WAPH-Web Application Programming and Hacking

Individual Project 1

Front-end Web Development with a Professional Profile Website on github.io cloud service

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Student

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Short-bio: I am an IT graduate student at UC. I am interested in backend development and AI.

Repository Information

Repository URL: https://github.com/Sangeethsk01/Sangeethsk01.github.io

Project Overview

The project involves creating a personal website hosted on GitHub. The website includes an index.html file displaying personal information, skills, and a resume. A separate course.html file links to labs and hackathons. The site uses an open-source Bootstrap template with features like scroll animation, navigation bar, and reload effects. A page tracker using Flagcounter counts visitors. Technical features include a jQuery analog clock, a digital clock, and a show/hide email function. The project integrates a joke API for displaying jokes, a Rick and Morty API for random cartoon characters, and utilizes JavaScript cookies to show a welcome message for new and returning visitors. Overall, I learned how

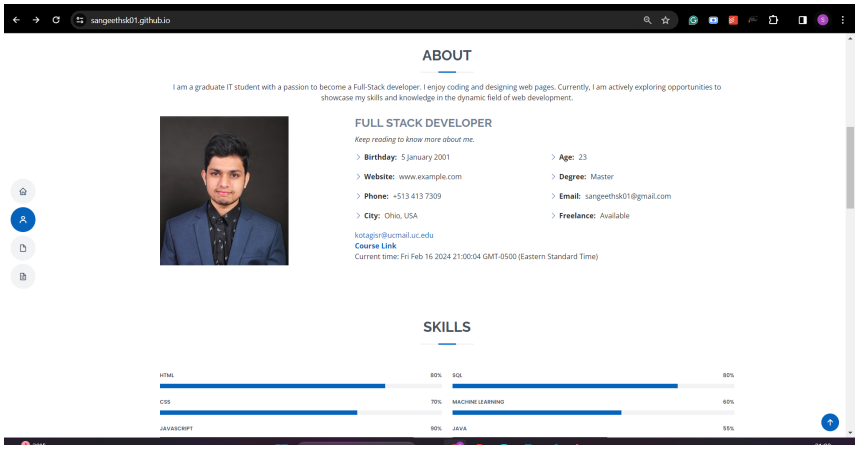
to host a static webpage on github.io and design it with css and bootstrap. I also learned about javascript libraries and how cookies work.

Link to the `github.io` repository: https://github.com/Sangeethsk01/Sangeethsk01.github.io/tree/main

Link to the portfolio webpage: https://sangeethsk01.github.io/index.html

Task 1: General Requirements

- Created an index.html file to display my information including my name, headshot, skills, and resume. Hosted this page as a personal website on my GitHub cloud account under the name `Sangeethsk01.github.io`.

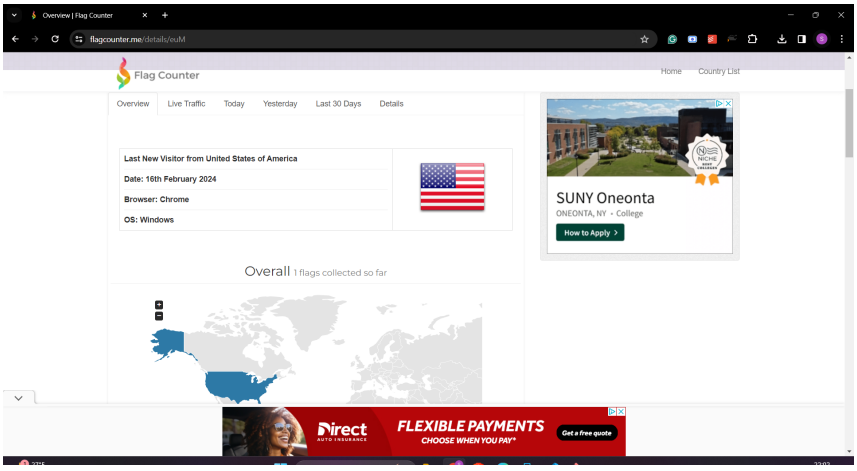


- Created another file named course.html that introduces this course and provides the links to all the labs and hackathons I completed. Provided this file as a link in the personal website page in the 'About' section.

