✓ **You finished this assignment**

Grade received 80%

**Go to next item**

☰ **Instructions**

1. Upload a zip file containing **Solar System** here.

   9 / 11 points

   Remember to include all the files needed to run your code, not just the sketch.js file. Do NOT encrypt/obfuscate your code.

   [solarSystem-mid.zip](solarSystem-mid.zip)

   ⚠ **Edit your response**
   The submission does not contain any text.

**Grading Rubric**

Earth is at the right orbit.

○ **0 points**    Not attempted

◉ **1 point**    Earth is at the right orbit

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Earth rotates around the sun.

○ **0 points**    Not attempted

○ **1 point**    Reasonable attempt, but doesn't quite work

◉ **2 points**    Earth rotates around the sun

---

Earth rotates around its axis and all earthlings get to see the sun.

○ **0 points**    Not attempted

○ **1 point**    Reasonable attempt, but doesn't quite work

◉ **2 points**    Earth rotates around it's axis and all earthlings get to see the sun

---

a) Moon is at the right orbit b) rotates around the earth c) always shows the same side (one point each).

○ **0 points**    Not attempted

○ **1 point**    One of a, b, c has been achieved

◉ **2 points**    Two of a, b, c has been achieved

○ **3 points**    All of a, b, c have been achieved

---

Sun is spinning on its axis at a reasonable speed.

○ **0 points**    Incomplete

◉ **1 point**    Completed

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Has the learner challenged themselves by implementing one of the ideas for further development proposed?

- What if the moon had an asteroid that was stuck in orbit around the moon? Can you add a smaller celestial body that is rotating around the moon.

- Pretend that earth, like Mars, has two moons. Can you add another different sized moon that rotates around the earth at a different speed with a different distance from the earth? This moon should also only show the one side to the earth.

○ **0 points**  Not attempted

◉ **1 point**  Partially attempted, but not quite working

○ **2 points**  Completed

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**Grader, please briefly comment on any/some of the following bullet points.**

**Positives**

- Has the learner exceeded what has been asked of them?
- Has an aspect of the learners submission surprised you, the grader, in any way? Is the learners sketch unique?
- Does the learner's submission demonstrate a deep understanding of the concepts covered in class?

**Negatives**

- Is there a specific aspect of the topics covered that you feel the learner should revisit?
- Any recurring mistakes that the learner made?

  Good work. There is an issue with the moon functionality. It does not always show the same side to the Earth. This is because of the missed nesting translating implementation. The moon/s needs to be inside the Earth translate method and the use of Pop and Push, and their positions need to be fixed

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2. Upload a zip file containing **Asteroids Game Clone** here. Remember to include all the files needed to run your code, not just the sketch.js file. Do NOT encrypt/obfuscate your code.    **12 / 16 points**

asteroidGameClone-mid.zip

**Grading Rubric**

bulletsystem.js edges() function is correct

○ **0 points**  Incomplete

◉ **1 point**  Completed

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spaceship.js interaction() function is correct.

○ **0 points**  Incomplete

◉ **1 point**  Completed

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Spaceship moves correctly. No friction in space and velocity limited by maxVelocity.

○ **0 points**  Not attempted

○ **1 point**  Reasonable attempt but doesn't quite work

◉ **2 points**  Completed

---

sketch.js isInside() function works as it should.

○ **0 points**  Incomplete

◉ **1 point**  Completed

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If asteroid hits spaceship: game ends.

○ **0 points**  Incomplete

◉ **1 point**  Completed

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If asteroid crashes on earth: game ends.

○ **0 points**    Incomplete

◉ **1 point**    Completed

---

If spaceship crashes on earth, game ends.

○ **0 points**    No

◉ **1 point**    Yes, the came does end

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If spaceship inside atmosphere: call the spaceship's setNearEarth() function.

○ **0 points**    Incomplete

◉ **1 point**    Completed

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If spaceship inside atmosphere, earth pulls it towards it, air friction affects movement.

○ **0 points**    Not attempted

◉ **1 point**    Reasonable attempt but doesn't quite work

○ **2 points**    Completed

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If any bullet hits asteroid: destroy asteroid.

○ **0 points**    Incomplete

◉ **1 point**    Completed

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Has the learner challenged themselves by implementing two of the ideas for further development proposed?

- Make the spaceship pretty by adding jets thrusters which activate from the opposite side of movement just like on a real spaceship.
- Keep score of how many asteroids you have hit.
- Make the program get progressively harder by spawning asteroids more frequently as time goes by.
- Make it your own by customising the look of the game (make sure you maintain same functionality or you might lose points during grading).

○ **0 points**    Not really

◉ **1 point**    Yes, something is there, but not much extra work has been put

○ **2 points**    Yes! Learner implemented one idea very well or more things but not very impressively

○ **4 points**    Yes! Learner really pushed themselves by doing 2 or more extensions to an impressive level. **Reserve this for truly impressive submissions**

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**Grader, please briefly comment on any/some of the following bullet points.**

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- Does the learner's submission demonstrate a deep understanding of the concepts covered in class?

