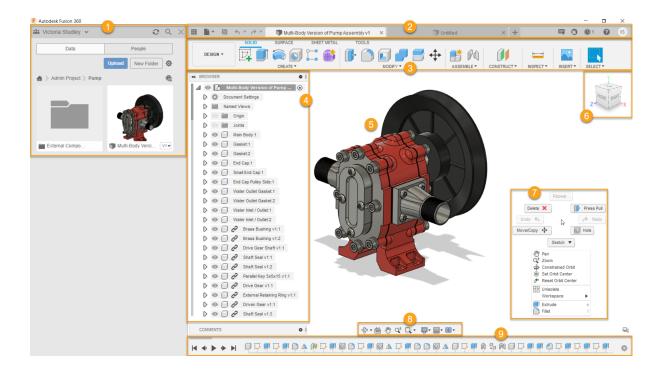
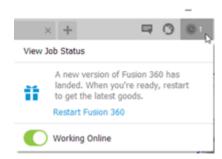
Interface

Explore the Fusion 360 interface to learn where all the design tools are located as you start designing.



- 1. Data Panel: Access teams, projects, and designs manage design data, and collaborate with others from the Data Panel.
- 2. Application Bar from left to right:
 - Data Panel :: Show or hide the Data Panel.
 - File menu : Create, open, upload, save, export, recover, 3D print, and share designs.
 - Save \(\frac{\mathbb{\pi}}{\text{:}} \): Save an untitled design or save changes to a design.
 - Undo/Redo [♠]
 - Open design tabs.
 - New Design : Create a new design.
 - Notification Center
 - Extensions ③: Manage access to Fusion 360 extensions.

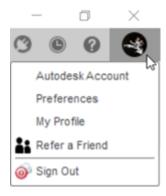
• Job Status (: View job status, Fusion 360 update status, and online/offline status.



 Help : Access learning content, documentation, quick setup, community resources, technical support, diagnostic tools, What's New, and information about the Fusion 360 installation.



- Click My Profile to:
 - o Access your Autodesk Account.
 - Change the photograph associated with your profile.
 - Adjust your Fusion 360 preferences.
 - View or edit your profile.
 - o Sign out.



- 3. Toolbar: Select the workspace you want to work in. The tools on the Toolbar differ in each workspace. The Toolbar is divided into tabs that organize the tools into logical groupings.
- 4. Workspaces: Fusion 360 uses workspaces to control which commands are available and the type of data you create.
 - Workspace picker: Select the name of the current workspace to switch between workspaces.
 - Tabs: Each workspace is organized into tabs that contain logical groupings of related tools.
 - Contextual tabs: Some commands activate a contextual tab, like
 Sketch. The contextual tab displays on the Toolbar alongside the other
 tabs within the workspace, while the contextual tools are active.
 - Contextual environments: Some commands activate a contextual environment, like Form. The contextual environment displays on the Toolbar, and its tabs replace the default tabs in the current workspace until you exit the contextual environment.
- 5. Browser: Lists objects in your assembly (components, bodies, sketches, origins, joints, construction geometry, etc.) and lets you control visibility of objects.
- 6. Assembly in the Canvas: Left-click to select objects from the assembly in the canvas.
- 7. ViewCube: Orbit your design or view it from different positions.
- 8. Marking Menu: Right-click to access the Marking Menu, which contains frequently used commands in the wheel and additional commands in the overflow menu.
- 9. Navigation Bar: Contains commands used to zoom, pan, and orbit your design, as well as display settings to control the appearance of the interface and how design assemblies are displayed in the canvas.
- 10. Timeline: Lists operations performed in your design. Right-click operations in the timeline to make changes. Drag operations to change the order in which they are calculated. (Parametric Modeling mode only)

Toolbar tips

• If another tab is visible, you can access the tools from that tab.

- When you are in Sketch mode, Change Parameters is accessible from the Modify drop-down menu.
- The API structure lets you put your Add-in in its own panel within the tool of any given tab. You can find the sample script in the Add-ins section.

