive Styles (Add your media queries here) */
```

APEC

OUTPUT:



APEC

RESULT:

Thus developing an interface with proper UI style guides using HTML and CSS is executed and verified successfully.

EX. NO. : 4	DEVELOPING WIREFLOW DIAGRAM FOR APPLICATION USING OPEN SOURCE SOFTWARE

AIM:

To develop wireflow diagram for application using open source software using HTML and CSS

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <title>Wireflow Diagram</title>
</head>
<body>
    <div class="box" id="page1">
        <h1>Page 1</h1>
        <p>Click the button to go to Page 2.</p>
        <a href="#page2" class="btn">Next</a>
    </div>
    <div class="box" id="page2">
    <h1>Page 2</h1>
    <p>Click the button to go back to Page 1 or proceed to Page 3.</p>
    <a href="#page1" class="btn">Previous</a>
    <a href="#page3" class="btn">Next</a>
    </div>
    <div class="box" id="page3">
```

```
        <h1>Page 3</h1>
        <p>Click the button to go back to Page 2.</p>
        <a href="#page2" class="btn">Previous</a>
    </div>
    </body>
    </html>
```

STYLE.CSS:

```
    body {
        font-family: Arial, sans-serif; text-align: center;
        background-color: #f0f0f0;
    }

    .box {
        background-color: #fff;
        padding: 20px;
        border: 1px solid #ddd; border-radius: 5px;
        margin: 20px auto;
        max-width: 400px;
        box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    }

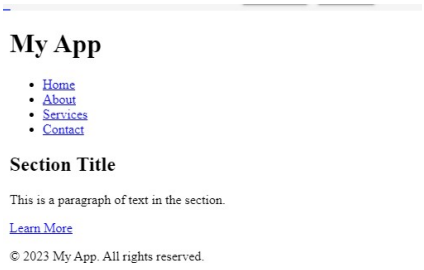
    h1 {
        font-size: 24px;
    }

    .btn {
        display: inline-block; padding: 10px 20px;
        font-size: 16px; cursor: pointer;
        text-decoration: none;
        background-color: #007BFF;
        color: #fff;
        border: none;
        border-radius: 5px;
        margin: 10px;
        }

.btn:hover {
   background-color: #0056b3;
}

/* Add your custom styles for links and interactions */
```

OUTPUT:



APEC

RESULT:

Thus developing wireflow diagram for application using open source software using HTML and CSS is executed and verified successfully.

EX. NO. : 5	EXPLORING VARIOUS OPEN SOURCE COLLABORATIVE INTERFACE PLATFORM

AIM:

To explore various open source collaborative interface platform using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="style.css">
   <title>Collaborative Whiteboard</title>
</head>
<body>
   <div class="whiteboard">
      <!-- The whiteboard content goes here -->
   </div>
</body>
</html>
```

STYLE.CSS:

```
body {
   margin: 0;
   padding: 0;
   background-color: #f0f0f0;
   display: flex;
   justify-content: center;
```

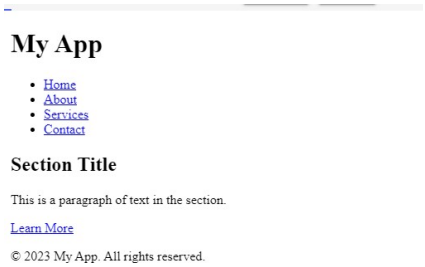
```
    align-items: center;
    height: 100vh;
}

.whiteboard {
    background-color: #fff;
    border: 1px solid #ddd;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);
    width: 800px;
    height: 600px;
}

/* Add your custom styles for the whiteboard interactions */
```

APEC

OUTPUT:



APEC

RESULT:

Thus exploring various open source collaborative interface platform using HTML and CSS is executed and verified successfully.

EX. NO. : 6	HANDS ON DESIGN THINKING PROCESS FOR A NEW PRODUCT

AIM:

To hand a design thinking process for a new product using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="styles.css">
   <title>New Product Design</title>
</head>
<body>
   <header>
      <h1>New Product Design</h1>
   </header>
   <main>
      <section class="problem-statement">
<h2>Identify the Problem</h2>
         <p>Begin by defining the problem you want to solve with your new
```

```
product. What are the pain points and challenges your product will
address?</p>
        </section>
        <section class="ideation">
            <h2>Ideation</h2>
            <p>Brainstorm ideas and concepts for your product. Consider different
approaches and gather inspiration from various sources.</p>
        </section>
        <section class="prototyping">
            <h2>Prototyping</h2>
            <p>Create prototypes or mockups of your product using HTML, CSS,
and potentially JavaScript. These are early representations of your product's
user interface.</p>
        </section>
        <section class="user-feedback">
            <h2>Get User Feedback</h2>
            <p>Test your prototypes with potential users or stakeholders and gather
feedback. Use their insights to refine your product design.</p>
        </section>
        <section class="implementation">
            <h2>Implementation</h2>
            <p>Once you have a well-defined product design, start implementing it
by developing the actual product or application.</p>
        </section>
    </main>
</body>
</html>
```

