

SCHOOL OF COMPUTER SCIENCE ENGINEERING AND INFORMATION SYSTEMS

WINTER SEMESTER 2024-2025 PMCA601L – FULL STACK WEB DEVELOPMENT LAB

LAB EXERCISE – 1

SUBMITTED ON: 13 – JAN - 2025

SUBMITTED BY-

AKASH KUMAR BANIK

PROGRAM: MCA

REGISTER No.: 24MCA0242

<u>LAB EXERCISE – 1</u>

- 1. Create a page aboutme.html that describes you. Include information such as:
- a. Your name in the top of the page in large text and your address in smaller text
- b. A description of you in <= 2 sentences. Emphasize important word(s) in bold.
- c. Print a paragraph with 4 5 sentences. Each sentence should be a different font.
- d. Print a paragraph that is a description of a book; include the title of the book as well as its author. Names and titles should be underlined, adjectives should be italicized and bolded.
- e. A list of classes you are taking right now with a simple description of each with interesting subjects in marvellous colours. (list)
- f. List your family members, friends and your favourite social leaders name as list under each category.
- g. Two images that represent you when you're happy and sad.
- h. Set the background color of the page as yellow.
- i. Something about one of your neighbours (people sitting next to you, make it interesting as well.
- j. Describe your skill level in programming languages.

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>About Me</title>
<style>
body {
```

```
background-color: rgb(243, 243, 131);
       padding: 30px 100px 30px 100px;
       line-height: 1.5;
       text-align: justify;
    .head{
       text-align: center;
       line-height: 1;
    .wrapper {
       font-size: large;
    h1 {
       font-size: 2.5em;
       color: darkblue;
    }
    h2 {
       font-size: 1.7em;
       color: darkgreen;
    .list-item {
       color: maroon;
    }
  </style>
</head>
<body>
  <div class="head">
    <h1>AKASH KUMAR BANIK</h1>
    <h2>MH-C Block, Vellore Institute of Technology, Vellore, Tamil Nadu, India</h2>
  </div>
```

<hr>>

<div class="wrapper">

I am an MCA student with a passion for design and development in the tech world. I am actively seeking opportunities to grow as a tech enthusiast.

>

I enjoy exploring new technologies and developing innovative solutions.

Reading books, especially on
technology and self-growth, is one of my favorite hobbies.

I also love coding and continuously
improving my programming skills.

Music inspires me and keeps me focused on my
goals.

The book I highly recommend is "<u>Computer Graphics and Vectors</u>" by Nilanjana P.
br>This is an excellent resource for beginners and intermediate learners, covering both
b><i>fundamentals</i></i></br>

<h2>Subjects I'm Studying</h2>

<u1>

Full Stack Web Development - Learning HTML, CSS,
JavaScript, ReactJS, and NodeJS.

Machine Learning - Focusing on classification,
prediction algorithms, and data mining techniques.

class="list-item">Software Testing - Exploring methodologies like Whitebox testing, Black-box testing, and Grey-box testing. It also includes difference between the SDLC and STLC.

class="list-item">Software Engineering - Studying SDLC models and their
importance in developing efficient software products.

Cybersecurity - Understanding network vulnerabilities
and implementing protective measures.