Create your first project

Create a new Fusion 360 project to familiarize yourself with project's organization. In Fusion 360, you create projects to contain and organize your design data. You can invite other people to a project to collaborate on a design, discuss challenges and successes, and stay current with project activities. Each project has its own data and people. There are two ways to create a project:

- Use the Data Panel
- Save a new design

Create a new project using the Data Panel

- 1. Click the Show Data Panel icon to open the Data Panel, which displays your projects and designs.
- 2. Click the New Project button.
- 3. Specify a name for the project.
- 4. Double-click the project to open it.

5.

Tip: To return to the list of projects, click the Leave Data Details icon at the top left of the Data Panel.

Create a new project when you save a new design

- 1. in the Application Bar, select File > Save As.
- 2. Specify a name for the design in the Name field.

- 3. Next to the Location field, click the arrow to expand the options.
- 4. Click the New Project button to create a new project.
- 5. Specify a name for the project.
- 6. Select the new project in the list of projects.
- 7. Click Save.

Navigation

Learn how to use the navigation tools in Fusion 360 so that you can move around your designs with ease.

There are multiple ways to control the view of your Fusion 360 design, including the Navigation Bar, ViewCube, the mouse, and touch gestures for touchpads and touch screen devices.

Mouse

Use mouse shortcuts to zoom in and out, pan, and orbit the view of the model.

- Zoom in and out: Scroll the mouse wheel forward and backward.
- Pan: Left-click and hold, then drag.
- Orbit: Hold the Shift key, click and hold the middle mouse button, then drag.
- Zoom Extents: Double-click the middle mouse button.

Learn how to customize your mouse behavior here.

ViewCube

The ViewCube controls the camera view.



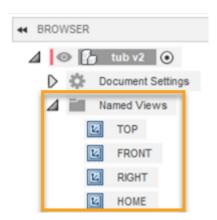
- Orbit: Left-click and drag the ViewCube to orbit the design in the canvas.
- Isometric views: Click the corners of the ViewCube to rotate the camera to predefined isometric views.
- Orthographic views: Click the named faces of the ViewCube to rotate the camera to predefined orthographic views (ex. Front, Top, Right).
- Home view: Click the Home icon to return to the home view.

Named Views

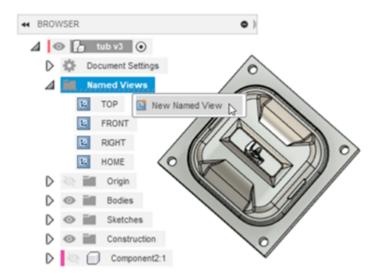
Each Named View consists of a specific magnification, location, and orientation. The following Named Views are created by default in each design, appear in the Browser, and map to the ViewCube views with the same names:

- Top
- Front
- Right
- Home

In addition to the default views, you can create custom Named Views to help you navigate your design.

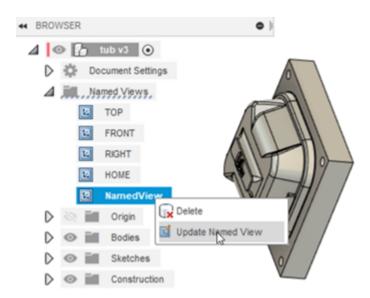


Orient the model in the canvas to a view that you desire, right-click the Named Views folder in the Browser and select New Named View.



Once you have create a Named View, it appears in the Browser under the Named Views folder. Double click the Named View to rename it.

if you would like to change the view that is associated with a Named View, orient the model in the canvas to a view that you desire, right-click the existing Named View, and select Update Named View.



Navigation Bar

The Navigation Bar is positioned at the bottom of the canvas of the current model. It contains commands that control navigation and display.



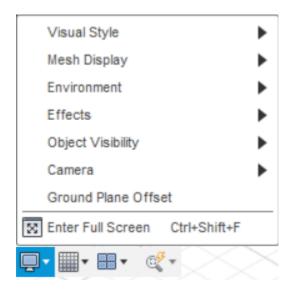
Navigation commands

- Orbit: Rotates the current view around the center mark (constrained orbit) or around the X and Y axes (free orbit).
- Look At: Zooms and rotates the model to display selected elements planar to the screen or a selected edge or line horizontal to the screen.
- Pan: Drags the view in the canvas.
- Zoom: Increases or decreases the magnification of the current view. You can zoom while other commands are active.
- Window: Defines a frame for the view. The elements within the frame zoom to fill the canvas.
- Fit: Positions the entire model within the canvas.

Display settings

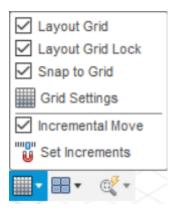
Display settings let you specify visual style, mesh display, environment, effects, object visibility, camera settings, and ground plane offset.

You can also enter full screen mode from this menu.



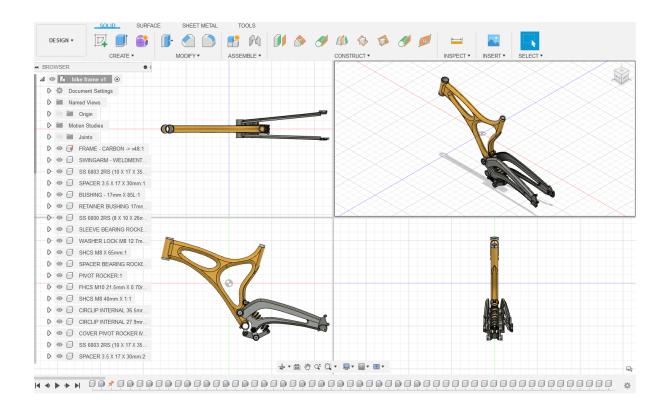
Grid and Snaps

Grid and Snap settings let you display or hide the layout grid, adjust snap and grid settings, enable or disable incremental movement, and set increments.

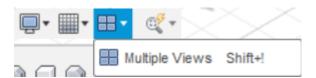


Viewports

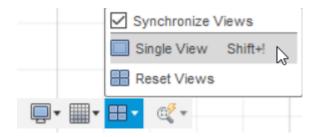
You can display four viewports in the canvas to see changes you make to your model from multiple camera positions simultaneously as you work.



 Enable multiple viewports: Click the viewports pull-down in the Navigation Bar then select Multiple Views.



 Enable single viewport: Click the viewports pull-down in the Navigation Bar then select Single View.



- Resize two viewports: Click and drag on the border between two viewports.
- Resize all four viewports: Click and drag at the intersection of all four viewports borders.

Mac trackpad

If you have a Mac with a touchpad or an Apple Magic Mouse, you can use multi-touch gestures to navigate the view.

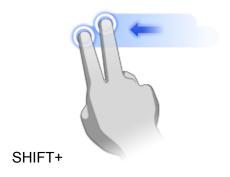
• Zoom In and Out: Use the 2-finger spread and 2-finger pinch.



• Pan: Use the 2-finger drag.



• Orbit: Hold Shift and use the 2-finger drag.



Start your design

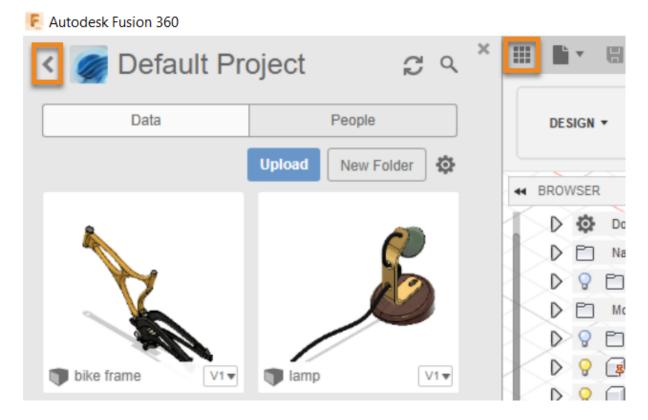
Create your first Fusion 360 design to familiarize yourself with the basic design tools as you get started.

Create your first design, use some of the basic modeling tools, use the browser and the timeline, switch between workspaces, and save your first design.

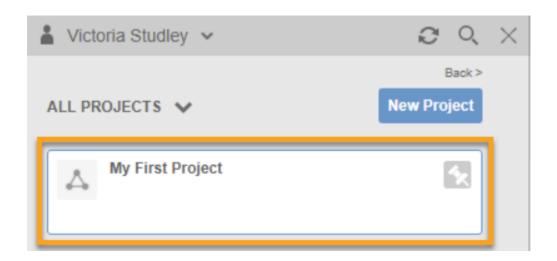
Set the active project

1. Click the Data Panel icon in the upper left to display the Data Panel.

2. Click the back button next to the active project in the Data Panel.



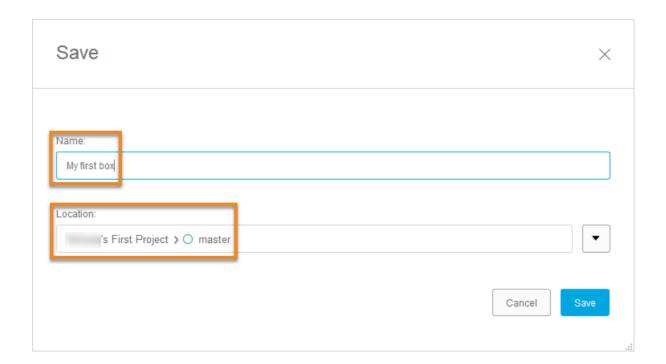
3. Double-click My First Project to make that project active.



Create and save a new design

- 1. Click the File icon > New Design.
- 2. Click the Save icon 🖁 to save the design.

- 3. In the Name field, enter My first box.
- 4. Set Location to <your name>'s First Project.
- 5. Click Save.

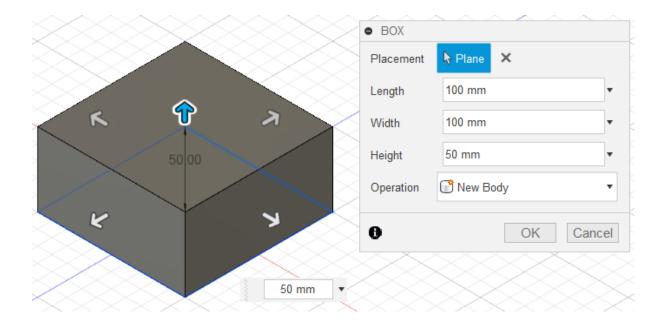


Create a Box

- 1. From the Toolbar, expand the Create menu, and click Box.
- 2. Select the XZ Plane along the bottom of the canvas.
- 3. Pick two points to define the length and width of the box.
- 4. In the Box dialog, enter these values:

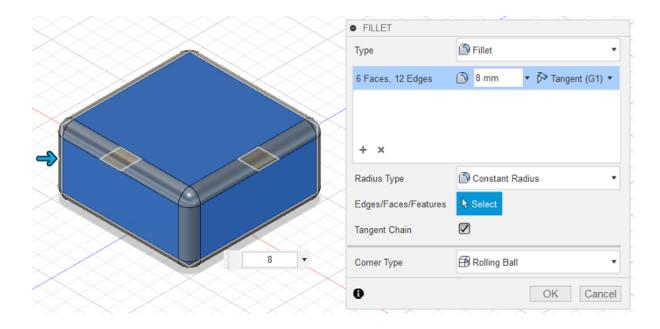
Length: 100 mmWidth: 100 mmHeight: 50 mm

5. Click OK.



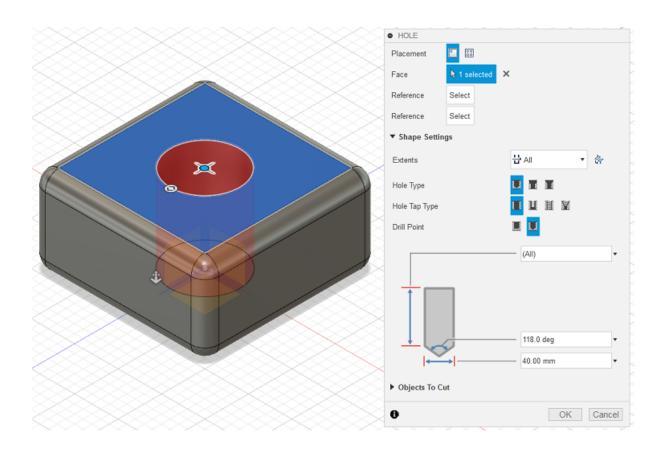
Round the edges of the Box

- 1. Right-click an empty area in the canvas, then select Press Pull from the Marking Menu.
- 2. Left-click, hold and drag the window to select the entire Box.
- 3. Enter 8 mm for the Radius.
- 4. Click OK.



Add a hole to the Box

- 1. From the Toolbar, expand the Create menu, and click Hole.
- 2. Select the top face of the Box.
- 3. Drag the center of the Hole to the center of the Box.
- 4. Set Diameter to a value of 40 mm.
- 5. Change Extents to All.
- 6. Click OK.

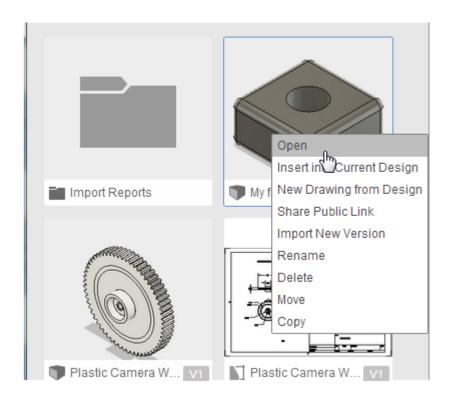


Close and reopen your design

1. Click the X on the tab for My first box. The design is closed and you are presented with an empty design.



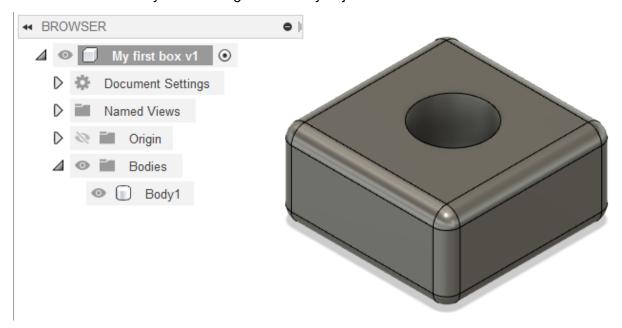
2. In the Data Panel, double-click My first box, or right-click on My first box and click Open.



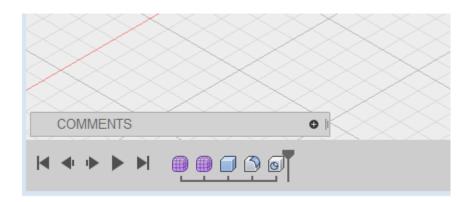
Use the browser

- 1. Click the Hidden icon next to the Origin folder to display the origin planes.
- 2. Click the Visible icon again to turn the origin planes off.
- 3. Click next to the Bodies folder to expand the folder.

4. Note there is one Body in this design - the box you just created.



Use the Timeline



- 1. Click the Play icon to replay the operations in the design.
- 2. Right-click the fillet operation in the Timeline.
- 3. Change the Radius to 5 mm and click OK.

Change workspaces

1. From the Toolbar, click the Design workspace, then select Render to switch to the Render workspace.

2. Notice the canvas appearance changes and the Timeline is replaced with the Rendering Gallery. This workspace is used to render images of your design.



- 3. Wait for the Rendering Gallery to display a thumbnail of your cloud renderings. Notice the progress of renderings that are in process.
- 4. Once the renderings have been processed, click on a thumbnail to display the full image in the Cloud Rendering dialog.
- 5. Close the Cloud Rendering dialog.
- 6. Click the Render workspace icon, then select Design to return to the Design workspace.