

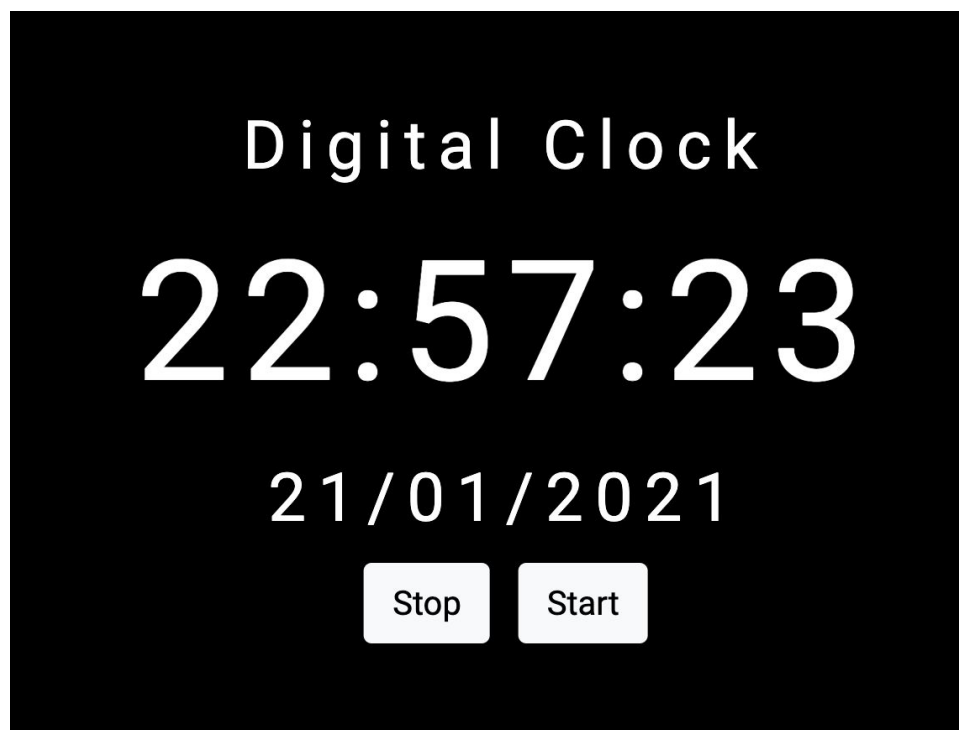
Javascript Assignment

Guidelines:

- i. This assignment is mandatory for everyone*
- ii. There will only be a single attempt for each exam and **no deadline extension in case of assignments***
- iii. Any case of unfair means or **plagiarism would lead to debarring in final placements without any further consideration.***
- iv. The images of the applications are only for reference, the app design/theme/colors can be different but all the components mentioned in the image of the apps should be present.*

Problem 1:

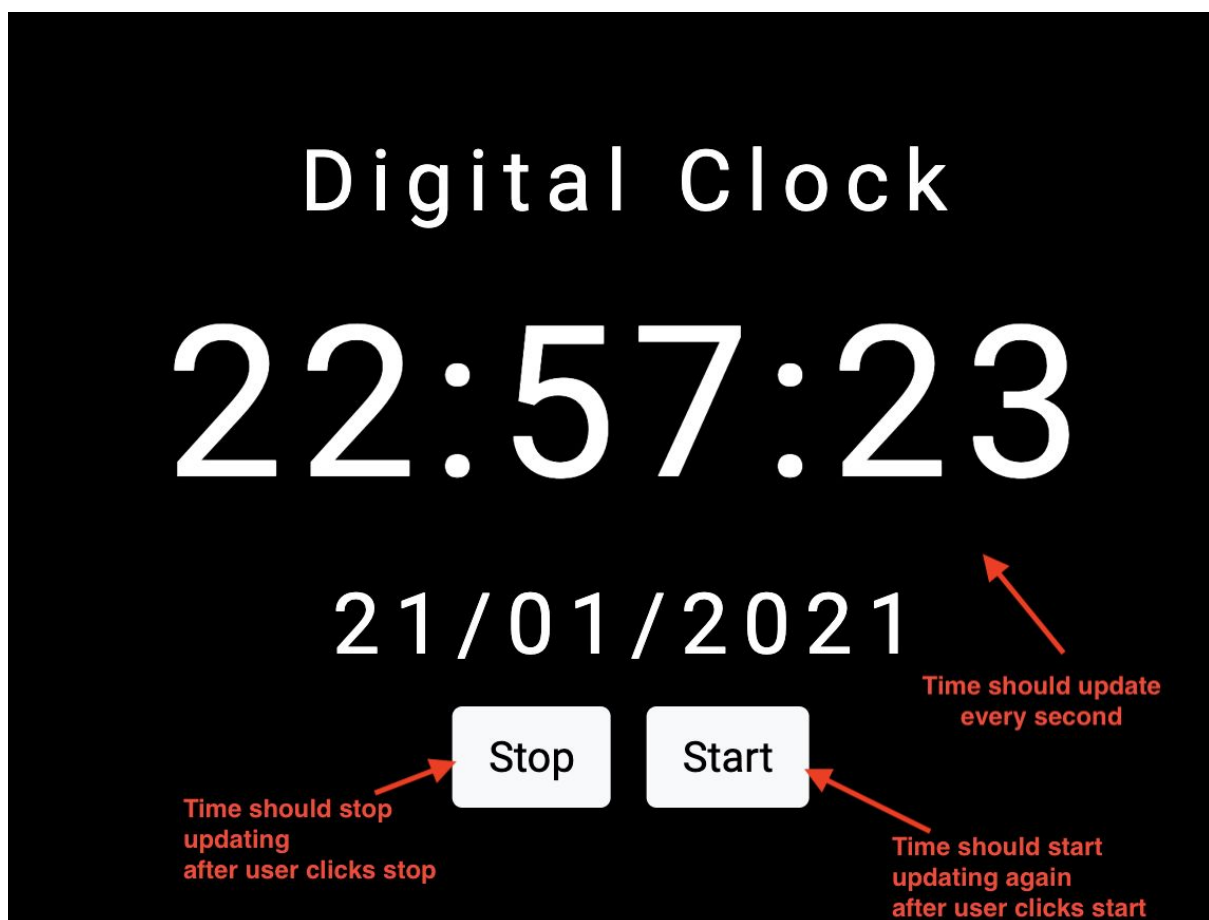
Build a digital clock with start/stop function



Primary Objective:

Build a digital clock which should display current time and update the time after every second.

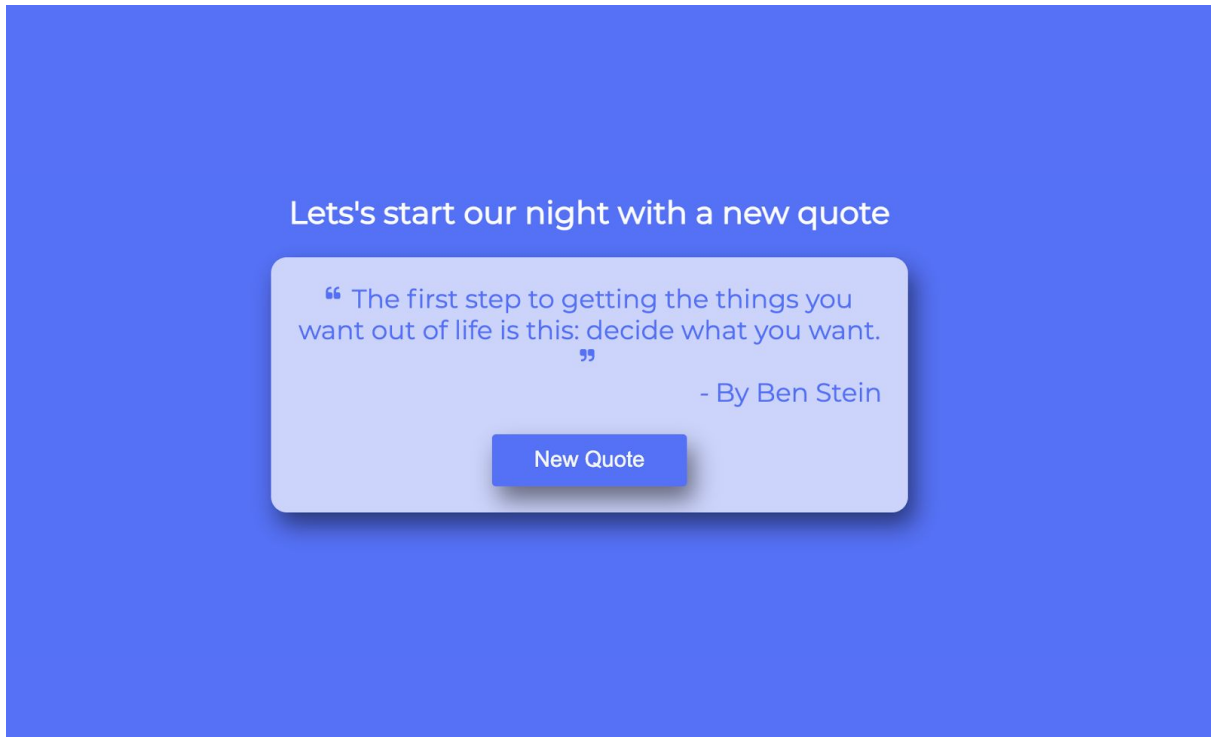
When the user clicks `Stop` Button the clock should stop updating the time. When the user clicks on the `Start` button later the clock should start updating the current time again as shown below:-

