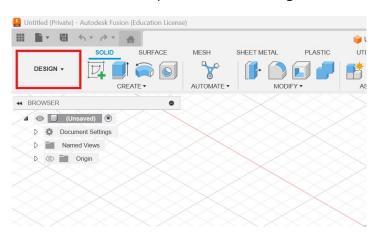
Objective:

Learn to navigate the Fusion 360 interface and use basic sketching, dimensioning, extruding, and filleting tools to create a custom name tag or keychain.

Step 1: Getting to Know the Interface

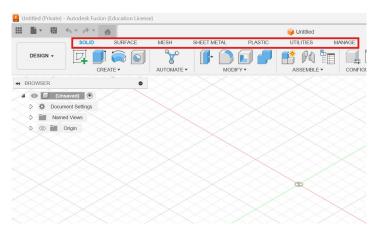
Open Fusion 360 and create a new project.

Check that the workspace is set to 'Design'.

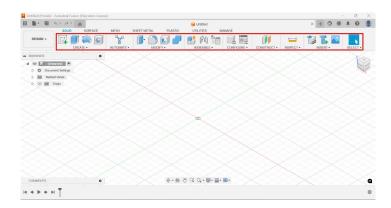


Navigate the following areas:

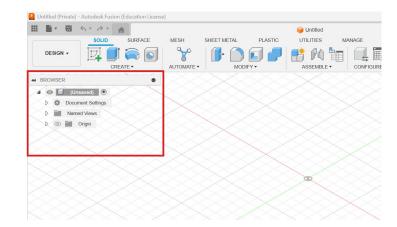
 Top Bar: Access tools under tabs like Solid, Surface, Sheet Metal.



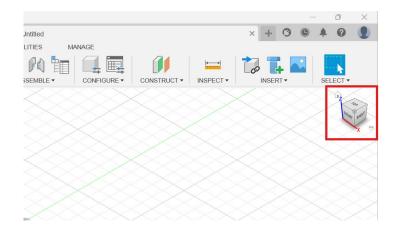
Tools Bar: Row of icons for tools and dropdown menus.



 Project Browser (Left Panel): View and organize sketches, components, and bodies.



 ViewCube (Top-Right): Click or drag to change perspective. Tip: Press Ctrl + Middle Mouse to pan, Shift + Middle Mouse to orbit.



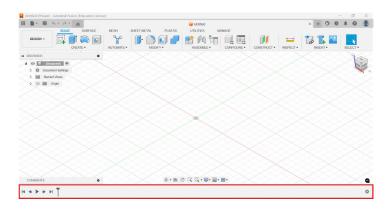
 Timeline (Bottom): Tracks your design history for easy edits.





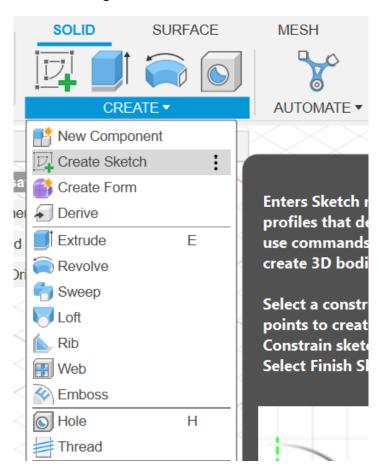




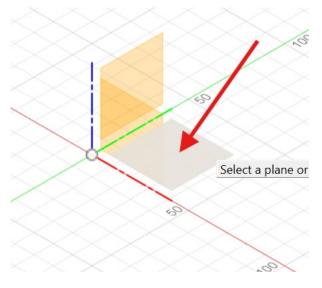


Step 2: Start a New Sketch

Under Solid, go to Create > Create Sketch.

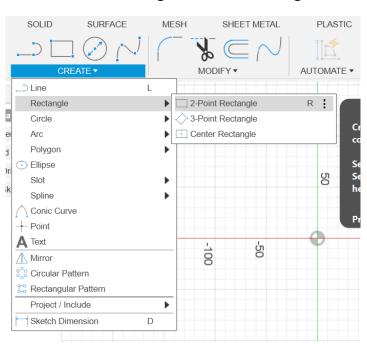


Choose the bottom plane as your sketch surface.



Step 3: Draw the Rectangle (Keychain Base)

Go to Create > Rectangle > 2-Point Rectangle.



Click the **origin** (0,0) and drag your mouse to the upper left.

Input:

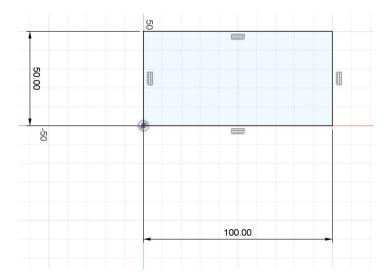
- Enter the Height: 50 mm
- Press TAB
- Enter the Width: 100 mm
- Press Enter to place the rectangle.









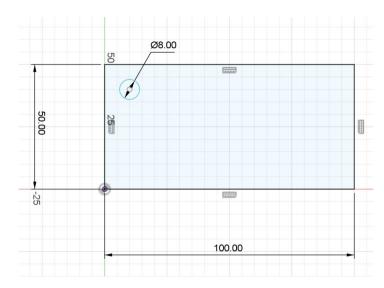


Make sure the rectangle turns black (fully defined). If it's blue, add Sketch Dimensions as needed.

Step 4: Add a Hole (Circle)

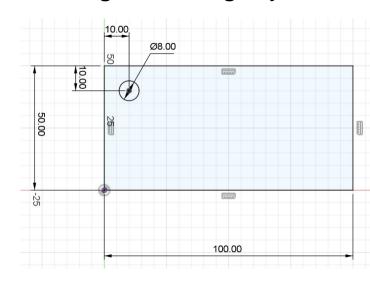
Go to Create > Circle > Centre Diameter Circle.

Click inside the rectangle and set the diameter to 8 mm.



Use the Sketch Dimension tool to fully define the circle. Create > Sketch Dimension:

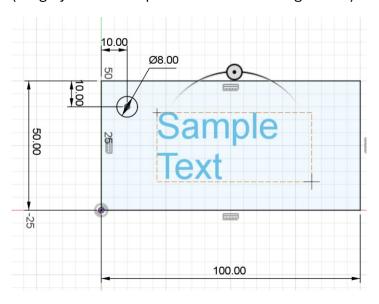
- Click the centre of the circle → then click the left vertical edge → set to 10 mm.
- Then click the centre → then click the top horizontal edge → set to 10 mm.



Step 5: Add Text

Go to Create > Text.

Click and drag a text box inside the rectangle (roughly from the top-left to the bottom-right area).



In the text dialog:

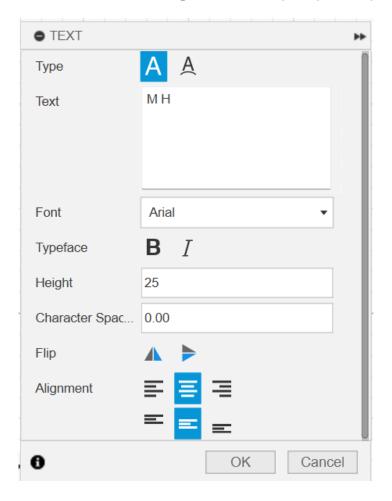
- Replace sample text with your initials or name
- Set Height to 25 mm.
- Set the Font to a Basic Font.
- Set Horizontal Alignment to Centre, Vertical Alignment to Middle.
- Click OK to place the text.







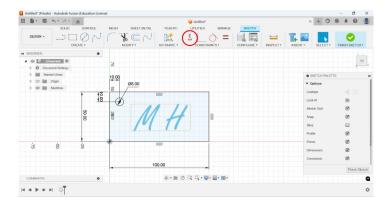




Step 6: Constrain the Text

Use the Horizontal/Vertical Constraint:

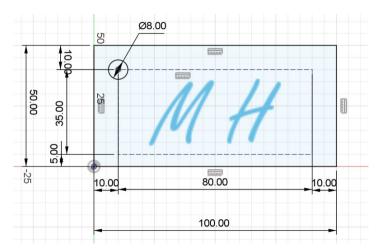
Click on the top edge of the text box to make it horizontal.



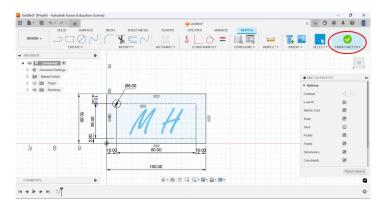
Use Sketch Dimension to define position:

- Bottom of text box → Bottom of rectangle: 5
 mm
- Right of text box → Right edge of rectangle:
 10 mm

- Top edge of text box: set height to 80 mm
- Side of text box: set width to 35 mm
- Confirm all text lines are black (fully defined).



Click Finish Sketch (top-right corner).



Step 7: Extrude the Keychain Body

Go to Solid > Create > Extrude.

Select the rectangle (base shape).

Set the extrusion Distance to -5 mm (extrudes downward).

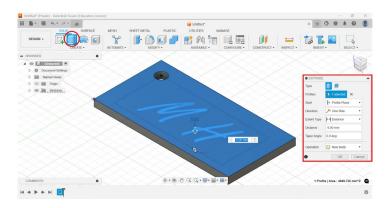
Click OK.







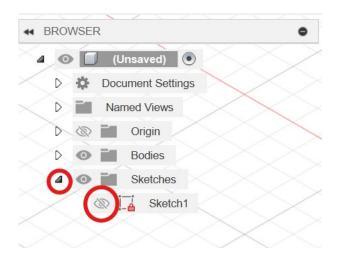




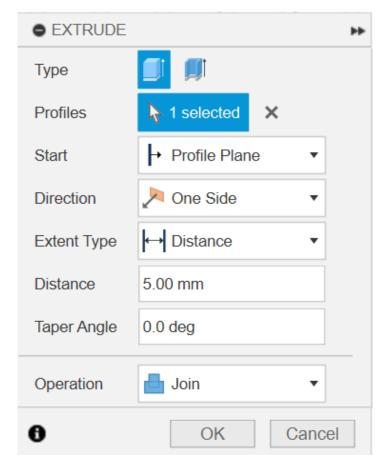
Step 8: Extrude the Text

In the Browser panel (left side):

- Expand the Sketches folder.
- Click the eye icon next to your sketch to make it visible again.



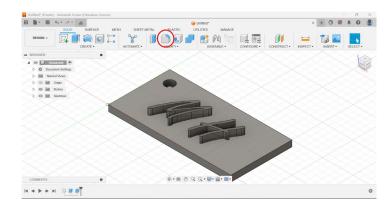
- Go to Solid > Create > Extrude again.
- Select the text only.
- Set the extrusion Distance to 5 mm.
- Set Operation to Join.
- Click OK.



Hide the sketch again by clicking the eye icon. Now Collapse the Sketches folder.

Step 9: Round the Corners (Fillet)

Go to Solid > Modify > Fillet.







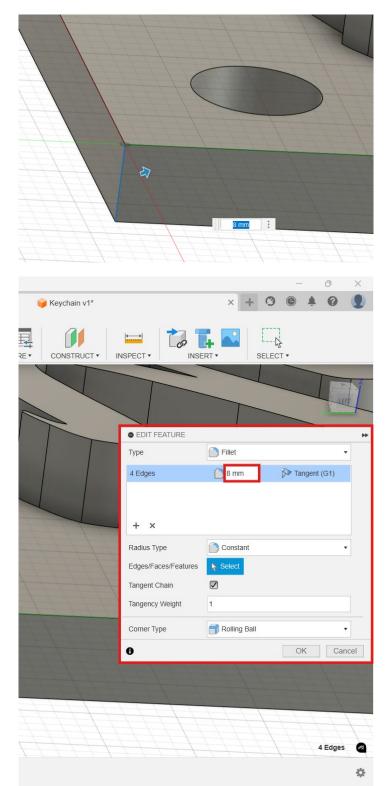




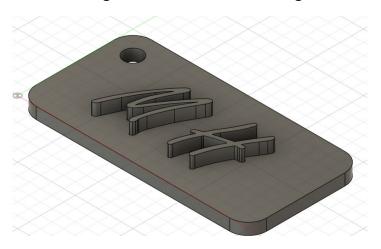
Select the four outer corners of the keychain.

Set Radius to 8 mm.

Press Enter to apply.



Your name tag should now look something like this:



Step 10: Save Your Design

Click the Save icon in the top-left corner.



Name your file "Keychain_v1".

Choose a project folder if needed.

Click Save.