```
<h2>People in My Life</h2>
<h3>Family</h3>
<u1>
 Father: Ash Ketchem
 Mother: Serena
 Sibling: Brock
<h3>Friends</h3>
<111>
 Rahul Mittal (Rahulul-bin-laden)
 Karan Maurya (K.K.K.K.Kiran)
 Shashank Kumar (Genda)
 Aatish Prasad (Golden Retriever)
<h3>Social Leaders</h3>
<u1>
 Adolf Hitler
 Vladimir Putin
 Kim Jong Un
<h2>Emotions</h2>
Here are two images representing my happy and sad emotions:
<img src="images/happy-face2.png" alt="Happy moment" width="300">
<img src="images/sad-face.png" alt="Sad moment" width="300">
<h2>About My Neighbours</h2>
```

Living next to Rahul Mittal and Karan Maurya is nothing short of an adventure. Rahul, aka 'Rahulul-bin-laden,' is always plotting his next 'master plan'—usually involving harmless pranks that keep us all on our toes. Meanwhile, Karan, better known as 'K.K.K.Kiran,' spends his days perfecting his dramatic Bollywood-style entrances, complete with slow-motion walks and imaginary background music.

AKASH KUMAR BANIK 24MCA0242

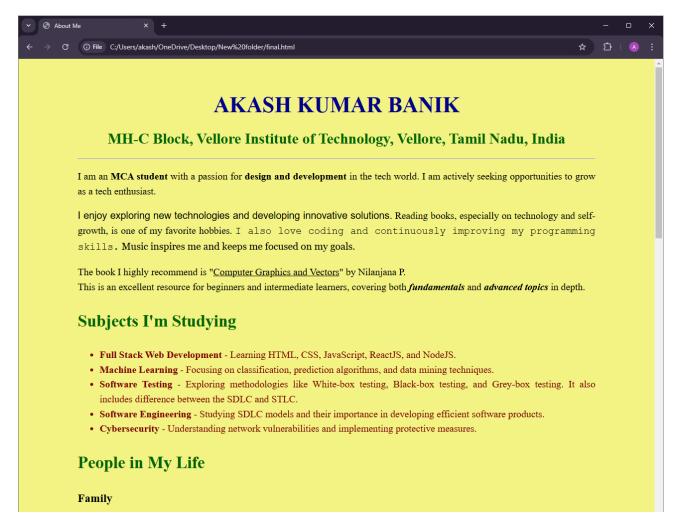
Together, they bring a unique blend of chaos and entertainment to the neighborhood.Whether it's Rahul's knack for turning every mundane event into a comedy show or Karan's endless supply of hilarious one-liners, there's never a dull moment when they're around!

```
<h2>Skill Levels</h2>

Python: Advanced
Java: Intermediate
C: Intermediate
JavaScript: Beginner

</div>
</body>
</html>
```

OUTPUT:



- Father: Ash Ketchem
- Mother: Serena
- Sibling: Brock

Friends

- Rahul Mittal (Rahulul-bin-laden)
- Karan Maurya (K.K.K.Kiran)
- Shashank Kumar (Genda)
- Aatish Prasad (Golden Retriever)

Social Leaders

- Adolf Hitler
- Vladimir Putin
- Kim Jong Un

Emotions

Here are two images representing my happy and sad emotions:



About My Neighbours

Living next to **Rahul Mittal** and **Karan Maurya** is nothing short of an adventure. Rahul, aka 'Rahulul-bin-laden,' is always plotting his next 'master plan'—usually involving harmless pranks that keep us all on our toes. Meanwhile, Karan, better known as 'K.K.K.Kiran,' spends his days perfecting his dramatic Bollywood-style entrances, complete with slow-motion walks and imaginary background music.

Together, they bring a unique blend of chaos and entertainment to the neighborhood. Whether it's Rahul's knack for turning every mundane event into a comedy show or Karan's endless supply of hilarious one-liners, there's never a dull moment when they're around!

Skill Levels

- Python: Advanced
- Java: Intermediate
- C: Intermediate
- JavaScript: Beginner

AKASH KUMAR BANIK 24MCA0242

2. Write a HTML code to design the following layout in formatted form and apply CSS box Model

First Name:	Last Name:]
Date of birth: mm / dd	1 / уууу Аде:	•	
Gender: Male V E	mail Address: Enter email a	ddress	
Positions Available:	O Junior Developer O M	id-level Developer C	Senior Developer
Programming Langua	ges: 🗆 Java 🗆 JavaScrip	t 🗆 Python	
Password:	Confirm Passy	word:	
Submit Reset			

CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>Developer Signup</title>
 <style>
  * {
   margin: 0;
   padding: 0;
   box-sizing: border-box;
   font-family: 'Roboto', sans-serif;
  body {
   background: linear-gradient(135deg, #968dec, #2ebf91);
   display: flex;
   justify-content: center;
```

```
align-items: center;
 height: 100vh;
 color: #333;
.container {
 background-color: #fff;
 border-radius: 12px;
 box-shadow: 0 8px 20px rgba(0, 0, 0, 0.2);
 padding: 40px;
 width: 90%;
 max-width: 700px;
 text-align: center;
.container h2 {
 color: #4a47a3;
 font-size: 2rem;
 margin-bottom: 1.5em;
.form-group {
 margin-bottom: 1.5em;
 text-align: left;
.form-group label {
 display: block;
 font-weight: bold;
 margin-bottom: 0.5em;
 color: #4a47a3;
.form-group input, .form-group select {
 width: 100%;
```

```
padding: 12px;
 border: 1px solid #968dec;
 border-radius: 8px;
 font-size: 1rem;
 color: #555;
 outline: none;
 transition: all 0.3s ease;
.form-group input:focus, .form-group select:focus {
 border-color: #2ebf91;
 box-shadow: 0 0 5px rgba(46, 191, 145, 0.5);
.form-row {
 display: flex;
 flex-wrap: wrap;
 gap: 20px;
.form-row .form-group {
 flex: 1;
 min-width: 45%;
.btn-submit, .btn-reset {
 width: 100%;
 padding: 14px;
 background-color: #4a47a3;
 color: #fff;
 font-weight: bold;
 border: none;
 border-radius: 8px;
 cursor: pointer;
```

