### **TOWER SIEGE – 2**



#### **INSTRUCTIONS:**

# Goal of the Project:

In Class 30, you have learnt to use the vanishing effect for a pig and use keyboard events to attach the bird back to the sling in the Angry Birds game.

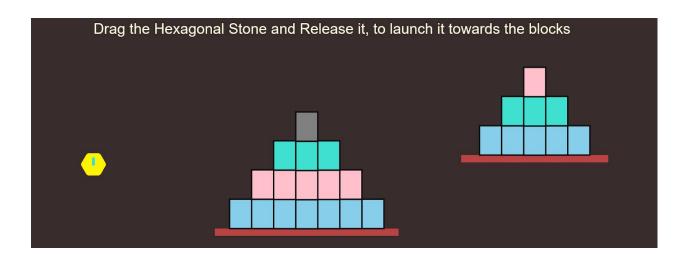
In this project, you will have to practice and apply what you have learnt in the class and continue adding more functionality to the Tower Siege game.

### 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 and they disappear.

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.

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# **Getting Started:**

- 1. Use your existing project created in Project 29.
- 2. Make modifications to the same project in **VS code**.
- 3. Start editing your code in **sketch.js**.

### Specific Tasks to complete the Project:

- 1. Add a property of "visibility" in our **Box.js.** 
  - Write code to display the boxes only when their speed is below the threshold of 3.
  - Don't forget to write the **remove** condition for the boxes.
  - As we need the boxes to fade, we use the tint condition for the image. (Refer to the Hints)
  - In the display function of the box, whenever the display function executes, the visibility of boxes by 5.
- 2. Ensure you write the push() and pop() conditions to avoid crazy behavior. (Refer to the Hints)
- When the user presses the Space Key, the keyPressed events in sketch.js should give an extra chance to the player and the block should attach to the polygon (bodyA) again.
  - We use **keyCode** value, which we call ASCII value, to attach the polygon back to **pointB in** slingShot Class.
- 4. Create a function attach(body) to set the bodyA to polygon body.
- 5. Make sure the project works before you submit it.

## **Submitting the Project:**

- 1. Upload your completed project to your own github account.
- 2. Create a new repository named "Project 30"
- 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.

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#### Hints:

- 1. Tint condition is given to the box object. Refer link: <a href="https://p5js.org/reference/#/p5/tint">https://p5js.org/reference/#/p5/tint</a>
- 2. Push() and Pop() conditions will stop the crazy behaviour of boxes visibility and invisibility.
  - Link for reference:
    - https://p5js.org/reference/#/p5/pop
    - https://p5js.org/reference/#/p5/push
- 3. **keyPressed** is default. they need not be called so feel free to experiment with its functionality.
  - Each key is identified by a 'keyCode' numeric value which we call ASCII value.
  - Links for reference:
    - https://p5js.org/reference/#/p5/keyPressed
    - https://www.chegg.com/homework-help/look-ascii-chart-appendix-deter mine-codes-letter-first-namea-chapter-1-problem-3e-solution-9780133 985078-exc

```
function keyPressed(){
   if(keyCode === 32){
        slingShot.attach(this.polygon);
   }
}
```

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After submitting your project your teacher will send you feedback on your work.

