

**Lab #7 Advanced NX API - ME 578 Winter 2018**  
Check off with Teaching Assistants before 11am on March 16th.

## Resources

- GTAC Help
- NXOpen API Reference

## Assignment

Create an NX program that generates the model seen in the drawing in the next page. Overall code should not be more than 500 lines of code. Lines will be counted based on normal formatting as defined by how the default Visual Studio formatting is (putting all your code on one line isn't normal). Make sure your builders get destroyed (they aren't extraneous).

Also create a block dialog in NX that allows selecting or changing different parameters. This may include values or selecting planes to define key features. The blocks do not need to be unique types, but experimenting with a variety is recommended.

For each of the five parameters that are selected from the generated dialog, five different aspects of your model should change.

## Check Off (15 Points)

1. (1 Point) Code generates the model. (Model should include all the key features, but sizing may vary depending on how you set up your parametric model)
2. (3 Points) Code is less than 500 lines (not including comments and white space).
3. (5 Points) Code brings up user created dialog (from block dialog). Each item in the dialog is worth 1 point.
4. (5 Points) Dialog allows the model to be changed. Each parametric portion is 1 point (each should be associated with an item in the dialog).
5. (1 Point) Provide a readme file that documents how to use your dialog.

# Drawing

