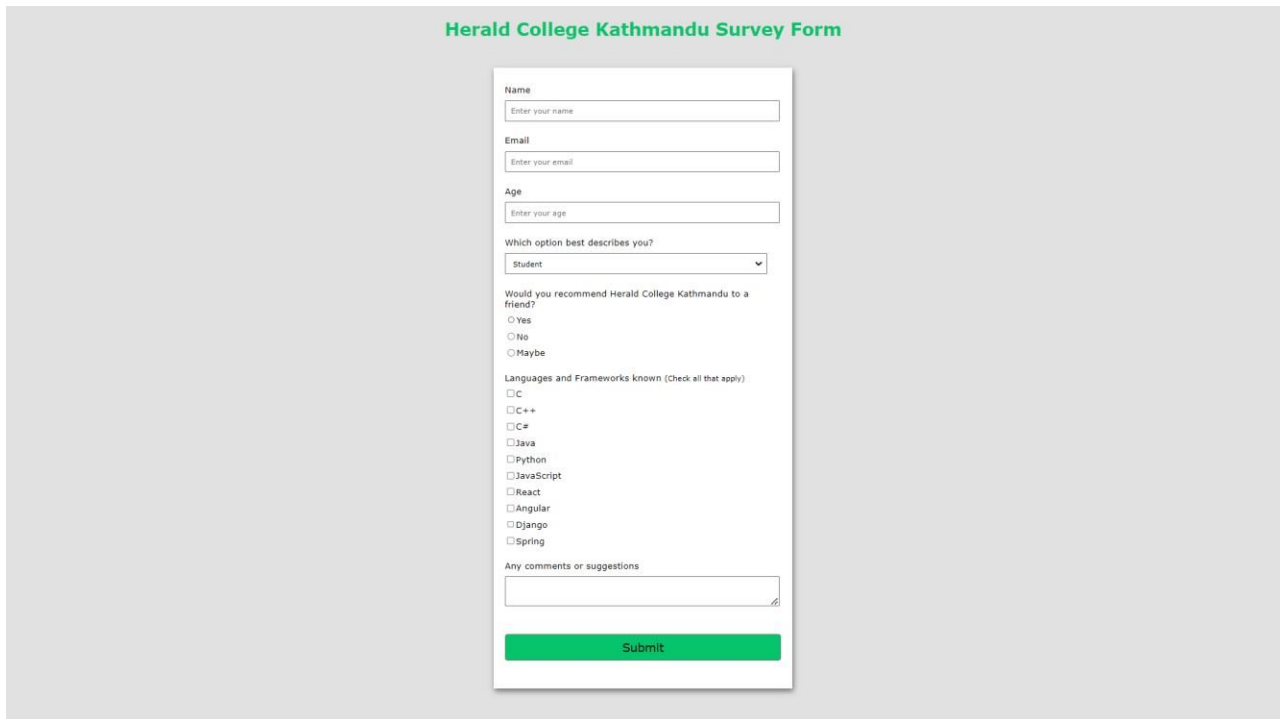


# Hands – On Lab

## Workshop 1

### 1. Survey Form

Using HTML and CSS (inline and internal) only, create a survey form as in the given figure:



The image shows a web browser displaying a survey form titled "Herald College Kathmandu Survey Form" in green text. The form is centered on a light gray background. It contains the following fields and options:

- Name:** A text input field with placeholder text "Enter your name".
- Email:** A text input field with placeholder text "Enter your email".
- Age:** A text input field with placeholder text "Enter your age".
- Which option best describes you?:** A dropdown menu with "Student" selected.
- Would you recommend Herald College Kathmandu to a friend?:** Three radio button options: "Yes", "No", and "Maybe".
- Languages and Frameworks known (Check all that apply):** A list of checkboxes for C, C++, C#, Java, Python, JavaScript, React, Angular, Django, and Spring.
- Any comments or suggestions:** A text area with a small icon in the bottom right corner.
- Submit:** A green button with the text "Submit".

