

Looking for a date?

Mahathi Nakka 23b0965

April 27, 2024

1 Introduction

This document mainly focuses on the implementation of HTML and CSS and JAVASCRIPT.

2 Steps to launch the website

Every webpage uses HTML, CSS to structure its webpage style up and display it. Go to a directory where all the related files are present. Run "python3 -m http.server". Now go to a webpage and type "http://localhost:8000/startinglove.html". Now we can work on .html file where it first opens startinglove.html webpage and then login.html webpage and so on..

3 Files

The files present are:

- startinglove.html : This is the first page to go to login page
- login.html : This contains username and password fields which are to be entered.
- pin.html : This has the two step verification to prove that you are a human.
- forgot.html : This has secret question.
- dating.html : It has a form for which user has to fill it.
- scroll_or_swipe.html : Enables us to scroll through the profiles.
- match.html : To find the right match.
- endinglove.html : This is the last step
- style.css : Styling to login.html, forgot.html, dating.html, scroll_or_swipe.html are written in it.

- script.js : Javascript file used to find the right match.
- login.json : Contains username, password, secret question and answer. For example

```
{
  "username": "deepa_mumbai",
  "password": "deepa@789",
  "secret_question": "What is the name of your first pet?",
  "secret_answer": "Tommy"
},
```

- students.json : It contains details of the people to whom we need to match. For example

```
{
  "IITB Roll Number": "2023002",
  "Name": "Aditi Singh",
  "Year of Study": "2nd",
  "Age": 20,
  "Gender": "Female",
  "Interests": ["Movies", "Art"],
  "Hobbies": ["Cooking", "Painting"],
  "Email": "aditi@example.com",
  "Photo": "photos/aditi_singh.png"
},
```

4 Basic Tasks

- **Login page** : There will be username and password for which user has to enter and when the password is wrong it throws error message. There are let's begin the journey and forgot password options also. When the user clicks on let's begin the journey button by entering correct credentials it is directed to pin.html webpage otherwise the user can click on forgot password which will be directing to forgot.html webpage.
- **Forgot password page**: When the user gives username as input and clicked on submit, a secret question will be displayed corresponding to the data fetched from login.json file. The password is also displayed. So again going back to login.html webpage to login.

```
fetch('login.json')
  .then(res => res.json())
  .then(information =>
```

fetch('login.json') is an inbuilt function in javascript requesting data from json file. .then is used to execute code after fetching the data.

```
then ( information =>
```

. This takes the json data and perform operations with the data here.

- **Input interface :** There is a form to be filled in the dating.html webpage which on submission finds the right match. It includes various fields like name, age, gender, hobbies, interests etc. There is also a scroll through profiles option in this webpage. There is a logout button as well, that takes back to the login screen.
- **Scroll through profiles :** This also includes the javascript code in which fetch finds the data from the json file.

```
information.appendChild (name);
```

It appends child element (here it is 'name') to the parent element ('information').

```
data.appendChild (img);
```

It adds the img element as a child to the data element.

```
document.addEventListener ( 'DOMContentLoaded', profiles );
```

It sets up an event listener that waits for the DOMContentLoaded event to be executed on the document, and when it occurs, it executes the function profiles.

- **Finding the right match :** It gives the right match after submitting the form in dating.html.

```
const finddetails = new URLSearchParams (window.location.search);
```

This is used to create a new instance of the URLSearchParams object. "window.location.search" provides information about the current URL.

```
const name = finddetails.get ( 'Name' );
```

The get() method on finddetails URL is being called and it gives the value associated with the key 'Name' from the URL of finddetails and names it as 'name'.

- **styles.css :**

```
background-image: url ();  
background-size: cover;  
background-position: center;  
background-repeat: no-repeat;  
}
```

They are used to set the wallpaper to the webpage. By the names itself we can understand what jobs they do. To adjust margins we use

```
margin-top/left/bottom/right and margin:auto also  
  
background-size: 100% 150%;
```

Puts the background image width to be 100% and height to be 150%.

- **script.js** : Javascript code to find the right match is written in this file. We used different functions to find the right match. Matching is based on maximum intersection of hobbies and interests
- **Output interface** : Output interface will be showing up the person to whom we are matched. There is a link written "And then!!" have a look over it.

5 Customisations

- I have made a two step verification to prove that you are a human by asking some arithmetic question everytime you login.
- I also used background gradient styling to style when scrolling through profiles.
- I included a video at the start.
- I also a video at the end of the journey.
- I added background images to every page.
- I added favicons also.
- **startinglove.html** This has a video at the very beginning and has a text "A new chapter unfolds" which on clicking gets us to the login page.

```
#video-background {  
  position: fixed;  
  top: 0;  
  left: 0;  
  width: 100%;  
  height: 100%;  
  object-fit: cover;  
  z-index: -1;  
}
```

This sets the styling of the video.

```
@keyframes love {  
  from {background-color: rgb(178, 32, 57);}  
  to {background-color: rgba(157, 53, 86, 0.737);}
```

@keyframes are generally used for animations. When styling is done in this, the animation will change from the one style to new style .

- **pin.html :**

This has two step verification to verify that you are a human. By defining some functions and using them i was able to create a arithmetic question where the user is always being asked about it everytime he/she logins. Only when the value matches then we can proceed next or else there will be an error message popping up. I included calculations by using the arithmetic operators '+', '-'.

```
const num1 = Math.floor(Math.random() * 10) + 1;
```

This produces some random number from 1 to 10 both including.

```
const correctAnswer = eval(maths);
document.getElementById('toverify').addEventListener('submit', function(event){
    const userAnswer = document.getElementById('answer').value;
```

This calculates the result of the arithmetic operation.

```
if (userAnswer.trim() === correctAnswer.toString()) {
    window.location.href = 'dating.html';
} else {
    alert('Wrong answer');
}
```

It checks if the user answer is correct and if it matches then it directs to dating.html page or else it gives error message.

- **Gradient styling :** It is done in scroll_or_swipe.html. The background color changes gradually by scrolling to bottom of the page.

```
<style>
body {
    height: 2500px;
background: linear-gradient(135deg, #ba437599 0%, #db1f3584 0%,
    #0f66b8ae 75%);
}
</style>
```

This is the styling used to change in a gradient way. The angle at the start specifies the angle of gradient. 135 degrees, means gradient is diagonal from the bottom left corner to the top right corner of the element. Leftmost color is to the start of the gradient and it similarly goes in that order making the last color closer to the end of the gradient.

- **endinglove.html** : By clicking on **"And then!!"** in match.html webpage we will be directed to this page. This is also very similar to startinglove.html.

6 End result

Journey begins with this - Starting with startinglove.html and by clicking on "A new chapter unfolds" we will be directed to login.html webpage where the login will be successful when correct details are filled and directs to pin.html webpage where we need to solve a mathematics question. If credentials are wrong then error message will be displayed. If in case one has forgotten the password he can claim a chance to retrieve back his password by clicking on forgot password which directs to forgot.html webpage where when user enters his/her username a secret question related to them pops up and when answered correctly the password is shown on the screen and again going back to login page. After answering the question in pin.html dating.html webpage will be displayed where the user has to fill the form and there is an option to scroll the profiles which on clicking it directs to scroll_or_swipe.html webpage. When the user clicks on submit we get the right match and there by on clicking "And then" puts an end to the work by displaying a video. This is the total flow of the work.

7 Conclusion

In conclusion HTML, CSS, JAVASCRIPT are very well useful to make webpages and styling it up.