Sub: Internet Programming

Experiment – 1

1. Aim: To design a personal profile (One page) using HTML-5 and CSS

2. Objective: To explore use of HTML-5 and CSS markup languages for web designing.

3. Lab outcome: After performing the experiment, the students will be able to **design and develop** a web page and view it in the web browser.

4. Prerequisite:
- Fundamental knowledge of HTML and CSS
- Familiarity with the web browsers

5. Requirements: The following are the hardware and software requirements –
PC with windows OS Notepad, Google Chrome etc.

6. Pre-Experiment Theory:

What is HTML-5?

HTML (Hyper Text Markup Language) is a markup language used to create web page documents. It is a markup language used by web browsers to visualize code. HTML-5 is 5th version of HTML that features se veral improvements in website capabilities, and web content development. HTML5 features include markup and scripting elements, as well as application programming interfaces (APIs) for functionalities such as adding video and audio on a page, local data storage, offline operations, and location data usage. With HTML5 addressing standard web development functions, dev teams don't need to create functionality from scratch for every application and can instead rely on built-in browser capabilities.

For details of various HTML elements, refer to web page https://www.w3schools.com/tags/

What is CSS?

CSS (Cascading style sheets) describe to the user how to display HTML elements on the screen in a proper format. It is the markup language that is used to style HTML documents.

With the help of CSS, we can change the colour of text, we can change the style of fonts, and we can control the spacing between the paragraph etc.. CSS is easy to understand and provides strong control on the Html documents.CSS is used along with HTML. CSS selectors are used to find (or select) the HTML elements you want to style.

7. Laboratory Exercise

A. Steps to be implemented.

Follow the procedure given below to design a web page to display your single page resume
1. Choose a template for resume design. Refer to reference – 1 given below.
2. Open a notepad or any other text editor or visual studio code.
3. Open a new file and write HTML code using its elements to design a web page to display resume as per chosen template.
4. Save file as .html
5. Style the resume using CSS markup language.
6. To view the output, right click the file and select open with option.
7. Test your resume web page in different browsers such as Google Chrome, Microsoft Edge or OPERA et.

B. Program Code

1. Write a program code using HTML-5 and CSS markup languages, to design a web page to display a single page resume of your own. For templates of a single page resume, refer to the first reference given below.

   Following is the suggestive list of components of your profile page
   - Your photograph
   - About you (Some inspirational quote)
   - Personal details (Name, Address, email, phone)
   - Academic qualifications
   - Skills
   - Projects
   - Internships
   - Hobbies
   - Achievements

8. Post Experimental Exercise-

C. Questions:
   1. Differentiate between HTML and HTML-5
   2. Convert your single page resume, designed in this experiment, to pdf file to upload to LinkedIn.

D. Results/Observations/Program output:
   Present the program input/output results if any and comment on the same.

E. Conclusion:
   1. Write what was performed in the experiment.
   2. Write which tools you used to perform the experiment
   3. Write what you inferred from the output obtained.

F. References:

[1] https://novoresume.com/career-blog/one-page-resume

[2] https://veerasundar.com/blog/how-to-make-resume-in-html-export-to-pdf

[3] https://medium.com/@iftimiealexandru/creating-a-resume-using-html-and-css-and-saving-it-as-a-pdf-e85d24b0408e

[4] https://steemit.com/steemstem/@gotgame/how-to-create-a-one-page-resume-website-using-html-css-flat-design

[5] https://github.com/imvpn22/resume

[6] https://codepen.io/DeepS/pen/DLyZam

In-Lab Exercise:

Write a program code using HTML-5 and CSS markup languages, to design a web page to display a single page resume of your own. For templates of a single page resume, refer to the first reference given below.

HTML:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Vishal Mahajan Resume</title>
    <link rel="stylesheet" href="EXP1.css">
</head>
<body>
    <div class="container">
        <div class="header">
            <h1>Vishal Rajesh Mahajan</h1>
            <p>Mumbai, Maharashtra, India (400103)</p>
            <p>+91 89999 72216 | <a
href="https://vishalrmahajan.in">vishalrmahajan.in</a> | <a
href="mailto:vism06@gmail.com">vism06@gmail.com</a></p>
            <p><a
href="https://www.linkedin.com/in/VishalRMahajan">linkedin.com/in/VishalRMahajan</a> | <a
href="https://github.com/VishalRMahajan">github.com/VishalRMahajan</a></p>
        </div>