Task 2: Non-technical requirements

- I have used an open-source bootstrap template and CSS library to design this portfolio. The page contains features like the animation on scroll (aos), navigation bar, reload effects, etc.

- Included a page tracker using `flagcounter` to count the number of visitors to the page. Included this counter at the bottom of the page.



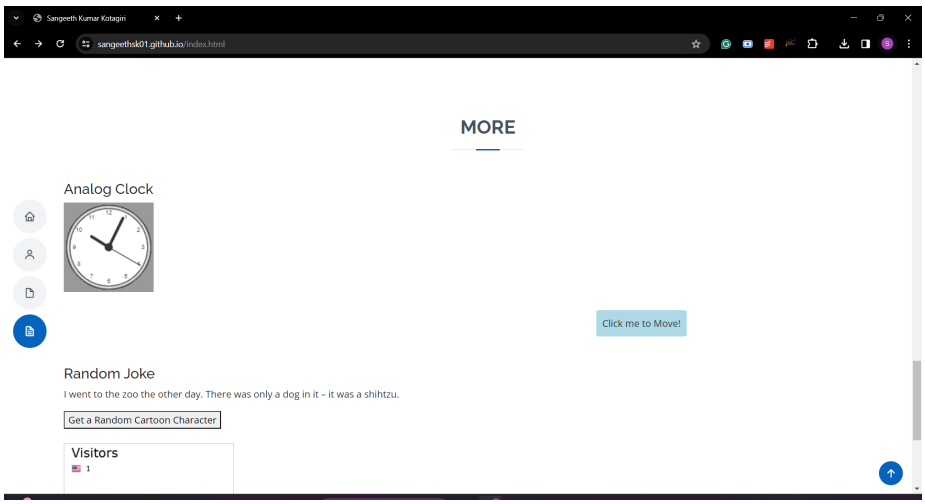
Page Tracker:

```
<!--Flag counter to count visitors-->
 <div class="Counter">
   <a href="https://www.flagcounter.me/details/euM">
   <img src="https://www.flagcounter.me/euM/" alt="Flag Counter"></a>
 </div>
```

Task 3: Technical requirements

Javascript frameworks

- Used jQuery to implement an analog clock in the 'more' section and a digital clock, a show/hide email function in the 'about' section.



- Used javascript open source library 'anime' library to create animation by making a button move when clicked on it. Used an EventListner to achieve this. Animation code:

```
<div id="animatedElement">Click me to Move!</div>
<script>
        // Using JS Animation library to move an element
        const element = document.getElementById('animatedElement');
        // Add a click event listener to trigger the animation
         element.addEventListener('click', () => {
        anime({
        targets: element,
        translateX: 1000,
        easing: 'easeInOutQuad',
        duration: 1000,
        direction: 'alternate',
          });
        });
</script>
```

API Integration

- Included the public jokeAPI to display a new joke every one minute. Used Ajax function to send the API get request.