**Learnings:**

How to make use of setInterval and clearInterval method in Javascript

Problem 2:

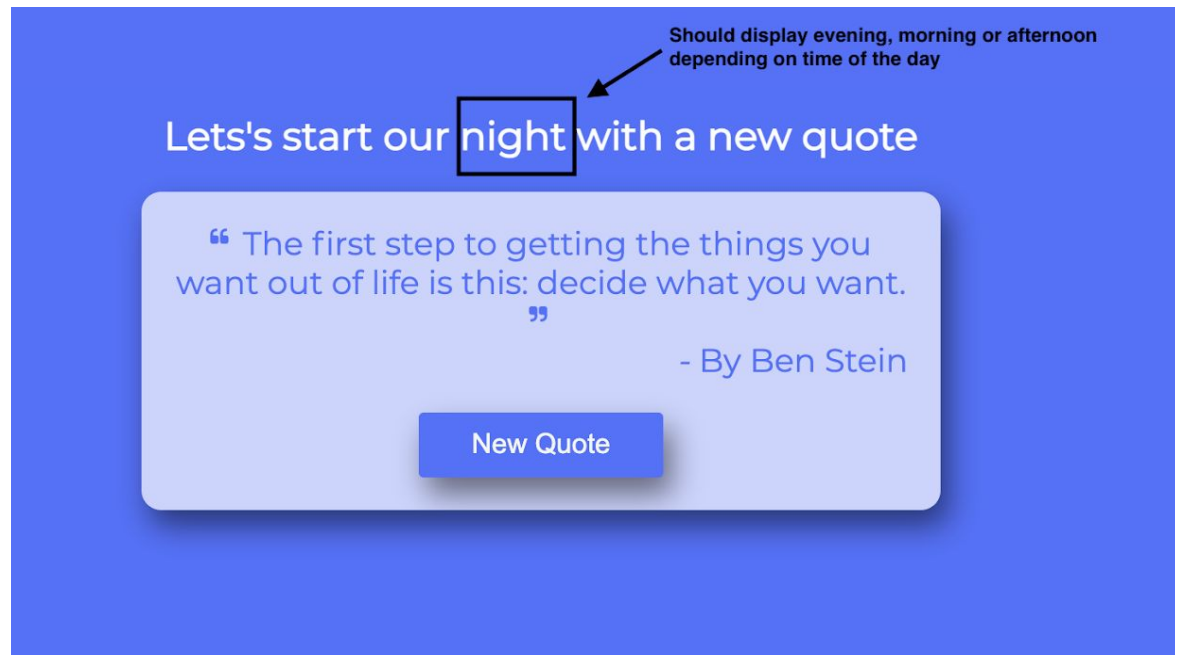
Build random quote generator using Javascript or JQuery



Primary Objectives:

- 1) The title section should show a greeting statement depending on time of the day:-
`Let's start our [timeOfDay] with a new quote`
The three options to be shown in place of `timeOfDay` placeholder would be:-
 - a) morning
 - b) afternoon
 - c) evening/night

For example if the user opens the page in the evening the title would be as shown in the screenshot:-



Note: The exact time slabs for the logic behind displaying morning, evening or afternoon can be your choice.