STYLE.CSS:

```
body {
    font-family: Arial, sans-serif;
}

header {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 1rem;
}

main {
    max-width: 800px;
    margin: 0 auto;
    padding: 1rem;
}

section {
    margin: 2rem 0;
    border: 1px solid #ddd;
    padding: 1rem;
    border-radius: 5px;
}

h1, h2 {
    color: #007BFF;
}

/* Add more styling as needed for your specific content and design. */
```

APEC

OUTPUT:



New Product Design

Identify the Problem

Begin by defining the problem you want to solve with your new product. What are the pain points and challenges your product will address?

Ideation

Brainstorm ideas and concepts for your product. Consider different approaches and gather inspiration from various sources.

Prototyping

Create prototypes or mockups of your product using HTML, CSS, and potentially JavaScript. These are early representations of your product's user interface.

Get User Feedback

Test your prototypes with potential users or stakeholders and gather feedback. Use their insights to refine your product design.

Implementation

Identify the Problem

Begin by defining the problem you want to solve with your new product. What are the pain points and challenges your product will address?

Ideation

Brainstorm ideas and concepts for your product. Consider different approaches and gather inspiration from various sources.

Prototyping

Create prototypes or mockups of your product using HTML, CSS, and potentially JavaScript. These are early representations of your product's user interface.

Get User Feedback

Test your prototypes with potential users or stakeholders and gather feedback. Use their insights to refine your product design.

Implementation

Once you have a well-defined product design, start implementing it by developing the actual product or application.

RESULT:

Thus hands on design thinking process for a new product using HTML and CSS is verified and executed successfully.

EX. NO. : 7	BRAINSTORMING FEATURE FOR PROPOSED PRODUCT

AIM:

To perform brainstorming feature for proposed product using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="styles.css">
    <title>Feature Brainstorming</title>
</head>
<body>
    <header>
        <h1>Feature Brainstorming for Proposed Product</h1>
    </header>
    <main>
            <section class="feature-idea">
                <h2>Feature Idea 1</h2>
    <p>Describe the first feature idea in detail.
            What problem does it solve?
           How does it benefit users?</p>
                        </section>
                <section class="feature-idea">
                    <h2>Feature Idea 2</h2>
          <p>Provide information about the econd feature idea. Explain its
functionality and user value.</p>
       </section>
```

```
        <section class="feature-idea">
            <h2>Feature Idea 3</h2>
            <p>Elaborate on the third feature idea. What are the technical requirements and potential
 challenges?</p>
        </section>
        <!-- Add more feature ideas as needed -->
    </main>
 </body>
 </html>
```

STYLE.CSS:

```
body {
    font-family: Arial, sans-serif;
}

header {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 1rem;
}

main {
    max-width: 800px;
    margin: 0 auto;
    padding: 1rem;
}

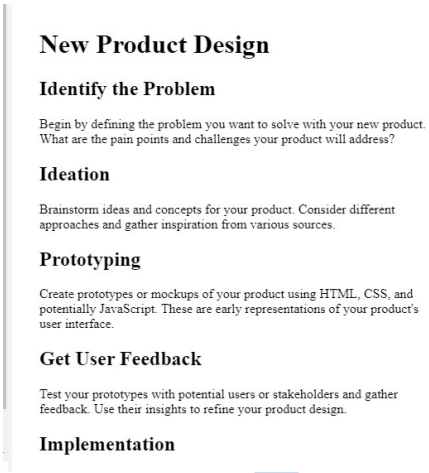
section {
    margin: 2rem 0;
    border: 1px solid #ddd;
    padding: 1rem;
    border-radius: 5px;
}