        <div class="section">
            <h2>Education</h2>
            <p>St. Francis Institute Of Technology (Nov 2022 - June 2026)</p>
            <p>Bachelor of Engineering in Information Technology, Mumbai,
India</p>
        </div>
```

```html
<div class="section">
    <h2>Relevant Coursework</h2>
    <ul class="coursework-list">
        <li>Data Structures</li>
        <li>Database Management</li>
        <li>Operating System</li>
        <li>Computer Network</li>
        <li>Computer Architecture</li>
    </ul>
</div>

<div class="section">
    <h2>Latest Projects</h2>
    <h3>HealthCast | FastAPI, Scikit Learn, Jupyter | <a
href="https://github.com/VishalRMahajan/HealthCast">GitHub</a> (Apr
2024)</h3>
        <ul>
            <li>Developed machine learning models using Scikit Learn to
predict diseases based on patient-reported symptoms and clinical data.</li>
            <li>Collaborated on deploying the ML model using FastAPI for
real-time disease prediction in healthcare.</li>
            <li>Contributed to the integration of the ML model into the
FastAPI backend for seamless functionality.</li>
        </ul>

        <h3>Escrow | Python, FastAPI, Postgres | <a
href="https://github.com/KXN2004/EscrowBackend">GitHub</a> (Mar 2024)</h3>
        <ul>
            <li>Teamed up to build a FastAPI-powered backend for the
Escrow event website, featuring an interactive quiz application.</li>
            <li>Completed the project in a 17-hour speedrun, deploying
the backend on Google Cloud Platform (GCP) for scalability and
reliability.</li>
            <li>Ensured a seamless user experience for event
participants, focusing on performance and reliability.</li>
```

```html
            <li>Hosted the project on GitHub for collaborative
development and version control.</li>
            </ul>

            <h3>EventHive | Reflex, FastAPI, Python, Postgres | <a
href="https://github.com/VishalRMahajan/EventHive">GitHub</a> (Mar 2024)</h3>
            <ul>
                <li>Developed EventHive, a comprehensive platform using
Reflex, a Python framework, for seamless website creation with Python for
both frontend and backend.</li>
                <li>Implemented features for student and committee login,
registration, event ticket booking, event addition, and automated ticket
email delivery using Reflex, FastAPI, and PostgreSQL for database
management.</li>
            </ul>
        </div>

        <div class="section">
            <h2>Technical Skills</h2>
            <ul>
                <li>Languages: Python, C, SQL</li>
                <li>Tools: VS Code, PyCharm, Postman, GitHub</li>
                <li>Technologies/Frameworks: FastAPI, Flask, PostgreSQL</li>
            </ul>
        </div>

        <div class="section">
            <h2>Certification</h2>
            <h3>Python for Data Science, AI and Development (IBM,
Coursera)</h3>
            <ul>
                <li>Certified in Python for Data Science and Software
Development, showcasing expertise in variables, data structures, branching,
loops, functions, objects, and classes.</li>
                <li>Proficient in using Python libraries like Pandas and
Numpy, with experience in developing code using Jupyter Notebooks, and
```
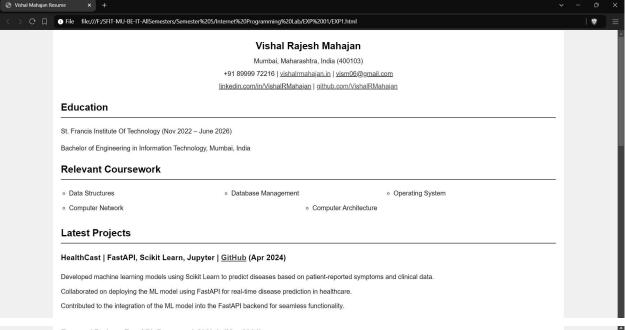
```
skilled in accessing and web scraping data using APIs and Beautiful
Soup.</li>
            </ul>

            <h3>Version control using Git and GitHub and Introduction to REST
APIs (MLSA)</h3>
            <ul>
                <li>Proficient in version control using Git and GitHub,
demonstrating commitment to enhancing software development skills.</li>
            </ul>
        </div>

