

DESIGN PROJECT

FIRST EVALUATION

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S5 ME
ROLL NO:38

CART INNOVATION



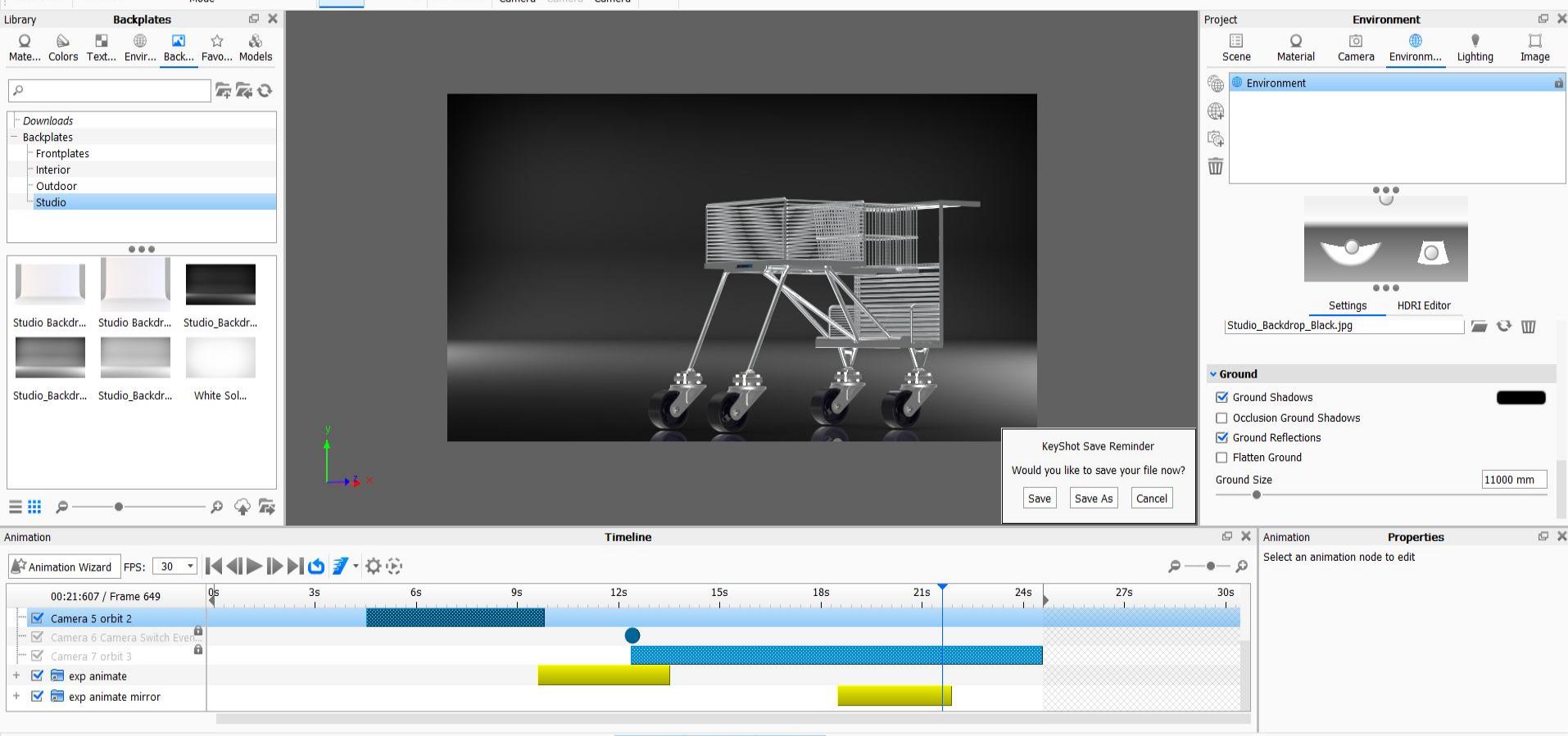
CONTENT

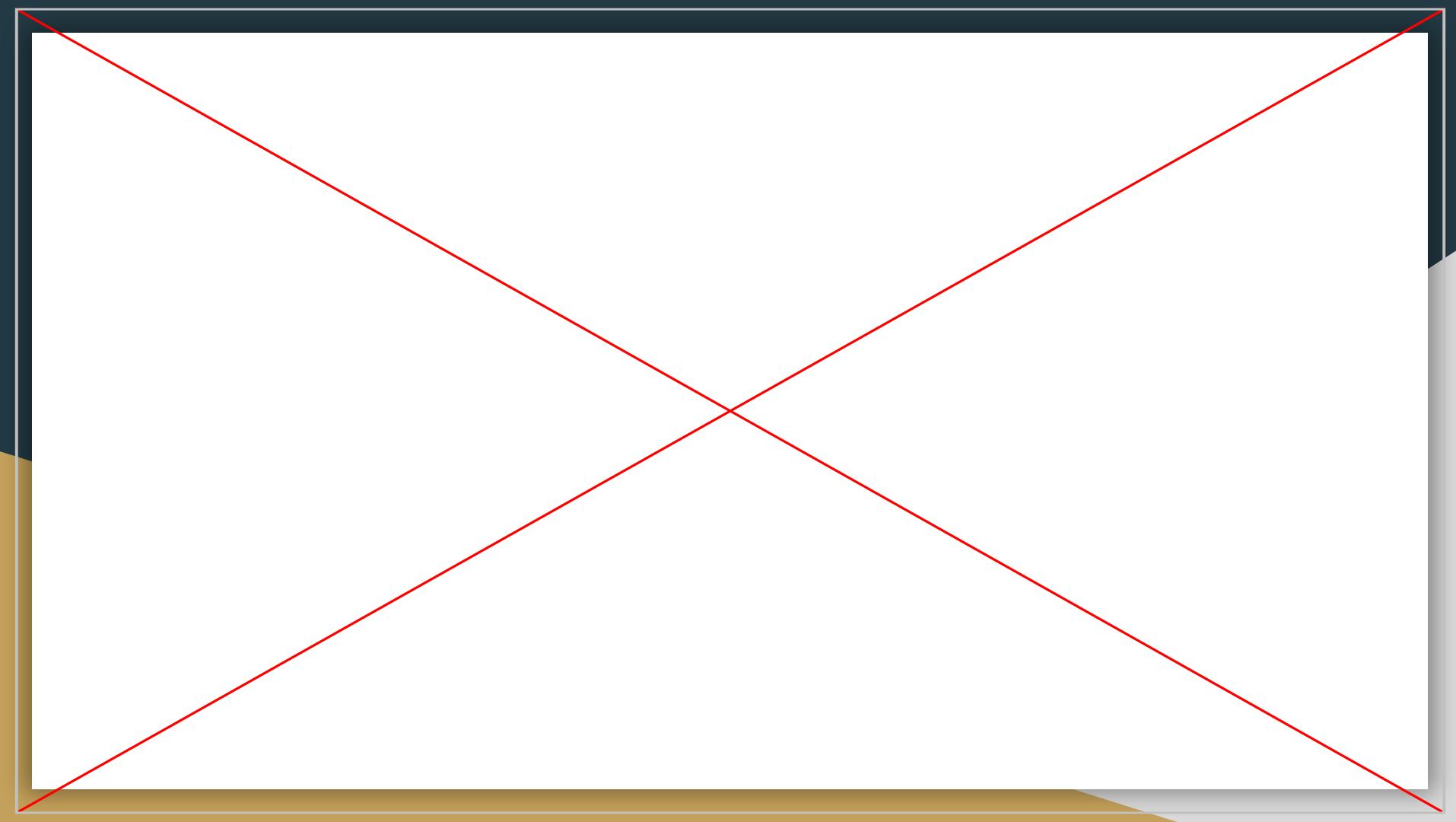
- RENDERING
- DESIGNING

THE DESIGN IS RENDERED IN A SOFTWARE CALLED **KEYSHOT**









THE CART WAS DESIGNED IN A CAD SOFTWARE CALLED **SOLIDWORKS**

The image displays four separate windows of the SOLIDWORKS 2018 Premium software interface, illustrating the step-by-step creation of a mechanical part.