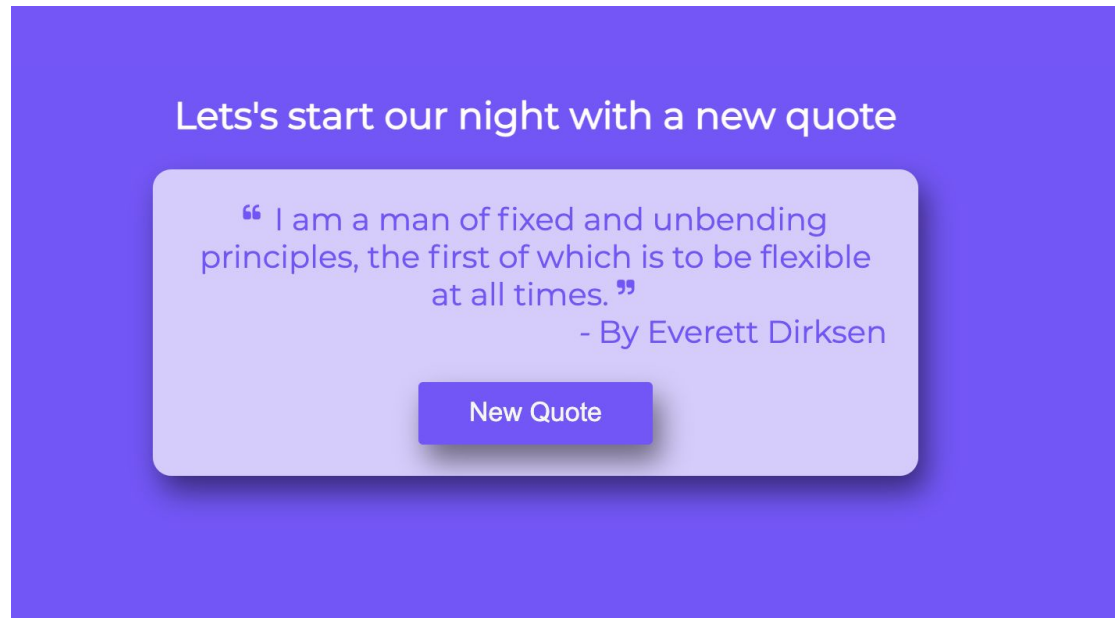
- 2) The user should be shown a different quote after clicking the **New Quote** button with a new theme in the background.

For this create a collection of at least 10 quotes and display one of them randomly when the user clicks on the **New Quote** button.

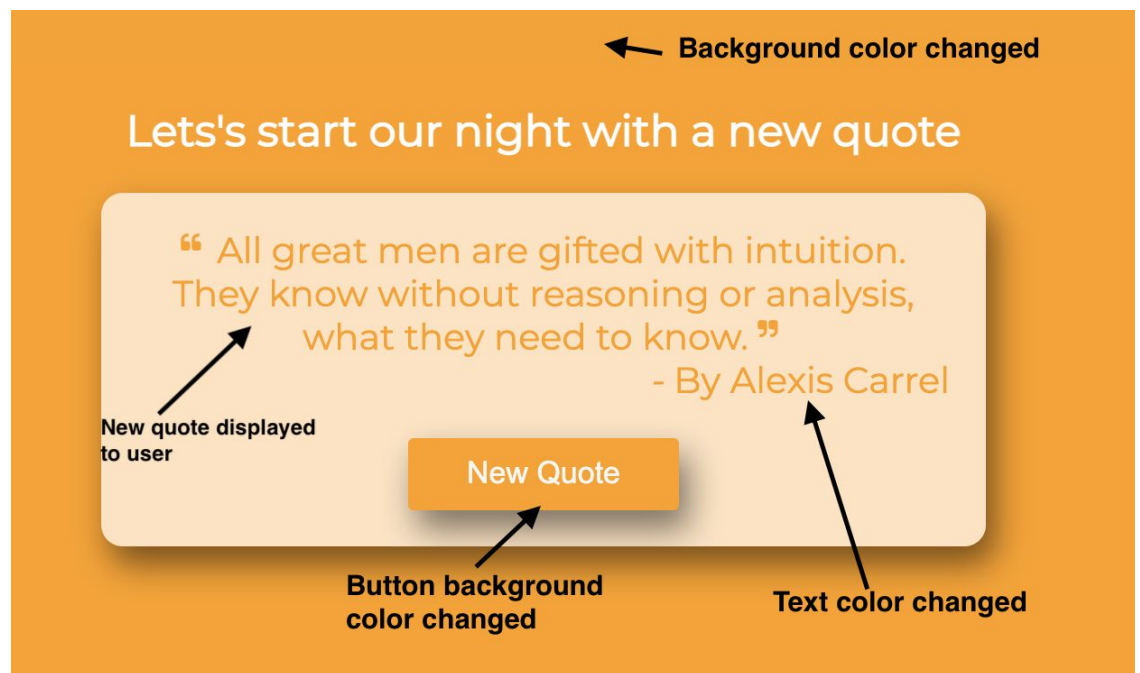
Also create a collection of at least 10 colors from which one color is randomly chosen and applied in the background of the page. The same color is also applied to button and quote text.