**Negatives**

- Is there a specific aspect of the topics covered that you feel the learner should revisit?
- Any recurring mistakes that the learner made?

  Good job. The movement inside the atmosphere needs further improvement.

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3. Upload a zip file containing **Angry Bird Clone** here.                **11 / 13 points**

   Remember to include all the files needed to run your code, not just the sketch.js file. Do NOT encrypt/obfuscate your code.

   angryBirdClone_Mid.zip

**Grading Rubric**

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Propeller in right place approx.

○ **0 points**    Not attemped

◉ **1 point**    Completed

---

Propeller moves with left/right arrow.

○ **0 points**    Not attempted

◉ **1 point**    Completed

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a) Birds are drawn when pressing 'b' and interact with propeller.

b) Removed from world and array when off-screen.

○ **0 points**    Not attempted or achieved

○ **1 point**    One of a or b achieved

◉ **2 points**    Both of a and b acheived

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a) Box tower is in the right place approx.

b) Has dimensions of example provided.

c) Boxes use multiple colors.

○ **0 points**    Not attempted

○ **1 point**    One of a, b, c, achieved

○ **2 points**    Two of a, b, c, achieved

◉ **3 points**    All of a, b, c, achieved

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a) Slingshot appears in right place.

b) Has the right stiffness.

c) Slingshot bird has enough mass to demolish tower.

○ **0 points**    Not attempted

○ **1 point**    One of a, b, c achieved

○ **2 points**    Two of a, b, c achieved

◉ **3 points**    All of a, b, c achieved

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Has the learner implemented at least **one** of the ideas for further development? Have they challenged themselves?

- Turn it into a game. Create a countdown. The player has a 60 seconds to remove all boxes from the screen. If they succeed, they win. If they fail, looping stops and a GAME OVER message is displayed.
- Make it your own by changing the colors and style.
- Add another physics object that adds to the gameplay in a fun way.

○ **0 points**    Not really. Minimal changes

◉ **1 point**    Yes, learner has implemented at least one idea for further development to a satisfactory degree

○ **2 points**    Learner has implemented 1 idea to an impressive degree

○ **3 points**    Learner has implemented ideas to a **really** impressive degree. **Please reserve this for truly unique, surprising, thoughtful submissions that show deeper understanding of the concepts presented in class**

**Grader, please briefly comment on any/some of the following bullet points.**

**Positives**

- Has the learner exceeded what has been asked of them?
- Has an aspect of the learners submission surprised you, the grader, in any way? Is the learners sketch unique?
- Does the learner's submission demonstrate a deep understanding of the concepts covered in class?

**Negatives**

- Is there a specific aspect of the topics covered that you feel the learner should revisit?
- Any recurring mistakes that the learner made?

  Very good work. You showed very good coding skills. However, I see room for development to attempt more advanced extensions.

4. Upload a zip file containing **Noisy Grid** here.            `8 / 10 points`

   Remember to include all the files needed to run your code, not just the sketch.js file. Do NOT encrypt/obfuscate your code.

   noisyGrid-mid.zip

   **Grading Rubric**

   Tiles are of the right size and spread on canvas.

   ○ **0 points**     Incomplete

   ◉ **1 point**     Completed

   Colors change organically over time.

   ○ **0 points**     Incomplete

   ○ **1 point**     Partially completed but not quite working

   ◉ **2 points**     Completed

   mouseX affects how fast the grid colors change.

   ○ **0 points**     Incomplete

   ◉ **1 point**     Completed

   "Compasses" (lines) setup correctly and at the center of each tile.

   ○ **0 points**     Incomplete

   ◉ **1 point**     Completed

   "Compasses" (lines) move organically over time.

   ○ **0 points**     Incomplete

   ○ **1 point**     Partially completed, but not quite working

   ◉ **2 points**     Completed

   mouseX affects how fast the "compasses" (lines) rotate.

   ○ **0 points**     Incomplete

   ◉ **1 point**     Completed

   Has the learner implemented at least **two** of the ideas for further development? Have they challenged themselves?

- Make it your own by changing the colors and style.
- Use the noise to change the color and length of the compass lines.

○ **0 points**    Not really

○ **1 point**    Learner has implemented at least one idea for further development

○ **2 points**    Learner has implemented two ideas for further development to an impressive degree. **Reserve this for truly impressive submissions**

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**Grader, please briefly comment on any/some of the following bullet points.**

**Positives**

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- Has an aspect of the learners submission surprised you, the grader, in any way? Is the learners sketch unique?
- Does the learner's submission demonstrate a deep understanding of the concepts covered in class?

**Negatives**

- Is there a specific aspect of the topics covered that you feel the learner should revisit?
- Any recurring mistakes that the learner made?

    Good work. However, the effect of the mouse functionality needs further improvement. Try to add more advanced extensions to improve the submission's graphics

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- Make it your own by changing the colors and style.
- Use the noise to change the color and length of the compass lines.