Top Left Window (Part1): Shows a 3D view of a cylindrical part with two vertical slots and three circular holes. The FeatureManager tree on the left lists the following features:

- Part1 (Default-<Default>-Display S)
- History
- Sensors
- Annotations
- Material <not specified>
- Front Plane
- Top Plane
- Right Plane
- Origin
- Boss-Extrude1
- Fillet1
- Plane1
- Boss-Extrude2
- Boss-Extrude3
- (Sketch4)
- Fillet2
- Dome1
- Cut-Extrude1
- Fillet3
- Mirror2

Top Right Window (Part2): Shows a 3D view of a hexagonal base. The FeatureManager tree on the left lists the following features:

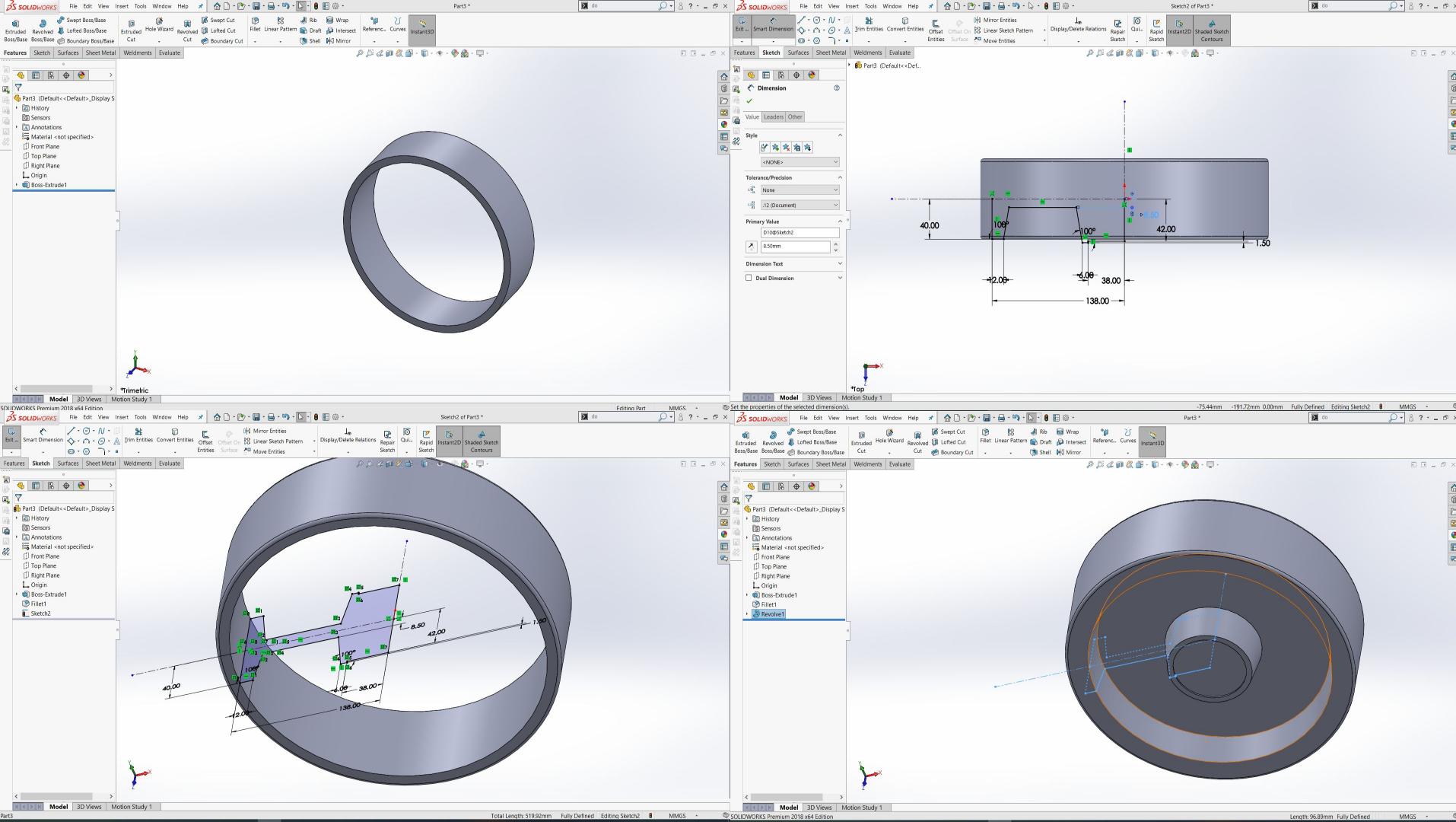
- Part2 (Default-<Default>-Display S)
- History
- Sensors
- Annotations
- Material <not specified>
- Front Plane
- Top Plane
- Right Plane
- Origin
- Boss-Extrude1