        <div class="section">
            <h2>Leadership / Extracurricular</h2>
            <h3>Information Technology Students' Association (ITSA) (July
2023 - Present)</h3>
            <ul>
                <li>Executive: Coordinated and organized events and workshops
for students, promoting technical skills and knowledge within the student
community.</li>
                <li>Collaborated with other ITSA members to create a website
for an ITSA organized event.</li>
            </ul>
        </div>

        <div class="section">
            <h2>Open Source Contributions</h2>
            <h3>Reflex Web (Feb 2024)</h3>
            <ul>
                <li>Fixed a small code block error causing a form not to
render properly on a page. <a
href="https://github.com/reflex-dev/reflex-web/pull/490">Merged PR</a></li>
            </ul>
        </div>
    </div>
</body>
</html>
```

CSS:

```css
body {
    font-family: Arial, sans-serif;
    line-height: 1.6;
    margin: 0;
    padding: 0;
    background-color: #f4f4f4;
}

.container {
    width: 80%;
    margin: auto;
    overflow: hidden;
    padding: 20px;
    background: #fff;
}

.header,
.section {
    margin-bottom: 20px;
}

.header {
    text-align: center;
}

.header h1 {
    margin: 0;
    font-size: 24px;
}

.header p {
    margin: 5px 0;
}
```

```css
.section h2 {
    margin-top: 0;
    border-bottom: 2px solid #333;
    padding-bottom: 5px;
}

ul {
    list-style: none;
    padding: 0;
}

ul li {
    margin-bottom: 10px;
}

.coursework-list {
    display: flex;
    flex-wrap: wrap;
    list-style-type: circle;
    padding-left: 20px;
}

.coursework-list li {
    flex: 1 1 30%;
    margin-bottom: 10px;
}
```

Output Screenshot:

Vishal Rajesh Mahajan

Mumbai, Maharashtra, India (400103)

+91 89999 72216 | vishalrmahajan.in | vism06@gmail.com

linkedin.com/in/VishalRMahajan | github.com/VishalRMahajan

Education

St. Francis Institute Of Technology (Nov 2022 – June 2026)

Bachelor of Engineering in Information Technology, Mumbai, India

Relevant Coursework

- Data Structures
- Database Management
- Operating System
- Computer Network
- Computer Architecture

Latest Projects

HealthCast | FastAPI, Scikit Learn, Jupyter | GitHub (Apr 2024)

Developed machine learning models using Scikit Learn to predict diseases based on patient-reported symptoms and clinical data.

Collaborated on deploying the ML model using FastAPI for real-time disease prediction in healthcare.

Contributed to the integration of the ML model into the FastAPI backend for seamless functionality.

Escrow | Python, FastAPI, Postgres | GitHub (Mar 2024)

Teamed up to build a FastAPI-powered backend for the Escrow event website, featuring an interactive quiz application.

Completed the project in a 17-hour speedrun, deploying the backend on Google Cloud Platform (GCP) for scalability and reliability.

Ensured a seamless user experience for event participants, focusing on performance and reliability.

Hosted the project on GitHub for collaborative development and version control.

EventHive | Reflex, FastAPI, Python, Postgres | GitHub (Mar 2024)

Developed EventHive, a comprehensive platform using Reflex, a Python framework, for seamless website creation with Python for both frontend and backend.

Implemented features for student and committee login, registration, event ticket booking, event addition, and automated ticket email delivery using Reflex, FastAPI, and PostgreSQL for database management.

Technical Skills

Languages: Python, C, SQL

Tools: VS Code, PyCharm, Postman, GitHub

Technologies/Frameworks: FastAPI, Flask, PostgreSQL

Certification

Python for Data Science, AI and Development (IBM, Coursera)

Certified in Python for Data Science and Software Development, showcasing expertise in variables, data structures, branching, loops, functions, objects, and classes.

Proficient in using Python libraries like Pandas and Numpy, with experience in developing code using Jupyter Notebooks, and skilled in accessing and web scraping data using APIs and Beautiful Soup.

Version control using Git and GitHub and Introduction to REST APIs (MLSA)

Proficient in version control using Git and GitHub, demonstrating commitment to enhancing software development skills.

Leadership / Extracurricular

Information Technology Students' Association (ITSA) (July 2023 – Present)

Executive: Coordinated and organized events and workshops for students, promoting technical skills and knowledge within the student community.

Collaborated with other ITSA members to create a website for an ITSA organized event.

Open Source Contributions

Reflex Web (Feb 2024)

Fixed a small code block error causing a form not to render properly on a page. Merged PR