h1, h2 {
    color: #007BFF;
}

/* Add more styling as needed for your specific content and design. */
```

APEC

OUTPUT:



APEC

RESULT:

Thus performing brainstorming feature for proposed product is executed and verified successfully using HTML and CSS.

EX. NO. : 8	DEFINING A LOOK AND FEEL OF THE NEW PROJECT

AIM:

To define a look and feel of the new project using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="styles.css">
   <title>Project Look and Feel</title>
</head>
<body>
   <header>
      <h1>Welcome to Our Project</h1>
      <p>Where creativity meets innovation</p>
   </header>
   <main>
      <section class="feature">
<h2>Feature 1</h2>
```

```
        <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce vitae velit et tellus eleifend fringilla.</p>
      </section>
      <section class="feature">
        <h2>Feature 2</h2>
        <p>Curabitur nec arcu sed urna scelerisque viverra. Vivamus rhoncusnisl in metus pharetra, id tincidunt ante scelerisque.</p>
      </section>
      <section class="feature">
        <h2>Feature 3</h2>
        <p>Nulla facilisi. Proin vehicula nisl id elit congue, sit amet luctus risus fringilla.
</p>
      </section>
  </main>
  <footer>
    <p>&copy; 2023 Your Project Name</p>
  </footer>
</body>
</html>
```

STYLE.CSS:

```
 body {
   font-family: Arial, sans-serif;
   background-color: #f0f0f0;
   margin: 0;
   padding: 0;
}

header {
   background-color: #007BFF;
   color: white;
   text-align: center;
   padding: 2rem 0;
}

h1 {
   font-size: 2rem;
}

p {
   font-size: 1rem;
}
```

```
main {
    max-width: 800px;
    margin: 0 auto;
    padding: 2rem;
}

section {
    background-color: white;
    border: 1px solid #ddd;
    border-radius: 5px;
    margin: 2rem 0;
    padding: 1rem;
}

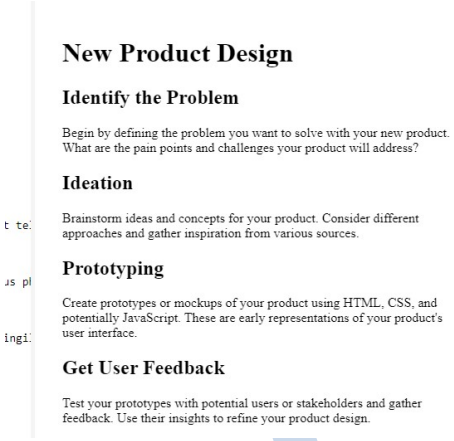
h2 {
    color: #007BFF;
    font-size: 1.5rem;
}

footer {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 1rem 0;
}

/* Add more styling as needed for your specific project's design. */
```

APEC

OUTPUT:



New Product Design

Identify the Problem

Begin by defining the problem you want to solve with your new product. What are the pain points and challenges your product will address?

Ideation

Brainstorm ideas and concepts for your product. Consider different approaches and gather inspiration from various sources.

Prototyping

Create prototypes or mockups of your product using HTML, CSS, and potentially JavaScript. These are early representations of your product's user interface.

Get User Feedback

Test your prototypes with potential users or stakeholders and gather feedback. Use their insights to refine your product design.

APEC

RESULT:

Thus defining the look and feel of the new project is executed and verified successfully using HTML and CSS.

EX. NO. : 9	CREATE A SAMPLE PATTERN LIBRARY FOR THAT PRODUCT (MOOD BOARD, FONTS, COLORS BASED ON UI PRINCIPLES)

AIM:

To create a sample pattern library(mood board, fonts, colors based on UI principles) using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
 <!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="styles.css">
   <title>Sample Pattern Library</title>
</head>
<body>
   <header>
      <h1>Pattern Library</h1>
      <p>Design Elements for Our Product</p>
   </header>
   <main>
<section class="color-palette">
         <h2>Color Palette</h2>
         <div class="color" style="background-color: #007BFF;"></div>
```

```
            <div class="color" style="background-color: #34C759;"></div>
            <div class="color" style="background-color: #FF9500;"></div>
            <div class="color" style="background-color: #FF2D55;"></div>
        </section>
        <section class="typography">
            <h2>Typography</h2>
            <h3>Heading Font</h3>
            <p class="font-sample">AaBbCc 123</p>
            <h3>Body Text Font</h3>
            <p class="font-sample">AaBbCc 123</p>
        </section>
        <section class="mood-board">
            <h2>Mood Board</h2>
            <img src="mood-board.jpg" alt="Mood Board">
        </section>
    </main>
</body>
</html>
```

STYLE.CSS:

```
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    margin: 0;
    padding: 0;
}
header {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 2rem 0;
}
h1 {
    font-size: 2rem; }
```

```
p {
    font-size: 1rem;
}

main {
    max-width: 800px;
    margin: 0 auto;
    padding: 2rem;
}
 section {
    background-color: white;
    border: 1px solid #ddd;
    border-radius: 5px;
    margin: 2rem 0;
    padding: 1rem;
}
 h2 {
    color: #007BFF;
    font-size: 1.5rem;
}
 .color-palette .color {
    width: 30px;
    height: 30px;
    display: inline-block;
    margin-right: 10px;
}
 .typography .font-sample {
    font-size: 1rem;
}
 img {
    max-width: 100%;
    height: auto;
}
```

APEC

OUTPUT:



New Product Design

Identify the Problem

Begin by defining the problem you want to solve with your new product. What are the pain points and challenges your product will address?

Ideation

Brainstorm ideas and concepts for your product. Consider different approaches and gather inspiration from various sources.

Prototyping

Create prototypes or mockups of your product using HTML, CSS, and potentially JavaScript. These are early representations of your product's user interface.

Get User Feedback

Test your prototypes with potential users or stakeholders and gather feedback. Use their insights to refine your product design.

APEC

RESULT:

Thus creating a sample pattern library for that product(mmod board, fonts, Colors based on UI principles) using HTML and CSS is executed and verified successfully.

EX. NO. : 10	IDENTIFY A CUSTOMER PROBLEM TO SOLVE

AIM:

To identify a customer problem and solving it using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <link rel="stylesheet" href="styles.css">
   <title>Customer Problem Identification</title>
</head>
<body>
   <header>
      <h1>Identify Customer Problems</h1>
      <p>Tell us about the challenges you face.</p>
   </header>
   <main>
<section class="problem-form">
        <h2>Customer Problem Identification Form</h2>
        <form>
           <label for="problem">Describe the problem you are facing:</label>
           <textarea id="problem" name="problem" rows="4"></textarea>
```

```
            <button type="submit">Submit</button>
        </form>
    </section>
  </main>
  <footer>
    <p>&copy; 2023 Your Company Name</p>
  </footer>
</body>
</html>
```

STYLE.CSS:

```
body {
  font-family: Arial, sans-serif;
  background-color: #f0f0f0;
  margin: 0;
  padding: 0;
}

header {
  background-color: #007BFF;
  color: white;
  text-align: center;
  padding: 2rem 0;
}

h1 {
  font-size: 2rem;
}

p {
  font-size: 1rem;
}

main {
  max-width: 800px;
  margin: 0 auto;
  padding: 2rem;
}

section {
  background-color: white;
  border: 1px solid #ddd;
  border-radius: 5px;
```

```
    margin: 2rem 0;
    padding: 1rem;
}

h2 {
    color: #007BFF;
    font-size: 1.5rem;
}

label {
    display: block;
    margin-bottom: 5px;
}

textarea {
    width: 100%;
    padding: 10px;
    border: 1px solid #ddd;
    border-radius: 5px;
    resize: vertical;
}

button {
    background-color: #007BFF;
    color: white;
    padding: 10px 20px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}

footer {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 1rem 0;
}
```

APEC

OUTPUT:



APEC

RESULT:

Thus for identifying a customer problem and solving using HTML and CSS is executed and verified successfully.

EX. NO. : 11	CONDUCT END-TO-END RESEARCH-USER RESEARCH, CREATING PERSONAS, IDEATION PROCESS(USER STORIES, SCENARIOS), FLOW DIAGRAM, FLOW MAPPING

AIM:

To conduct end-to-end research- user research, creating personas, ideation process(user stories, scenarios), flow diagram, flow mapping using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="styles.css">
    <title>User Research and Ideation</title>
</head>
<body>
    <header>
        <h1>User Research and Ideation</h1>
        <p>Understanding our users and their needs.</p>
        </header>
        <main>
            <section class="user-research">
                <h2>User Research</h2>
```