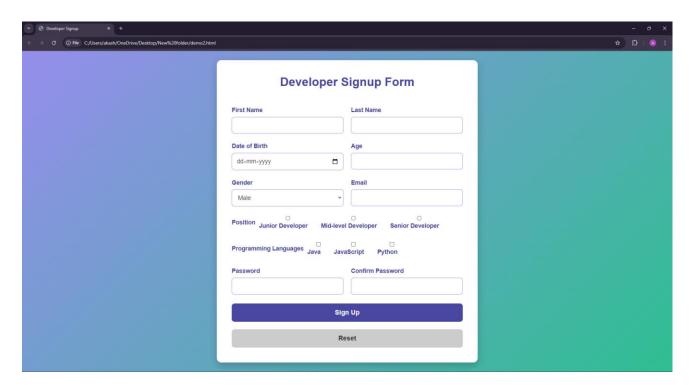
```
font-size: 1.1rem;
   transition: background-color 0.3s ease;
  .btn-reset {
   background-color: #ccc;
   color: #333;
  .btn-submit:hover {
   background-color: rgb(60, 190, 60);
  .btn-reset:hover {
   background-color: #9c9b9b;
  .form-group.radio-group, .form-group.checkbox-group {
   display: flex;
   flex-wrap: wrap;
   gap: 10px;
   align-items: center;
  .form-group.radio-group input, .form-group.checkbox-group input {
   margin-right: 8px;
 </style>
</head>
<body>
 <div class="container">
  <h2>Developer Signup Form</h2>
  <form>
   <div class="form-row">
```

```
<div class="form-group">
  <label for="fName">First Name</label>
  <input type="text" id="fName" name="fName" required>
 </div>
 <div class="form-group">
  <label for="lName">Last Name</label>
  <input type="text" id="lName" name="lName" required>
 </div>
</div>
<div class="form-row">
 <div class="form-group">
  <label for="dob">Date of Birth</label>
  <input type="date" name="dob" id="dob" required>
 </div>
 <div class="form-group">
  <label for="age">Age</label>
  <input type="number" name="age" id="age" required>
 </div>
</div>
<div class="form-row">
 <div class="form-group">
  <label for="gender">Gender</label>
  <select name="gender" id="gender" required>
   <option value="male">Male</option>
   <option value="female">Female
   <option value="trans">Transgender</option>
  </select>
 </div>
 <div class="form-group">
  <label for="email">Email</label>
```

```
<input type="email" name="email" id="email" required>
    </div>
   </div>
   <div class="form-row">
    <div class="form-group radio-group">
     <label>Position</label>
                                                                                Junior
     <label><input
                      type="radio"
                                     name="pos"
                                                   value="j-dev"
                                                                   required>
Developer</label>
     <label><input type="radio"
                                   name="pos" value="m-dev" required>
                                                                            Mid-level
Developer</label>
     <label><input type="radio" name="pos" value="s-dev" re> Senior Developer</label>
    </div>
   </div>
   <div class="form-row">
    <div class="form-group checkbox-group">
     <label>Programming Languages/label>
     <label><input type="checkbox" name="lang" value="java"> Java</label>
     <label><input type="checkbox" name="lang" value="js"> JavaScript</label>
     <label><input type="checkbox" name="lang" value="python"> Python/label>
    </div>
   </div>
   <div class="form-row">
    <div class="form-group">
     <label for="password">Password</label>
     <input type="password" id="password" name="password" required>
    </div>
    <div class="form-group">
     <label for="confirmPassword">Confirm Password</label>
     <input type="password" id="confirmPassword" name="confirmPassword" required>
    </div>
```

```
</div>
<div class="form-row">
<button type="submit" class="btn-submit">Sign Up</button>
<button type="reset" class="btn-reset">Reset</button>
</div>
</div>
</div>
</body>
</html>
```

OUTPUT:



3. Design a HTML page which displays your course registration page details of Winter 2024-25 as it is available in VTOP.

CODE:

<!DOCTYPE html>

<html lang="en">

<head>

```
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Course Registration - Winter 2024-25</title>
<style>
  body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
  background-color: #f0f0f0;
  header {
    background-color: #4893e4;
    color: #fff;
    padding: 10px;
    text-align: center;
  footer {
    background-color: #4893e4;
    color: #fff;
    text-align: center;
    padding: 5px;
    position: fixed;
    bottom: 0;
    width: 100%;
  table {
    width: 100%;
    border-collapse: collapse;
    padding: 10px;
```

```
th, td {
       text-align: center;
       padding: 10px;
       border: 1px solid #ccc;
    thead th {
       background-color: #333;
       color: white;
    .col1 { background-color: #FFDDC1; }
    .col2 { background-color: #FFABAB; }
    .col3 { background-color: #FFC3A0; }
    .col4 { background-color: #D5AAFF; }
    .col5 { background-color: #85E3FF; }
    .col6 { background-color: #B9FBC0; }
    .col7 { background-color: #FFD6E8; }
    .col8 { background-color: #FF9CEE; }
    .col9 { background-color: #D5AAFF; }
    .col10 { background-color: #FFABAB; }
    .col11 { background-color: #FFC3A0; }
    .col12 { background-color: #85E3FF; }
  </style>
</head>
<body>
  <header>
    <h2>Course Registration - Winter 2024-25</h2>
  </header>
  <br>
  <main>
```

```
<thead>
>
 S1.No.
 Class Group
 Course
 LT P J C
 Category
 Course Option
 Class Id
 Slot/Venue
 Faculty Details
 Registered/Updated Date & Time
 Attendance Date/Type
 Status & Ref. No.
</thead>
1
 General (Semester)
 PMCA504L - Software Engineering (Theory Only)
 3 0 0 3 3.0
 Discipline Core
 Regular
 VL2024250503324
 A2+TA2 - SJTG04
 GITANJALI J
 09-Nov-2024 09:14
 10-Nov-2024 - Manual
```

```
Registered and Approved
>
2
General (Semester)
PMCA507L - Machine Learning (Theory Only)
3 0 0 3 3.0
Discipline Core
Regular
VL2024250503334
B2+TB2 - SJT825
PARIMALA M
09-Nov-2024 09:13
10-Nov-2024 - Manual
Registered and Approved
3
General (Semester)
PMCA507P - Machine Learning Lab
0 0 2 2 1.0
Discipline Core
Regular
VL2024250503338
L27+L28 - SJT217
PARIMALA M
09-Nov-2024 09:13
10-Nov-2024 - Manual
Registered and Approved
```

```
>
4
General (Semester)
PMCA601L - Full Stack Web Development (Theory Only)
3 0 0 3 3.0
Discipline Elective
Regular
VL2024250503351
C2+TC2 - SJT825
SUMANGALI K
13-Dec-2024 20:26
14-Dec-2024 - Manual
Registered and Approved
5
General (Semester)
PMCA601P - Full Stack Web Development Lab
0 0 2 2 1.0
Discipline Elective
Regular
VL2024250503356
L3+L4 - SJT217
SUMANGALI K
13-Dec-2024 20:26
14-Dec-2024 - Manual
Registered and Approved
>
6
```

```
General (Semester)
 PMCA602L - Python Programming (Theory Only)
 2 0 0 2 2.0
 Discipline Elective
 Regular
 VL2024250503366
 D2 - SJTG08
 SELVA RANI B
 09-Nov-2024 09:27
 10-Nov-2024 - Biometric
 Registered and Approved
7
 General (Semester)
 PMCA602P - Python Programming Lab
 0 0 2 0 1.0
 Discipline Elective
 Regular
 VL2024250503373
 L15+L16 - SJT217
 SELVA RANI B
 09-Nov-2024 09:27
 10-Nov-2024 - Biometric
 Registered and Approved
>
 8
 General (Semester)
 PMCA605L - Cyber Security (Theory Only)
```

```
3 0 0 3 3.0
Discipline Core
Regular
VL2024250503392
F2+TF2 - SJT223
NADESH R.K
09-Nov-2024 09:08
10-Nov-2024 - Manual
Registered and Approved
9
General (Semester)
PMCA614L - Software Testing (Theory Only)
2 0 0 2 2.0
Discipline Core
Regular
VL2024250503423
E2 - SJT221
ARIVUSELVAN K
09-Nov-2024 09:15
10-Nov-2024 - Manual
Registered and Approved
10
General (Semester)
PMCA614P - Software Testing Lab
0 0 2 0 1.0
Discipline Core
```

```
Regular
VL2024250503429
L11+L12 - SJT122
ARIVUSELVAN K
09-Nov-2024 09:15
10-Nov-2024 - Manual
Registered and Approved
11
General (Semester)
PSTS502P - Quantitative Skills Practice
3 0 0 1 1.5
Skill Enhancement
Regular
VL2024250503073
G1+TG1 - PRP534
SIXPHRASE (APT)
09-Nov-2024 09:03
10-Nov-2024 - Manual
Registered and Approved
12
General (Semester)
PSTS601L - Advanced Competitive Coding
3 0 0 3 3.0
Open Elective
Regular
VL2024250500126
```

