

DESIGN PROJECTS

STUDENT GUIDE



NAME TAG

DESCRIPTION

Welcome to the Design Projects Student Guide for Name Tags! The focus of this project is a name tag, a simple and useful design for use with bags, backpacks, or attached to a key ring.

This guide contains information regarding Design Intent, DFAM (Design for Additive Manufacturing) and Design Tips to keep in mind for each part.

You will use CAD to design each part, and print the part on a 3D printer.

For a video demonstrating the design approach, detailed dimensions and step by step instructions, see the links in the **Additional Resources** section below.

PROJECT TASKS

- Create the Name Tag component in CAD.
- Print the physical components on a 3D printer.
- Attach the Name Tag to a bag or split key ring.

ADDITIONAL RESOURCES

- [LINK TO DOCUMENTS](#)
- [LINK TO YOUTUBE VIDEO](#)
- [LINK TO STEP-BY-STEP](#)

NAME TAG

DESIGN INTENT

- Fillets are added at corners to remove sharp edges and strengthen the design.
- Text is extruded as an emboss, up to the same level as the upper edge.

DFAM

- Uses Flat-Pack Design (no support material necessary).

DESIGN TIPS:

- 'Wake up' the circular edge to make a concentric circle.
- Use Offset Entities to create the inner cut area.
- Locate the loop at the corner of the base before adding fillets.

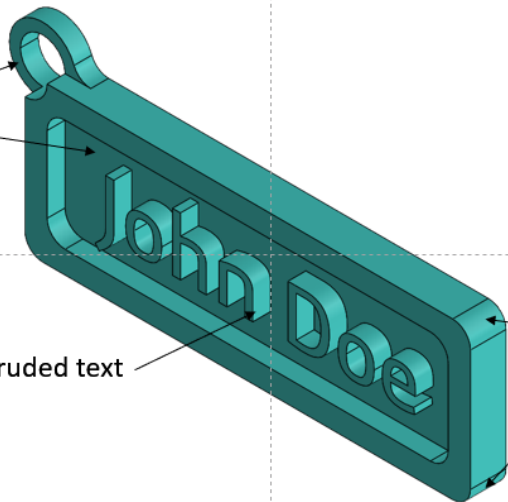
Loop on corner



Inner section and loop half base thickness

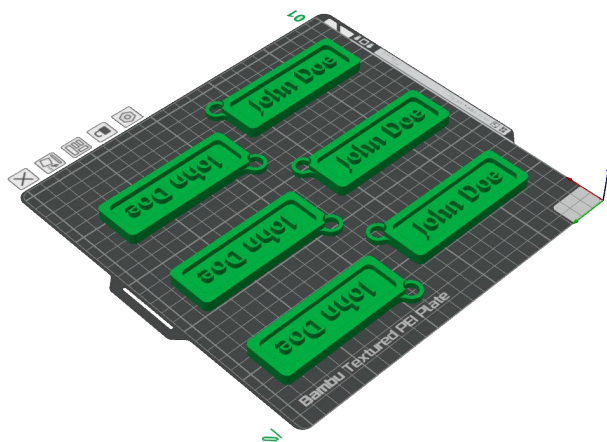
Extruded text

Fillets on outer and inner corners

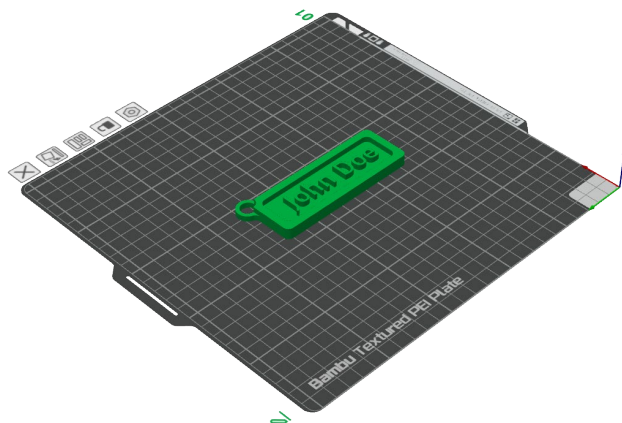


3D PRINTING

- Use **Print 3D** in xDesign to export your STL files.
- Nest your parts to print many at one time.
- If you print multiple name tags, note that some slicing software includes automatic arranging options.



NESTING



ORIENTATION OF NAME TAG