Example:-

a) UI before user clicks on **New Quote** button:



b) UI after user clicks on **New Quote** button:



Learnings:

How to make use of DOM manipulation methods in Javascript/Jquery

Resources:

The quote symbol before and after the quote can be taken from font-awesome library:

<https://fontawesome.com/icons?d=gallery&q=quote>

Tutorial on font awesome icons:-

https://www.w3schools.com/icons/fontawesome_icons_intro.asp

Color codes for the background colors used in the sample design can be taken from material palette website:- <https://www.materialpalette.com/>


Problem 3:

Build a student's virtual college id card generator using Javascript or JQuery


ID Card Generator

Enter Student Details


Enter Name:

 Ramesh Dev

Enter College Name:

 I.I.T


Enter Location:

 Mumbai

Enter student's picture:


Choose file

student2.jpg



Generate Card

Generated ID Card



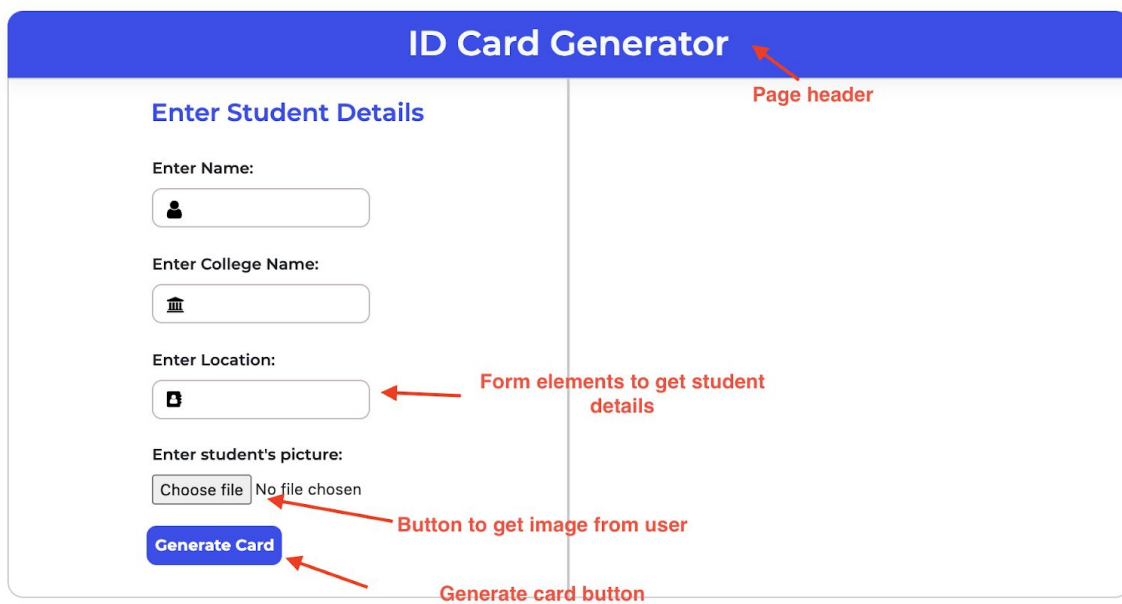
Name: Ramesh Dev

College Name: I.I.T

Location: Mumbai

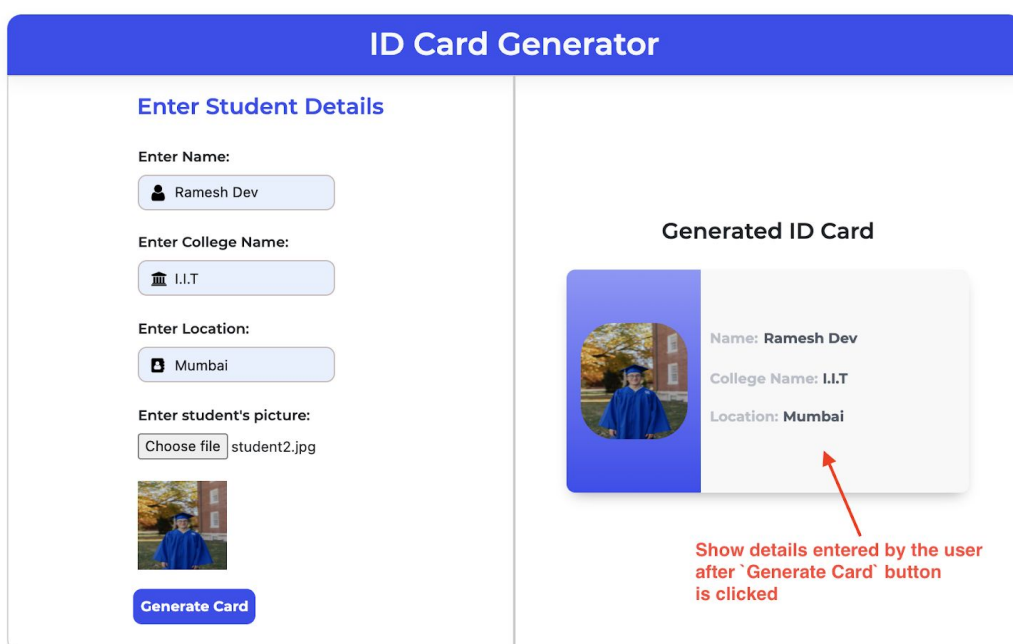
Objective:

A student should be able to upload details on the left side of the page including option to upload image initially:-



The image shows the initial state of the 'ID Card Generator' web application. The page has a blue header with the title 'ID Card Generator'. The main content area is divided into two columns. The left column, titled 'Enter Student Details', contains four input fields: 'Enter Name:' with a person icon, 'Enter College Name:' with a building icon, 'Enter Location:' with a location pin icon, and 'Enter student's picture:' with a 'Choose file' button and the text 'No file chosen'. Below these fields is a blue 'Generate Card' button. The right column is currently empty. Red arrows point to various elements with labels: 'Page header' points to the blue header, 'Form elements to get student details' points to the input fields, 'Button to get image from user' points to the 'Choose file' button, and 'Generate card button' points to the 'Generate Card' button.

