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Billiards

The goal of Billiards is to pocket all of the balls using the cue ball in the shortest possible time.

There are 15 object balls and a cue ball. The object balls are placed in a triangular formation, while the cue ball is placed on the other end of the table. During the game, players can only hit the cue ball. The cue ball can collide with other balls, causing them to move.

I was inspired by the GamePigeon variant of 8-ball, which is the only experience in cue sports that I have. I also learned about the physics of billiard balls last semester, regarding the conservation of momentum and collision. I would like to apply my knowledge to this project.

Current	<ul style="list-style-type: none">● Draw the game board<ul style="list-style-type: none">○ Dark green table, with 6 pockets● Initialize the arrays of balls and pockets<ul style="list-style-type: none">○ The balls are just in a straight line, so I could see if they render correctly.○ The pockets are roughly in their right positions. They might be a few pixels off, but that's a small issue I might fix later.● Setup game such that balls are in their triangular starting positions<ul style="list-style-type: none">○ Calculate positions, initialize PVectors to them● Implement a cue stick to strike the cue ball<ul style="list-style-type: none">○ Draw the stick○ Allow the stick to rotate around the cue ball○ Adjust strength and shoot● Ball movements<ul style="list-style-type: none">○ Implement the physics behind it (momentum/collision, reflection, etc.)
Future	<ul style="list-style-type: none">● Add scoring and game rules

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