

INSTRUCTIONS:

Goal of the Project:

In Class 32, you have learnt the concept of API calls and how to make an API call, the JSON data structure and how to access data from JSON. You also created an asynchronous function in JavaScript and a scoring system for the game.

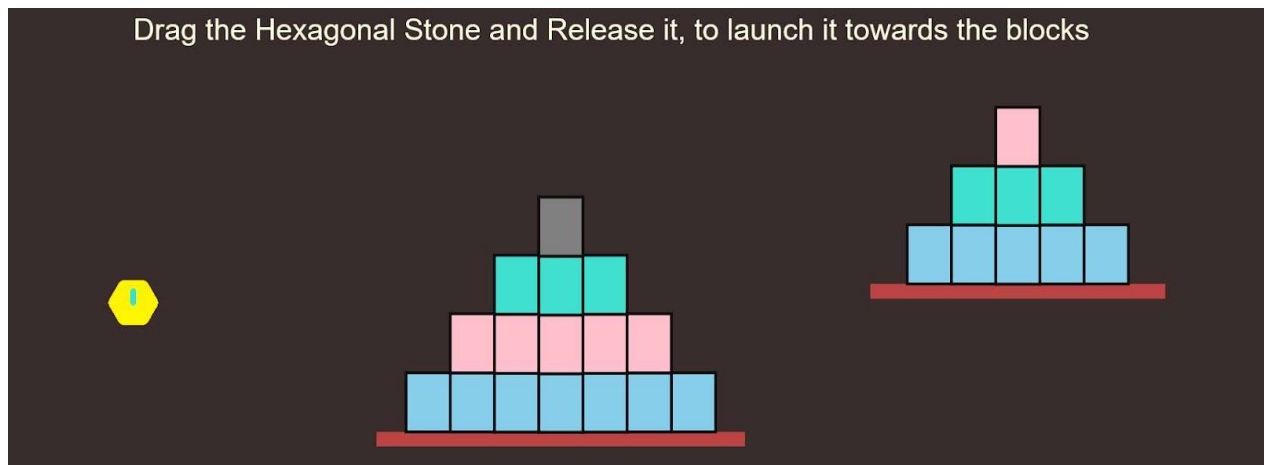
In this project, you will have to practice and apply the concepts learnt in the class. Update the background of the project based on day/night and keep track of the player scores.

Story:

In the game design competition in your school, you are asked to make a game related to knocking down objects.

Create a Tower Siege Game where your friends can throw a rock at a group of stacked objects and crash them. The stacked objects then disappear and the player scores points.

See a video of this in action [here](#).



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

Getting Started:

1. Use your existing project created in Project 30.
2. **Import** this folder **into VS Code**.
3. Start editing your code in **sketch.js**.

Specific Tasks to complete the Project:

1. Create a variable score and initialize it with 0.
2. Display text to show the score in sketch.js.

```
text("SCORE : "+score,750,40);
```

3. Create a **score()** function inside box.js.
 - The score increases as the visibility of the boxes reduces.
 - Set a limit for visibility. (See Hints)
4. Call the score() function for each object of the box.

```
blocks1.score();  
blocks2.score();  
blocks3.score();  
blocks4.score();  
blocks5.score();  
blocks6.score();  
blocks7.score();  
blocks8.score();  
blocks9.score();
```

Additional Challenging Activity:

1. Change the background of the game based on whether it is day or night.
 - Call the WorldTimeAPI using **fetch()** and collect the response in a variable.
 - As done in the class, extract the time of the day in hours and assign the hour variable.
 - Using the hour variable:
 - If the time is between 6 am to 6 pm make the background image a light, bright color.
 - If the time is between 6 pm to 6 am make the background image a dark color.
 - Fetch the time at the start of the program and determine the initial color of the background.

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 the repository.
5. Copy the link to the github pages link in the Student Dashboard.

Hints :

1. Score function for reference:

```
score(){  
  if(this.visibility<0 && this.visibility >-105){  
    score++;  
  }  
}
```

2. Use the following API for the code:
 - <http://worldtimeapi.org/api/timezone/Asia/Kolkata>
 - <http://worldclockapi.com/api/json/est/now>
3. For more understanding on slice function, see the following link:
 - [JavaScript String slice\(\) Method](#)

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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