After entering details, once user clicks on generate card button, the right hand side should show a virtual card as shown in image below:-



The image shows the 'ID Card Generator' web application after the 'Generate Card' button has been clicked. The left column now shows the entered details: 'Enter Name:' with 'Ramesh Dev', 'Enter College Name:' with 'I.I.T', 'Enter Location:' with 'Mumbai', and 'Enter student's picture:' with a 'Choose file' button and the text 'student2.jpg'. Below the text is a small thumbnail image of a student in a blue graduation cap and gown. The 'Generate Card' button is still present. The right column now displays a 'Generated ID Card'. The card has a blue header and a white body. It features a circular profile picture of the student on the left and the following details on the right: 'Name: Ramesh Dev', 'College Name: I.I.T', and 'Location: Mumbai'. A red arrow points to the card with the label 'Show details entered by the user after `Generate Card` button is clicked'.

Note: There is no need to store user details in backend or local storage. The task is to only extract the values from the form fields on the left and display them on the right side after button click.

Learnings

How to use HTML5 form elements, input file type and Javascript DOM manipulation

Resources

The icons before form inputs can be taken from font-awesome library:

<https://fontawesome.com/icons?d=gallery&q=quote>

Tutorial on font awesome icons:-

https://www.w3schools.com/icons/fontawesome_icons_intro.asp

Blue color shade used in sample design:- #4047F0

Id photo background gradient:- linear-gradient(to top, #4047F0, #8f94fb)