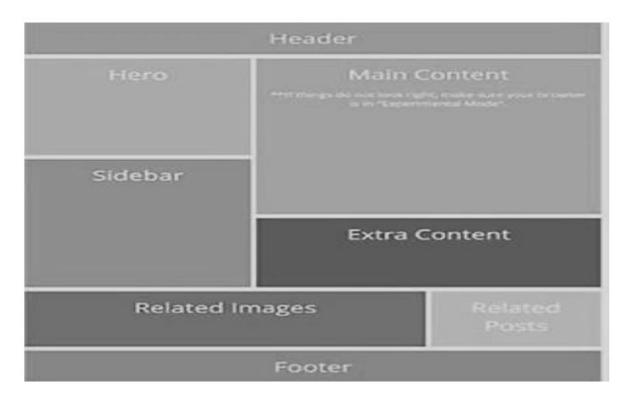
24MCA0242

AKASH KUMAR BANIK

OUTPUT:



- 4. Write the HTML and CSS code to the following layout in flex design with following specifications.
- a) All heading text color must be in white with font size as 15px.
- b) Choose different background color for each component in the layout.



CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Grid Layout</title>
<style>

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

```
body {
  font-family: Arial, sans-serif;
  display: flex;
  justify-content: center;
  align-items: center;
  min-height: 100vh;
  background-color: #f4f4f4;
.wrapper {
  display: grid;
  grid-template-areas:
     "container1"
     "container2"
     "container3";
  grid-template-rows: auto auto auto;
  gap: 10px;
  width: 90%;
  max-width: 1200px;
.container1 {
  display: grid;
  grid-template-areas:
     "header header"
     "hero main-content"
     "sidebar extra-content";
  grid-template-rows: 50px 200px 200px;
  grid-template-columns: 1fr 2fr;
  gap: 10px; /* Original gap */
  width: 100%;
```

```
.container2 {
  display: grid;
  grid-template-areas:
     "related-images related-posts";
  grid-template-rows: 150px;
  grid-template-columns: 3fr 1fr;
  gap: 10px; /* Original gap */
  width: 100%;
.container3 {
  display: grid;
  grid-template-areas:
     "footer footer";
  grid-template-rows: 50px;
  grid-template-columns: 1fr 2fr;
  gap: 10px; /* Original gap */
  width: 100%;
}
header {
  grid-area: header;
  background-color: #4CAF50;
  color: white;
  text-align: center;
  line-height: 50px;
.hero {
  grid-area: hero;
  background-color: #2196F3;
  color: white;
  text-align: center;
```

```
padding: 20px;
.main-content {
  grid-area: main-content;
  background-color: #FF9800;
  color: white;
  padding: 20px;
.sidebar {
  grid-area: sidebar;
  background-color: #9C27B0;
  color: white;
  padding: 20px;
.extra-content {
  grid-area: extra-content;
  background-color: #795548;
  color: white;
  padding: 20px;
.related-images {
  grid-area: related-images;
  background-color: #FFC107;
  color: white;
  padding: 20px;
.related-posts {
  grid-area: related-posts;
  background-color: #3F51B5;
  color: white;
```

```
padding: 20px;
    footer {
       grid-area: footer;
       background-color: #F44336;
       color: white;
       text-align: center;
      line-height: 50px;
  </style>
</head>
<body>
  <div class="wrapper">
    <div class="container1">
       <header class="header">Header
       <div class="hero">Hero</div>
       <div class="main-content">Main Content</div>
       <div class="sidebar">Sidebar</div>
       <div class="extra-content">Extra Content</div>
    </div>
    <div class="container2">
       <div class="related-images">Related Images</div>
       <div class="related-posts">Related Posts</div>
    </div>
    <div class="container3">
       <footer class="footer">Footer</footer>
    </div>
```

AKASH KUMAR BANIK

24MCA0242

</div>

</body>

</html>

OUTPUT:

