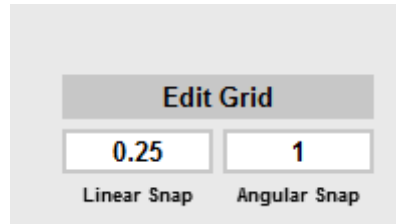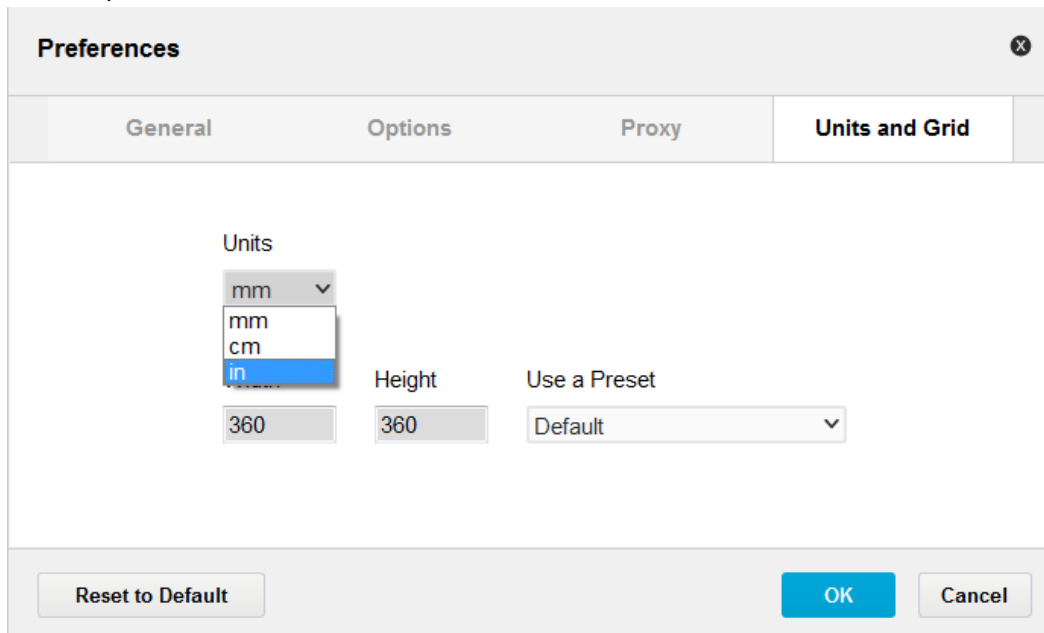# My First Car – A tutorial for AutoDesk123D Design
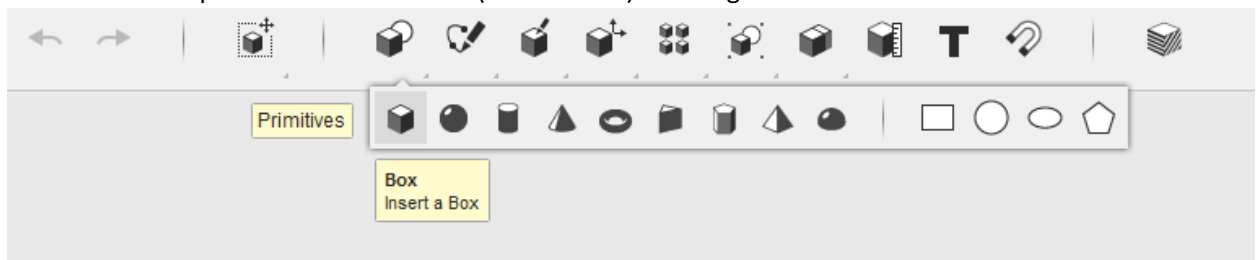
1. Open AutoDesk123D Design
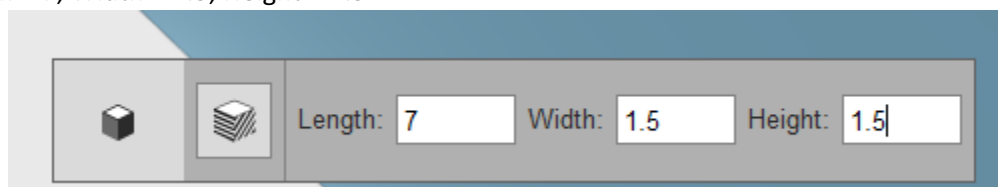2. Click on "Edit grid" on bottom right hand corner

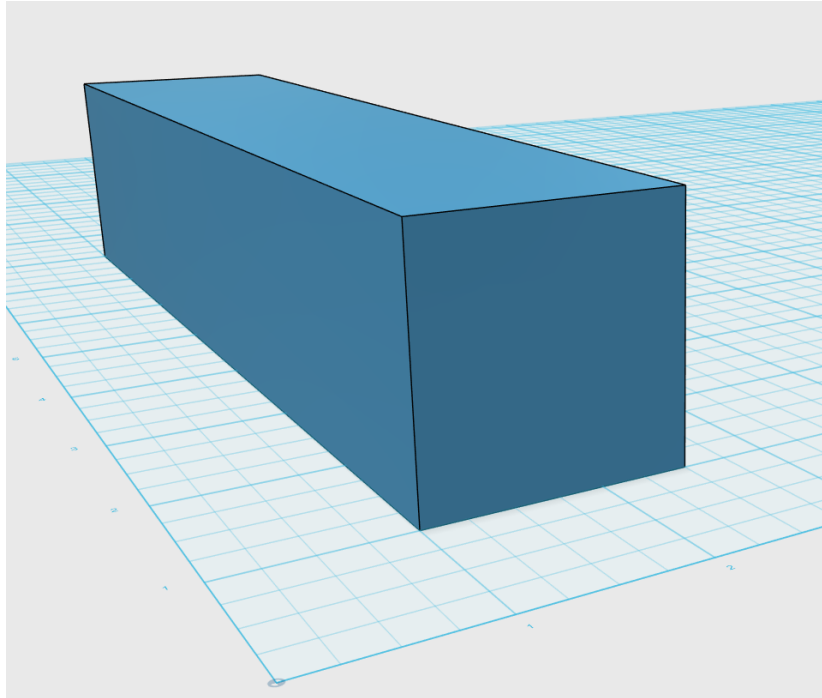3. Use the pull down menu for "Units" and select "in". Click OK

4. Mouse over Shapes -> Primitives -> Box(Insert a Box) and single click.
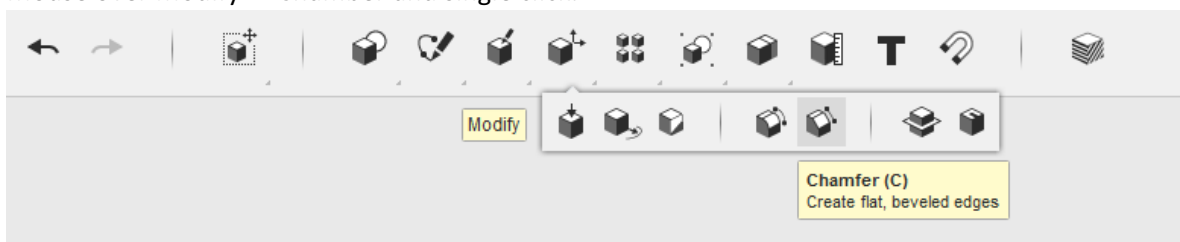

5. **Don't click on the mat yet**. Click the dimension menu on the bottom. Update the dimensions Length = 7, Width = 1.5, Height = 1.5
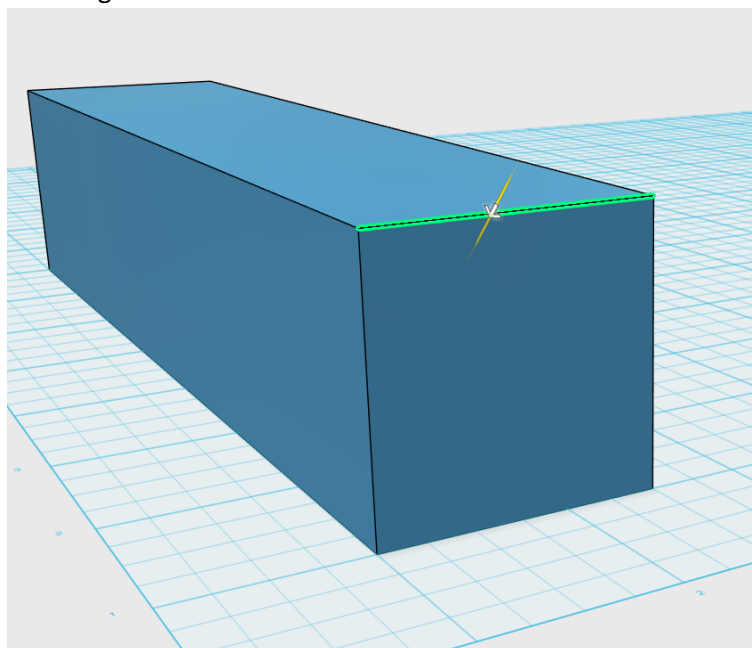

6. The box will then automatically adjust in size.
7. Now, place the box on the mat by moving the mouse and a single click.

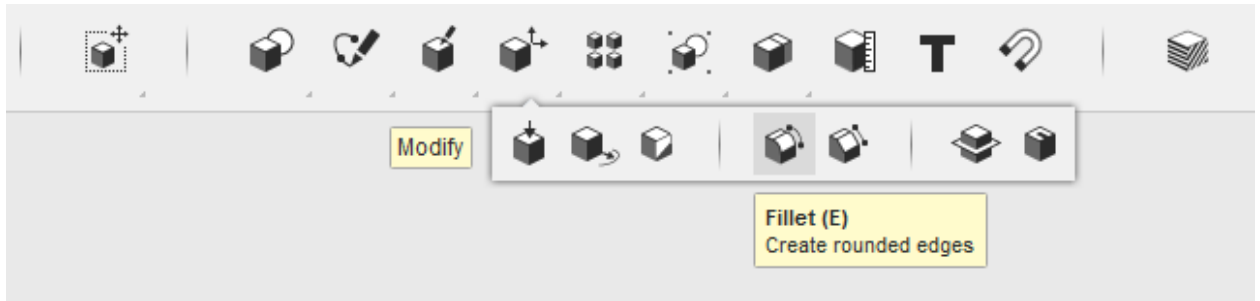8. Mouse over Modify -> Chamber and single click.

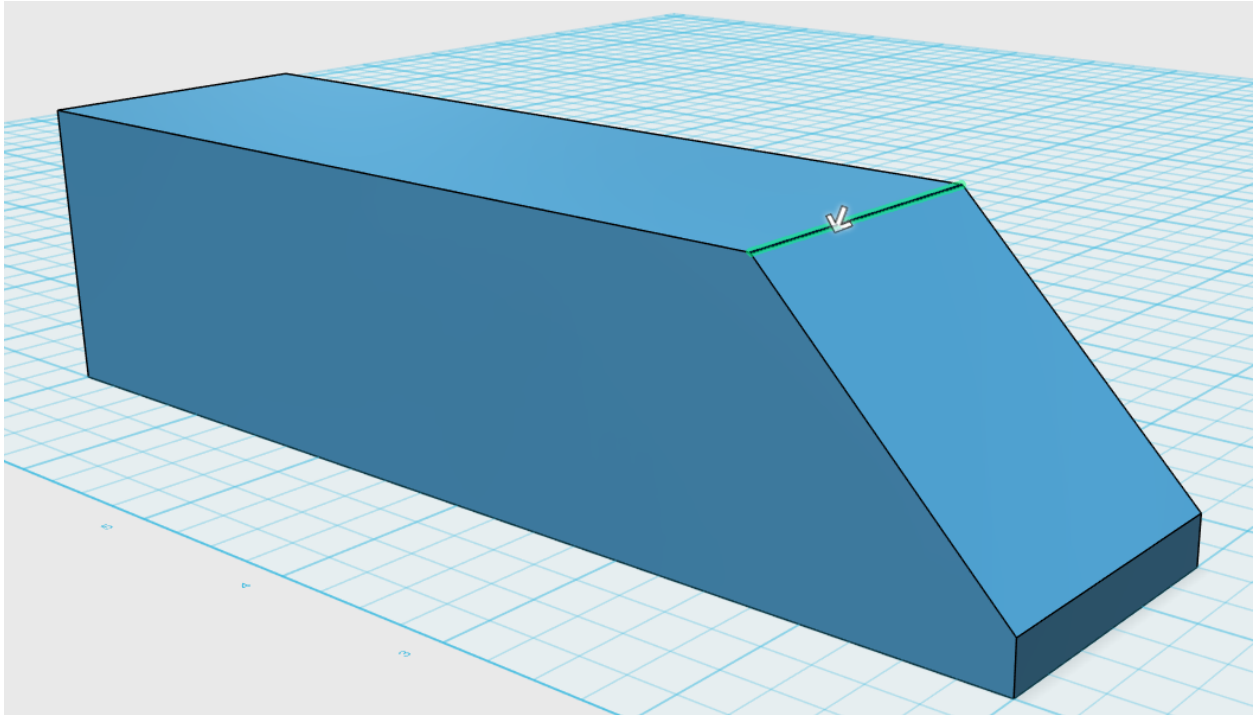9. Click on the top front edge of the box to select it

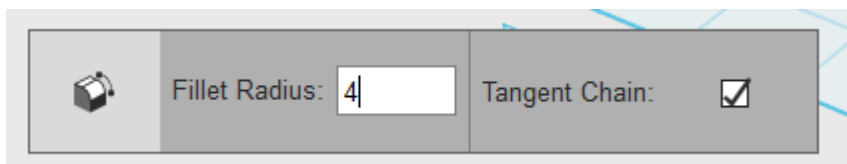10. Click the dimension menu on the bottom menu, enter 1.25 for distance.

Distance: 1.25   Tangent Chain ☑

11. Mouse over Modify -> Fillet and single click.

Modify

Fillet (E)
Create rounded edges

12. Select top, front edge

13. Click the dimension menu on the bottom menu, enter 4 for radius.

Fillet Radius: 4   Tangent Chain: ☑

14. Mouse over Modify -> Fillet and single click.

Fillet (E)
Create rounded edges
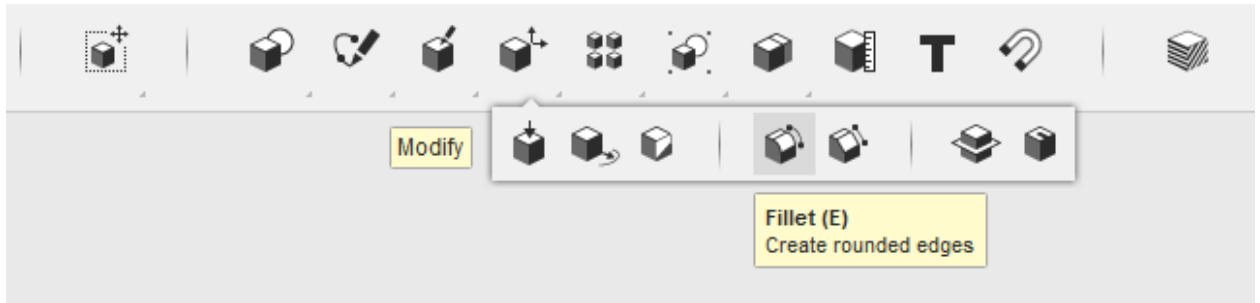
15. Select top, back edge
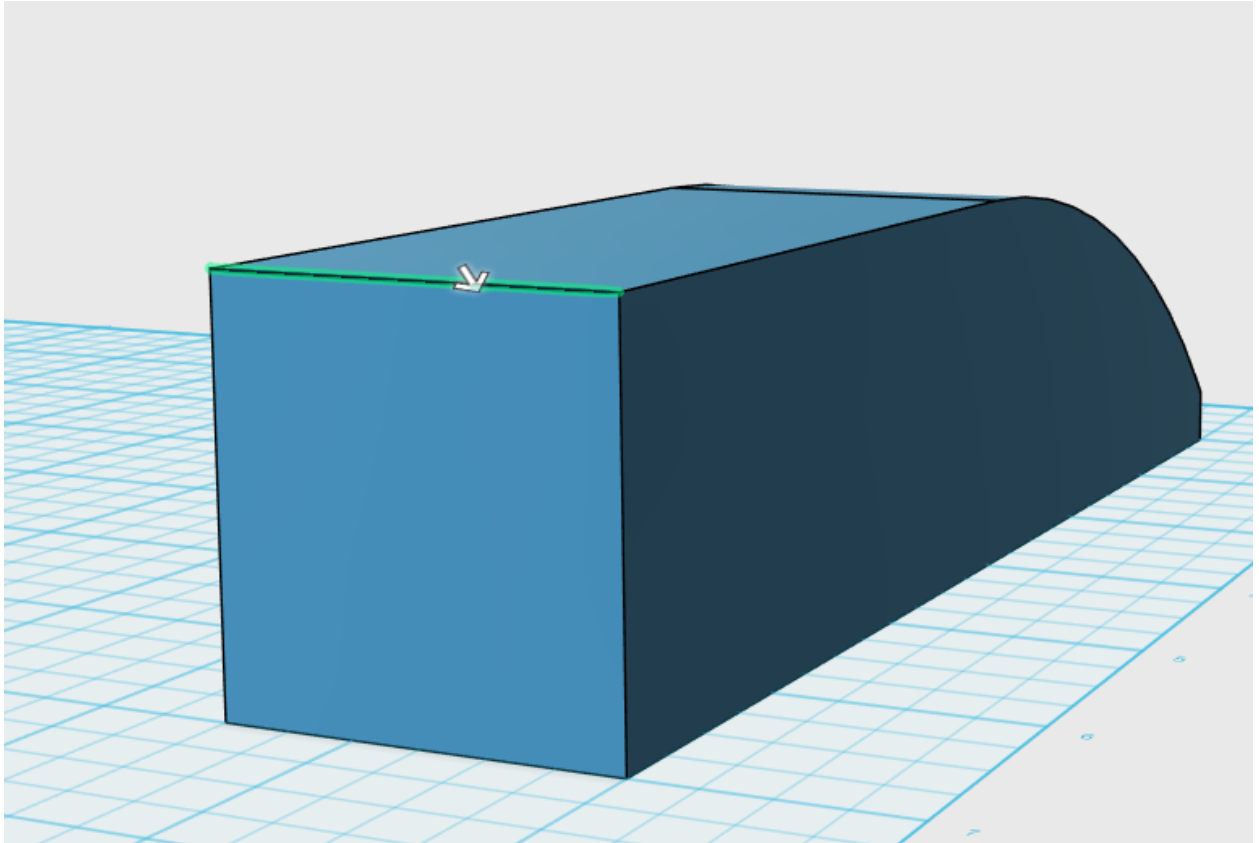
16. Click the dimension menu on the bottom menu, enter 1.25 for radius.