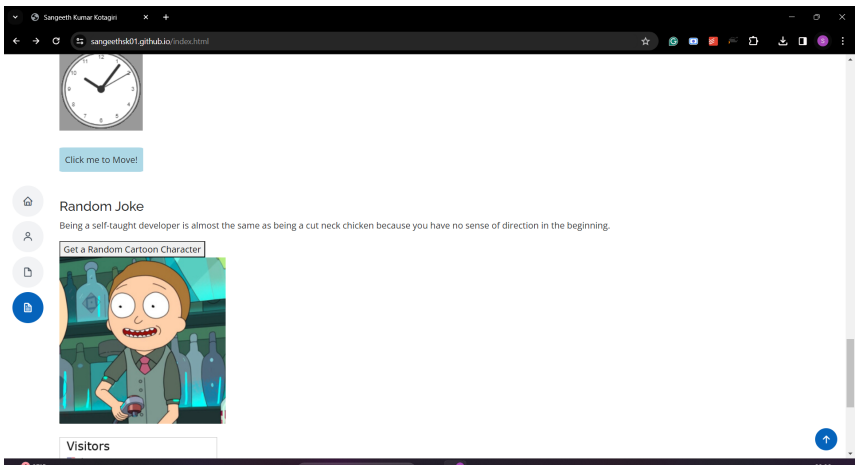
Code:

```
<div id="jokeContainer">
      <!-- The joke will be displayed here -->
</div>
<script>
      // Function to fetch and display a joke
      function fetchJoke() {
          $.ajax({
              url: 'https://v2.jokeapi.dev/joke/Any',
              method: 'GET',
              success: function(response) {
                  // Check if it's a single-part or two-part joke
                  var jokeText = response.type === 'single' ? response.joke : response.

                  // Display the joke in the container
                  $('#jokeContainer').html('<p>' + jokeText + '</p>');
              },
              error: function(error) {
                  console.error('Error fetching joke:', error);
              }
          });
      }

      // Initial fetch when the page loads
      fetchJoke();

      // Set up interval to fetch and display a joke every minute
      setInterval(fetchJoke, 60000);
</script>
```



- Used a public API named `rickandmortyapi` to get cartoon characters when requested. Built a function to generate a random number to get a random character when clicked on the button.

  Code:

```
<button id="getRandomCharacter">Get a Random Cartoon Character</button>
  <div id="characterImage">
      <!-- Character image will be displayed here -->
  </div>
<script>
  //Generating Rick and morty cartoon characters
      $("#getRandomCharacter").click(function(){
          getRandomCharacter();
      });

      function getRandomCharacter() {
          $.ajax({
              url: 'https://rickandmortyapi.com/api/character/' + getRandomCharacterId(
              method: 'GET',
              success: function(response) {
                  displayCharacterImage(response);
              },
              error: function(error) {
                  console.error('Error fetching character:', error);
              }
          });
      }

      function getRandomCharacterId() {
          // The Rick and Morty API has characters up to id 671, adjust as needed
          return Math.floor(Math.random() * 671) + 1;
      }

      function displayCharacterImage(character) {
          var characterImage = '<img src="' + character.image + '" alt="' + character.n
          $("#characterImage").html(characterImage);
      }
</script>
```

Using JavaScript cookies

- Using a cookie, written a Javascript code to display a welcome message for the new visitors and a welcomeback message for the old visitors on the home section. The JavaScript code includes two functions for handling cookies in the web browser. The setCookie function sets a cookie with a given name, value, and optional expiration period in days. The getCookie

function retrieves the value of a specified cookie by searching through the document's stored cookies.

Code:

```
<strong><div class="cookie" id="welcomeMessage"></div></strong>
 <script>
   // Cookie code
    function setCookie(name, value, days) {
         var expires = "";
         if (days) {
             var date = new Date();
             date.setTime(date.getTime() + (days * 24 * 60 * 60 * 1000));
             expires = "; expires=" + date.toUTCString();
         }
         document.cookie = name + "=" + value + expires + "; path=/";
     }

     function getCookie(name) {
         var nameEQ = name + "=";
         var cookies = document.cookie.split(';');
         for (var i = 0; i < cookies.length; i++) {
             var cookie = cookies[i];
             while (cookie.charAt(0) == ' ') {
                 cookie = cookie.substring(1, cookie.length);
             }
             if (cookie.indexOf(nameEQ) == 0) {
                 return cookie.substring(nameEQ.length, cookie.length);
             }
         }
         return null;
     }

     function displayWelcomeMessage() {
         var lastVisit = getCookie("lastVisit");
         var welcomeMessage = $("#welcomeMessage");

         if (lastVisit === null) {
             // First-time visit
             welcomeMessage.text("Welcome to my homepage!");
             setCookie("lastVisit", new Date().toUTCString(), 365);
         } else {
             // Returning visit
             welcomeMessage.text("Welcome back! Your last visit was " + lastVisit);
         }
     }
```

```
    // Call the function when the document is ready
    $(document).ready(function(){
        displayWelcomeMessage();
    });
</script>
```