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SUNRISE AND SUNSET

WhiteHat Jr
Live Online Coding for Kids

INSTRUCTIONS:

Goal of the Project

In Class 32, you learned the concept of API calls and the JSON data structure along with accessing data from JSON. You also created an asynchronous function in JavaScript and a scoring system for the game.

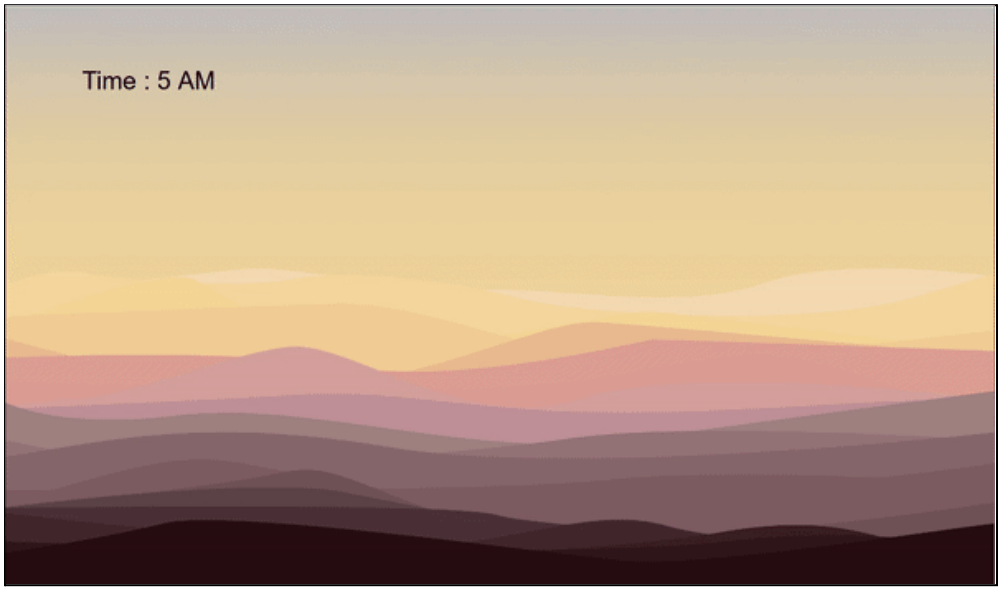
In this project, you will have to practice and apply the concepts learned in the class. You have to create a Sunrise and Sunset animation here.

Story:

Rohan's school is organizing an animation competition. All the participants have to submit a unique animation created by writing code. Rohan wants to participate in the competition and wants to create a **Sunrise and Sunset** animation. But he is not good at coding. We told him about you that you are a brilliant coder.

Could you help him and complete his cute Sunrise and Sunset animation?

The final output of this project is shown below:



***This is just for your reference. We expect you to apply your own creativity in the project.**

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Getting Started:

1. Use the template on GitHub, available for download here.
2. **Unzip** this folder, rename the unzipped folder as **Project-32**.
3. **Import** this folder into **VS Code**.
    - Click on File -> Open Folder -> Select the folder that we renamed in the correct location.
4. Start editing your code in **sketch.js**.

Specific Tasks to complete the Project:

1. Call **getBackgroundImage** asynchronous function in **setup()** which is already created in the project template.
2. Inside the **getBackgroundImage** function:
    - Write code to fetch datetime from this API.

```
// write code to fetch time from API
var response = await fetch("write API url here");
```

    - Now, after getting the response from API, extract the datetime value from the data.
    - Write code to slice the datetime and find the hour from it.

```
// write code slice the datetime
hour = datetime.slice(11,13);
```

    - Add conditions to change background images from sunrise to sunset according to the time. Check hints.
    - Lastly, load the image in the **backgroundImg** variable here.

```
//load the image in backgroundImg variable here
backgroundImg = loadImage(bg);
```

3. Check if the code works as you expected before submitting the project.
4. **SAVE** all the changes made to the project.

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Submitting the Project:

1. Upload your completed project to your own GitHub account.
2. Create a New Repository named "**Project 32**".
3. **Upload** working code to this GitHub repository.
4. Enable GitHub pages for your repository.
5. Copy the link to the GitHub pages link in the Student Dashboard.

Hints for the project:

1. To extract datetime for the data in JSON format, you can use the code given below:

```
var responseJSON = await response.json();
var datetime = responseJSON.datetime;
```

2. To change background images from sunrise to sunset. You can see the few parts of the code given below as a reference:

```
// add conditions to change the background images from sunrise to sunset
if(hour>=04 && hour<=06 ){
    bg = "sunrise1.png";
}else if(hour>=06 && hour<=08 ){
    bg = "sunrise2.png";
}else if(hour>=23 && hour==0){
    bg = "sunset10.png";
}else if(hour==0 && hour<=03){
    bg = "sunset11.png";
}else{
    bg = "sunset12.png";
}
```

3. You can easily complete this project because this project requires very similar code that you have written in your class activity for changing background in the Angry Birds Game.

REMEMBER... Try your best, that's more important than being correct.
After submitting your project your teacher will send you feedback on your work.

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