Fillet Radius: 1.25   Tangent Chain: ☑

17. Your car should now looks like the image below. Next, follow the steps to prepare the car to attach to the car base.
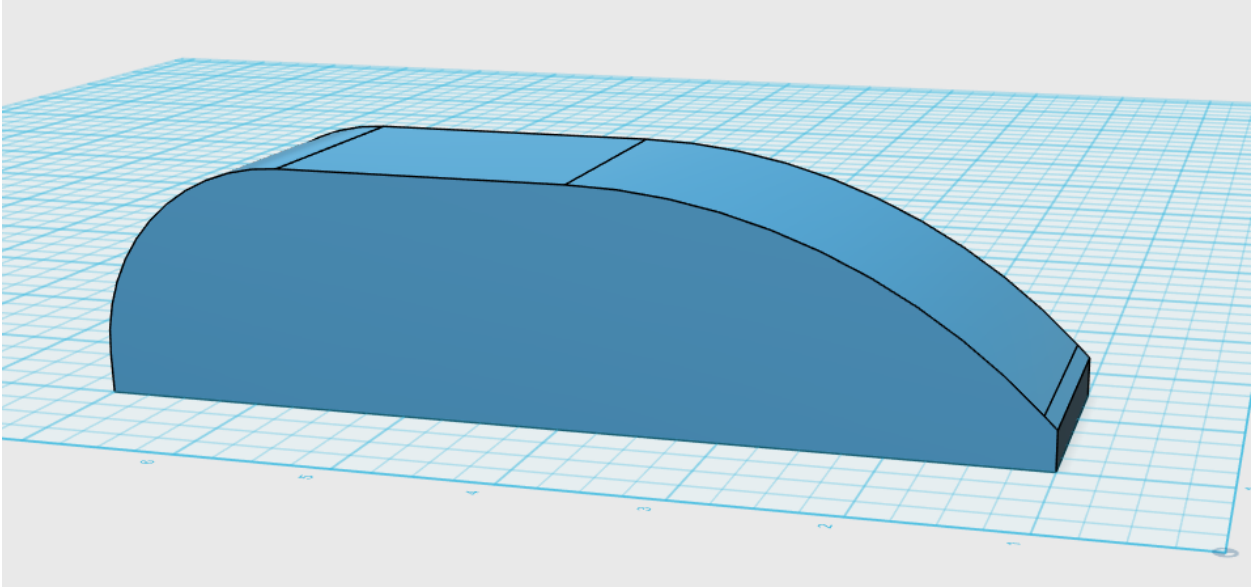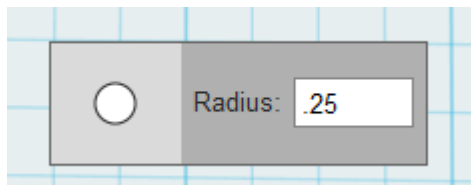
18. Rotate the car so that you can see the underneath. Use the middle mouse button or click the rotation block in the top right corner.


19. Mouse over Primatives -> Circle and single click.
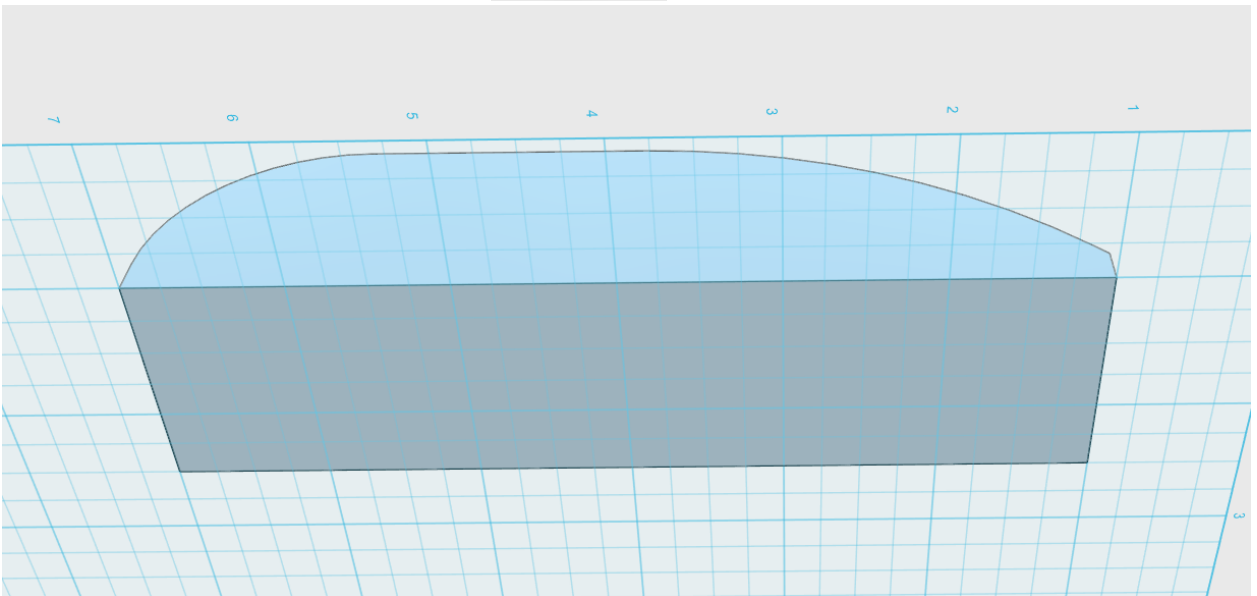
Primitives

Circle
Insert a Sketch Circle
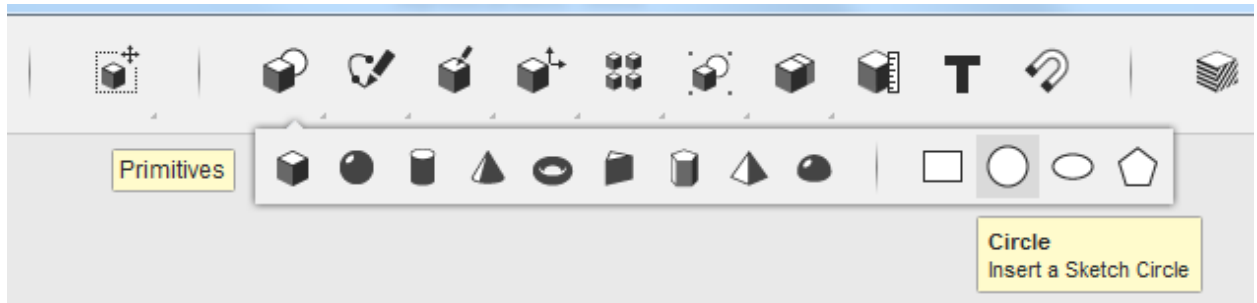
20. Click the dimension menu on the bottom menu, enter 0.25 for radius.

Radius: .25

21. Place the circle on the bottom car. Center the circle along with width (0.75 inches from each side) and approximately 1.75 inches from the front.

22. Mouse over Construct -> Extrude and single click.

Construct
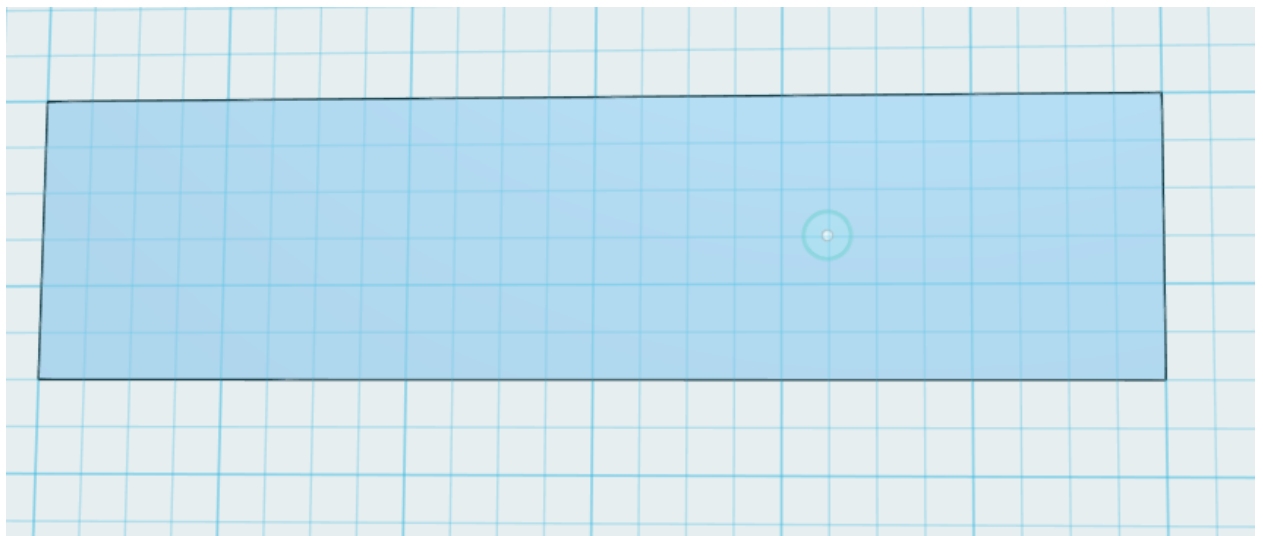
Extrude (U)
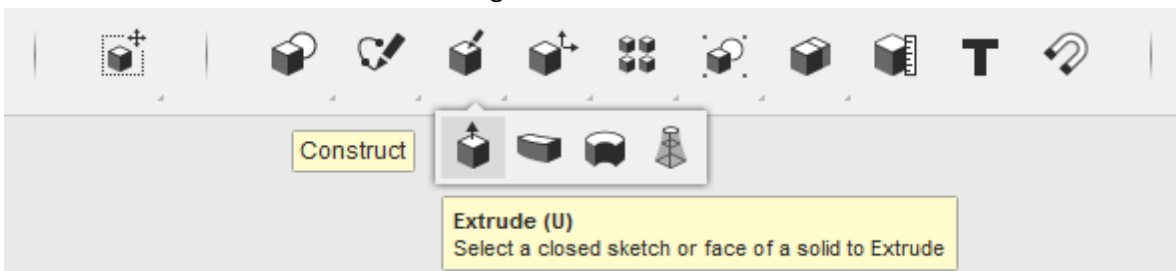Select a closed sketch or face of a solid to Extrude
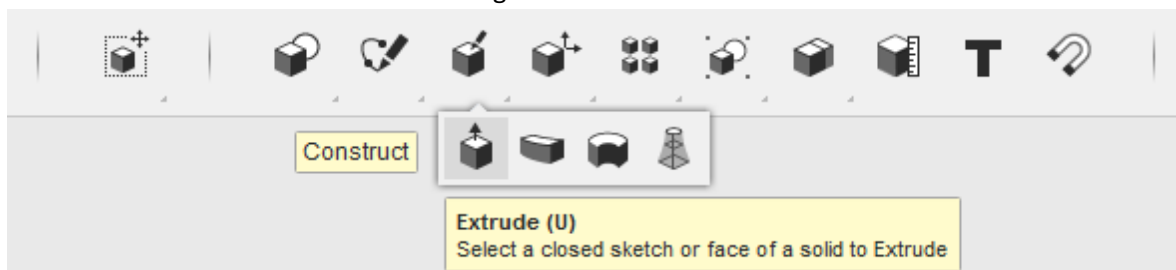
23. Select the circle. Using the keyboard, enter 0.4 for the depth. The software should automatically recognize it is a "cut". If not, use "-.4".
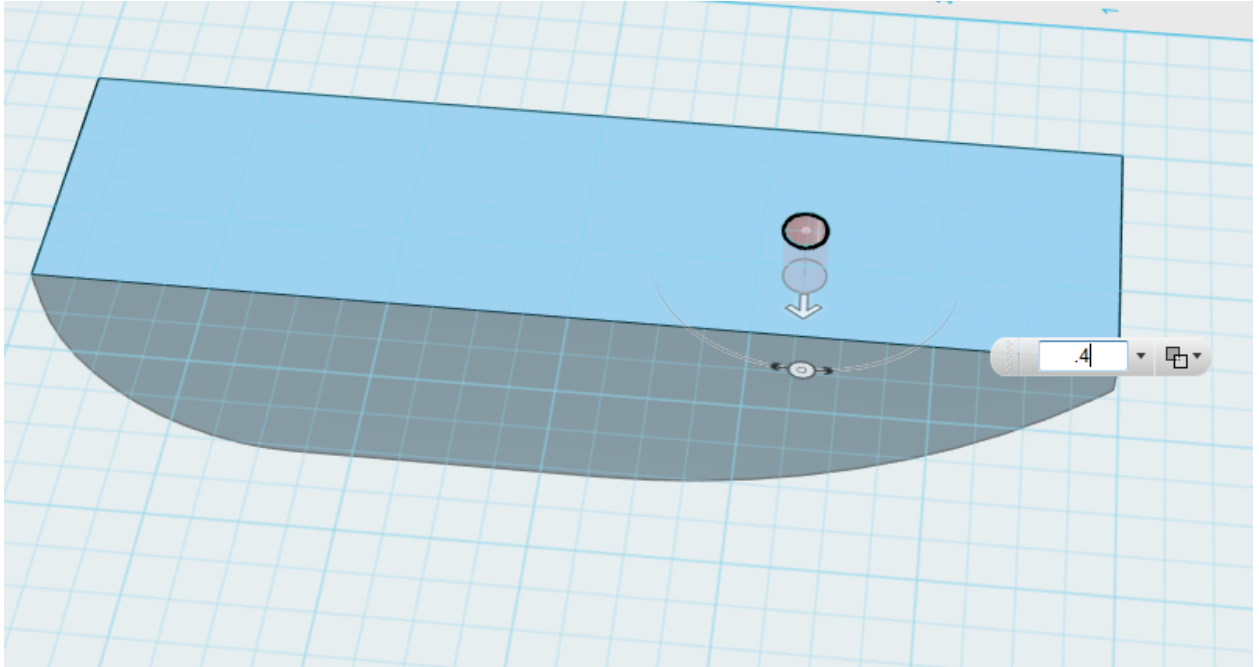
24. Select the circle with the mouse. With the keyboard, enter Ctrl-C and Ctrl-V to create a copy. Select the arrow pointing towards the front of the car. Click and drag the arrow to the rear of the car until the spacing between the holes measures 2.50 inches.