```
            <p>Summary of user research findings and insights.</p>
        </section>
        <section class="personas">
            <h2>Personas</h2>
            <div class="persona">
                <img src="persona1.jpg" alt="Persona 1">
                <h3>Persona 1</h3>
                <p>Description and details of the persona.</p>
            </div>
            <div class="persona">
                <img src="persona2.jpg" alt="Persona 2">
                <h3>Persona 2</h3>
                <p>Description and details of the persona.</p>
            </div>
        </section>
        <section class="ideation">
            <h2>Ideation Process</h2>
            <h3>User Stories</h3>
            <ul>
                <li>User story 1: As a [user type], I want to [do something] so that
[achieve a goal].</li>
                <li>User story 2: ...</li>
            </ul>
            <h3>Scenarios</h3>
            <ul>
                <li>Scenario 1: Describe a scenario related to the user stories.</li>
                <li>Scenario 2: ...</li>
            </ul>
        </section>
        <section class="flow-diagram">
            <h2>Flow Diagram and Mapping</h2>
            <img src="flow-diagram.png" alt="Flow Diagram">
        </section>
    </main>
```

```
    <footer>
      <p>&copy; 2023 Your Company Name</p>
    </footer>
  </body>
  </html>
```

STYLE.CSS:

```
  body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    margin: 0;
    padding: 0;
  }
  header {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 2rem 0;
  }
  h1 {
    font-size: 2rem;
  }
  p {
    font-size: 1rem;
  }
  main {
    max-width: 800px;
    margin: 0 auto;
    padding: 2rem;
  }
  section {
    background-color: white;
    border: 1px solid #ddd;
```

```
    border-radius: 5px;
    margin: 2rem 0;
    padding: 1rem;
}

h2 {
    color: #007BFF;
    font-size: 1.5rem;
}

.persona {
    margin: 1rem 0;
}

.persona img {
    max-width: 100px;
    height: auto;
}

ul {
    list-style-type: disc;
    padding-left: 20px;
}

footer {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 1rem 0;
}
```

APEC

OUTPUT:



APEC

RESULT:

Thus for conducting end-to-end research- user research, creating personas, ideation process (user stories, scenarios), flow diagram, flow mapping using HTML and CSS is executed and verified successfully.

EX. NO. : 12	SKETCH, DESIGN WITH POPULAR TOOL AND BUILD A PROTOTYPE AND PERFORM USABILITY TESTING AND IDENTIFY IMPROVEMENTS

AIM:

To sketch, design with popular tool and build a prototype and perform usability testing and identify improvements using HTML and CSS.

ALGORITHM:

Step 1: Start

Step 2: <p> used for paragraph.

Step 3: <i> used for italic.

Step 4: <b> used for bold.

Step 5: <u> used for underline.

Step 6: used for division.

Step 7: <pre> used for preformatted text

Step 8: Stop

SOURCE CODE:

INDEX.HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="styles.css">
    <title>Interactive Prototype</title>
</head>
<body>
    <header>
        <h1>Welcome to Our App</h1>
    </header>
<main>
    <section class="content">
        <h2>App Content</h2>
        <p>This is where the main content of your app will go.</p>
    </section>
    <section class="menu">
        <h2>Navigation Menu</h2>
```

```
        <ul>
          <li><a href="#">Home</a></li>
          <li><a href="#">Features</a></li>
          <li><a href="#">About Us</a></li>
          <li><a href="#">Contact</a></li>
        </ul>
      </section>
    </main>
</body>
</html>
```

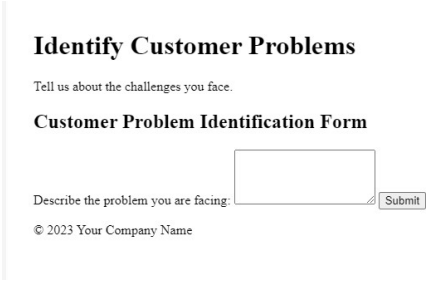
STYLE.CSS:

```
body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    margin: 0;
    padding: 0;
}
header {
    background-color: #007BFF;
    color: white;
    text-align: center;
    padding: 2rem 0;
}
h1 {
    font-size: 2rem;
}
main {
    max-width: 800px;
    margin: 0 auto;
    padding: 2rem;
}
section {
    background-color: white;
```

```
    border: 1px solid #ddd;
    border-radius: 5px;
    margin: 2rem 0;
    padding: 1rem;
}
 h2 {
    color: #007BFF;
    font-size: 1.5rem;
}
 ul {
    list-style-type: none;
    padding: 0;
}
 ul li {
    margin-bottom: 10px;
}
 ul li a {
    text-decoration: none;
    color: #007BFF;
}
 /* Add more styling as needed for your specific prototype. */
```

APEC

OUTPUT:



APEC

RESULT:

Thus for sketching, designing with popular tool and build a prototype and perform usability testing and identify improvements using HTML and CSS is executed and verified successfully.