GitHub Link: [https://github.com/Navn-eet/Internet-Software-Architecture/tree/main/Navneet\\_Workshop/Workshop1/Task1](https://github.com/Navn-eet/Internet-Software-Architecture/tree/main/Navneet_Workshop/Workshop1/Task1)

Create a simple web page which must include the following sections:

1. Logo
2. Navigation Menu (Home, About, Service, Contact)
3. Search Box and icon
4. Heading Text
5. Use of <p> and <span> tag with different styling
6. Button
7. Form
8. Social media icons
9. Footer section
10. Background image

GitHub Link:  
[https://github.com/Navn-eet/Internet-Software-Architecture/tree/main/Navneet\\_Workshop/Workshop1/Task2](https://github.com/Navn-eet/Internet-Software-Architecture/tree/main/Navneet_Workshop/Workshop1/Task2)

### 3. XAMPP Control Panel

Download and install Xampp Server on your computer and run the web page build in question 1 and 2 using localhost. See the difference between running a page with localhost and directly.

Task 1:

**Herald College Kathmandu Survey Form**

Name  
Enter your name

Email  
Enter your email

Age  
Enter your age

Which option best describes you?  
Student

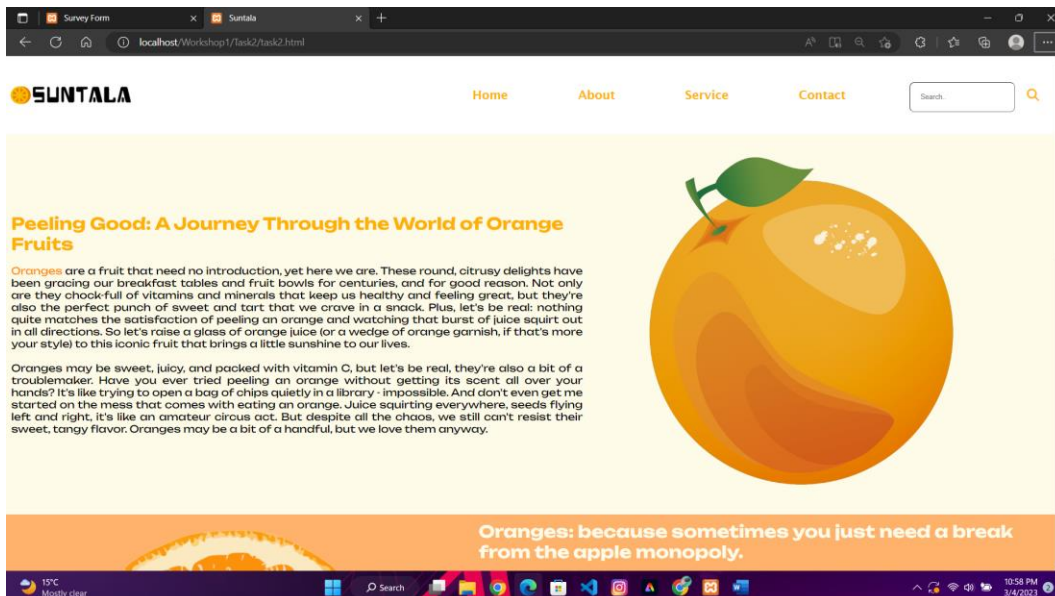
Would you recommend Herald College Kathmandu to a friend?  
☐ Yes  
☐ No  
☐ Maybe

Languages and Framework Known (Check all boxes that apply.)  
☐ C  
☐ C++  
☐ C#  
☐ Java  
☐ Python  
☐ JavaScript  
☐ React  
☐ Angular  
☐ Django  
☐ Spring

Any comments or suggestions  
Your Message

Submit

Task2:



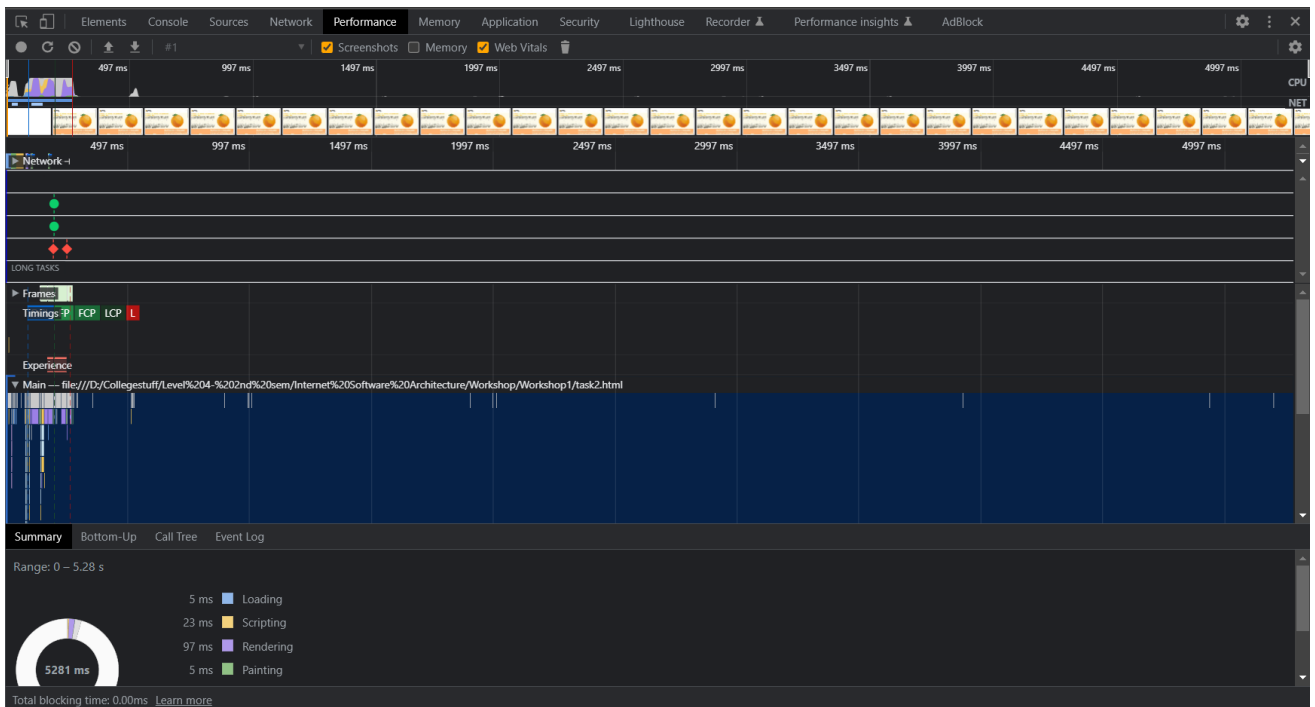


When opening a website on an XAMPP Apache server, the font sizes and image sizes appear different than intended because the CSS file that specifies the font and image sizes does not load properly, leading to the default settings being applied. While opening the website as an HTML file directly in a web browser ensures that the CSS file is more likely to load correctly and that the font and image sizes are displayed as specified in the CSS.

## 4. Web Performance Visualization

For the created web pages, visualize the web performance using devtools, following the steps:

1. After running the file in the browser, right click on mouse and go to inspect
2. Check the network and performance options for the visualization



→ The website performance data provided indicates that the website took a total of 5.28 seconds (5281ms) to fully load, with the majority of time spent in the idle state (5046ms). This prolonged idle time raises concerns about potential underlying issues such as slow database queries or network latency, which could be causing delays in page loading. It is important to identify and address the root cause of this issue to optimize website performance.

The rendering process took 97ms, which suggests that the website may have some complexity in its design and structure, leading to delays in rendering. Similarly, the scripting process took 23ms, indicating that the website may have some inefficiencies in its code. Optimizing the code can help reduce the time it takes to execute scripts, thus improving the website's performance.

The system took 106ms, which may indicate that the server or network may have caused delays in

processing requests. It is crucial to optimize network speed, database queries, and server processing to improve the overall performance of the website.

On the positive side, both loading and painting took only 5ms, indicating that there may be no significant issues with the website's resources, such as images, videos, or other multimedia content. These resources were likely optimized correctly and did not impact the website's overall performance.