25. Mouse over Construct -> Extrude and single click.
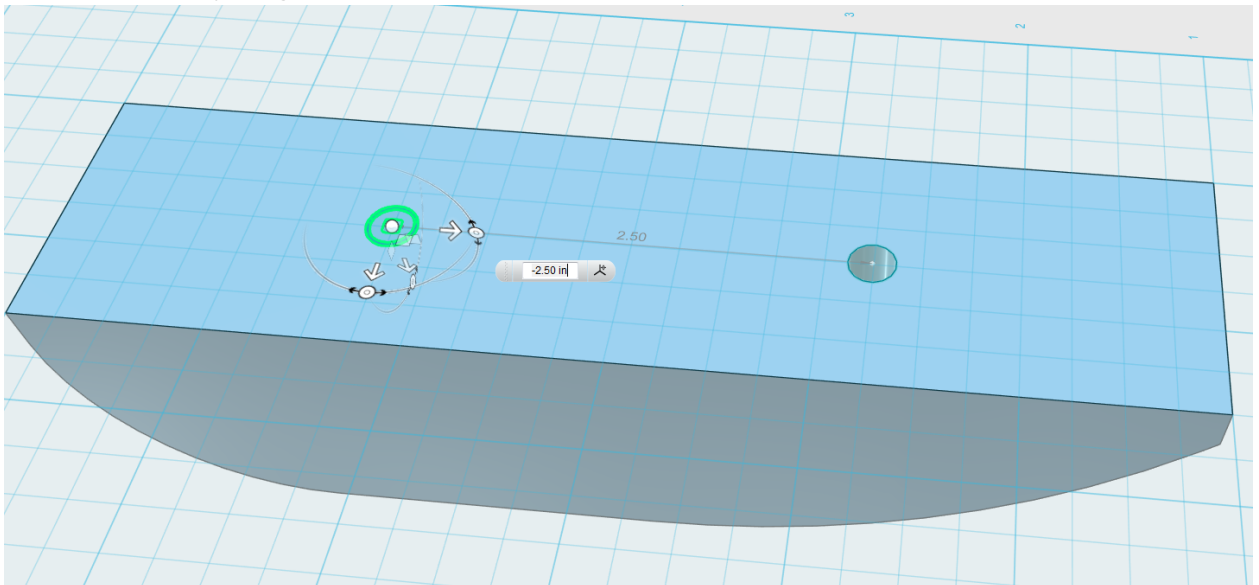
Extrude (U)
Select a closed sketch or face of a solid to Extrude

26. Select the second circle. Using the keyboard, enter 0.4 for the depth. The software should automatically recognize it is a "cut". If not, use "-.4".
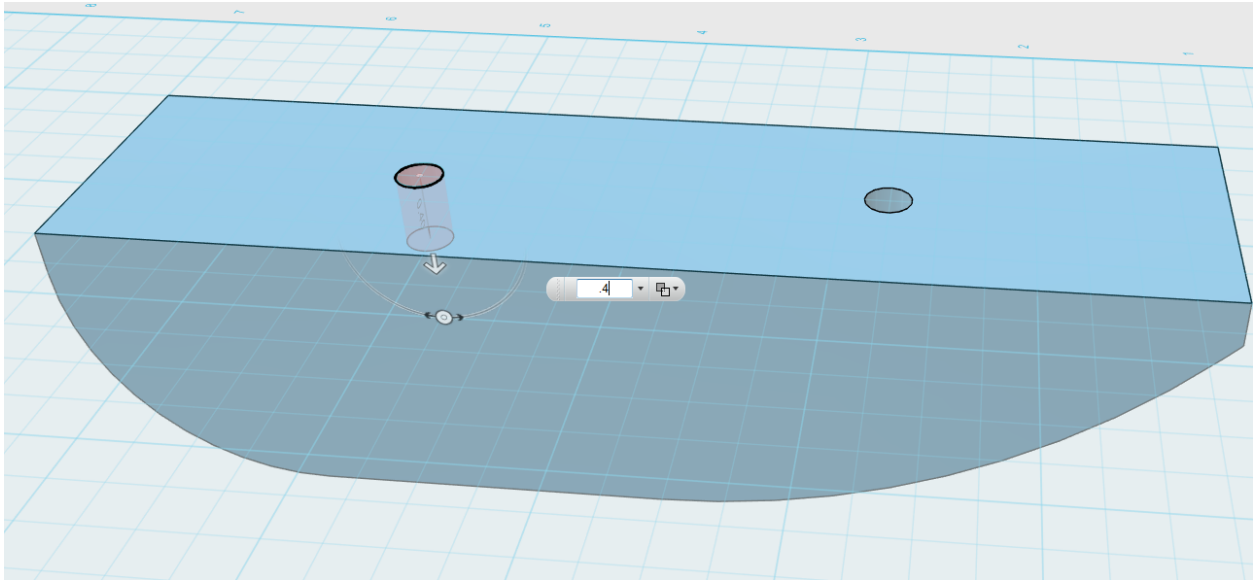
27. Congratulations, you have now designed your first car!