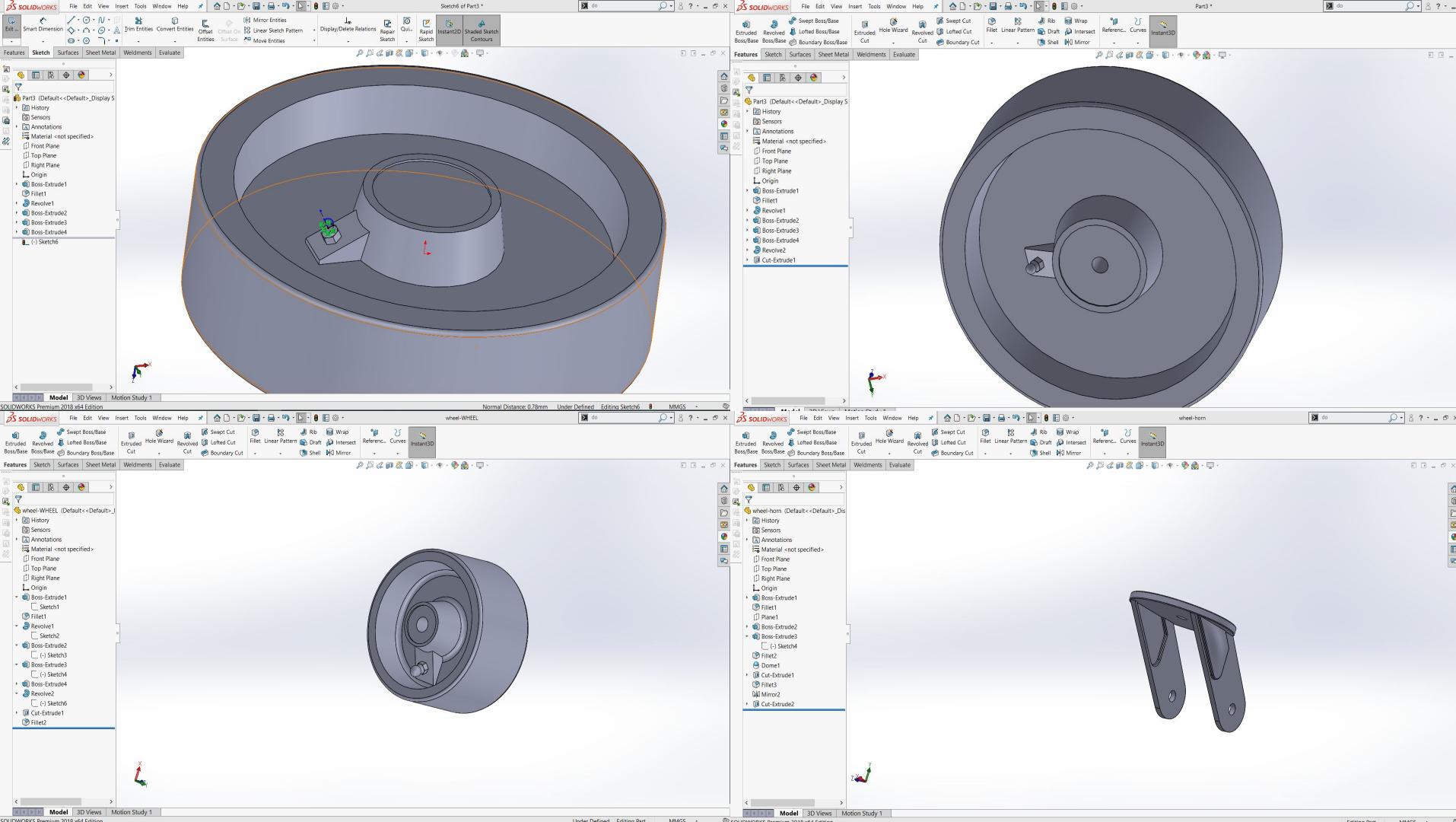
Bottom Left Window (Part2): Shows a 3D view of the hexagonal base with a yellow Boss-Extrude feature applied. The Boss-Extrude dialog box shows the following settings:

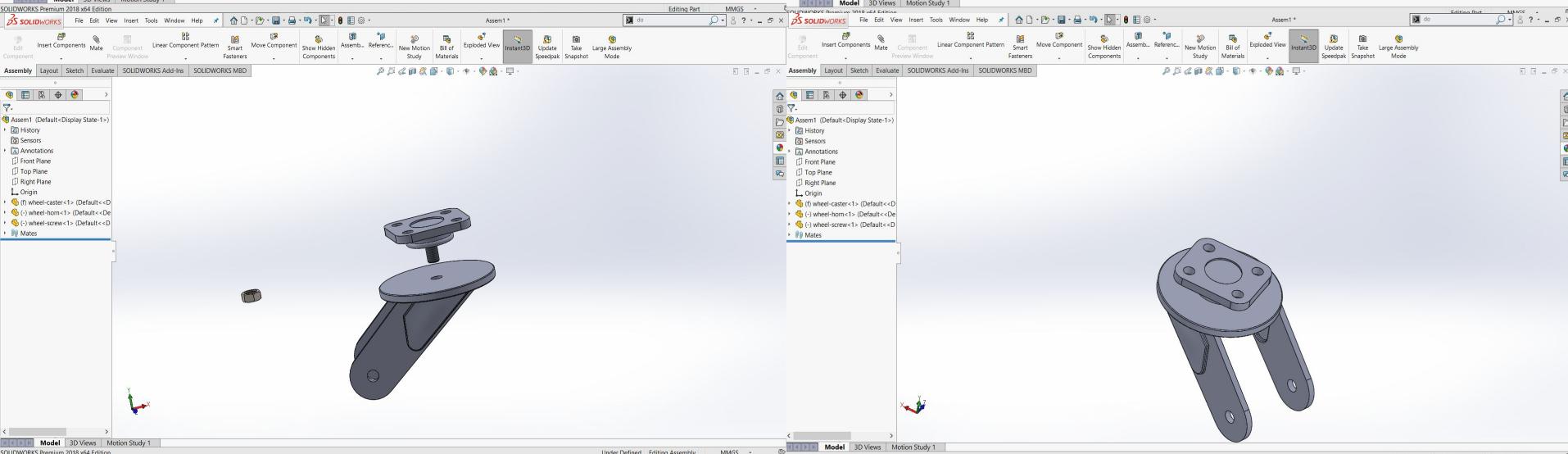
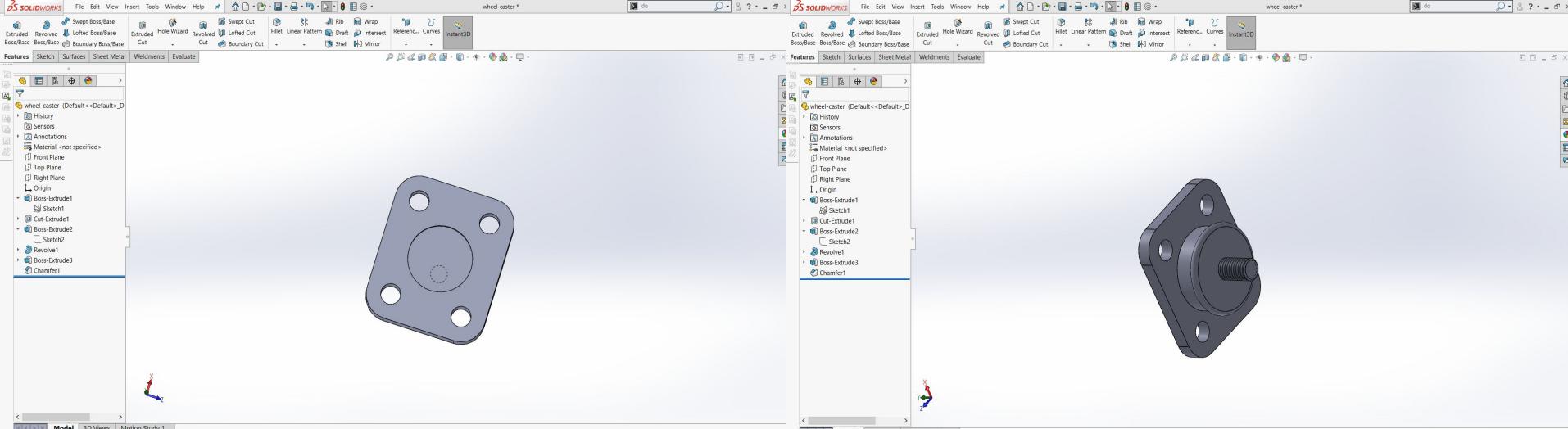
- From: Sketch Plane
- Direction 1:
 - Blind
 - Distance: 126.00mm
 - Merge result: checked
 - Draft outward: unchecked
- Direction 2: unchecked
- Thin Feature: unchecked

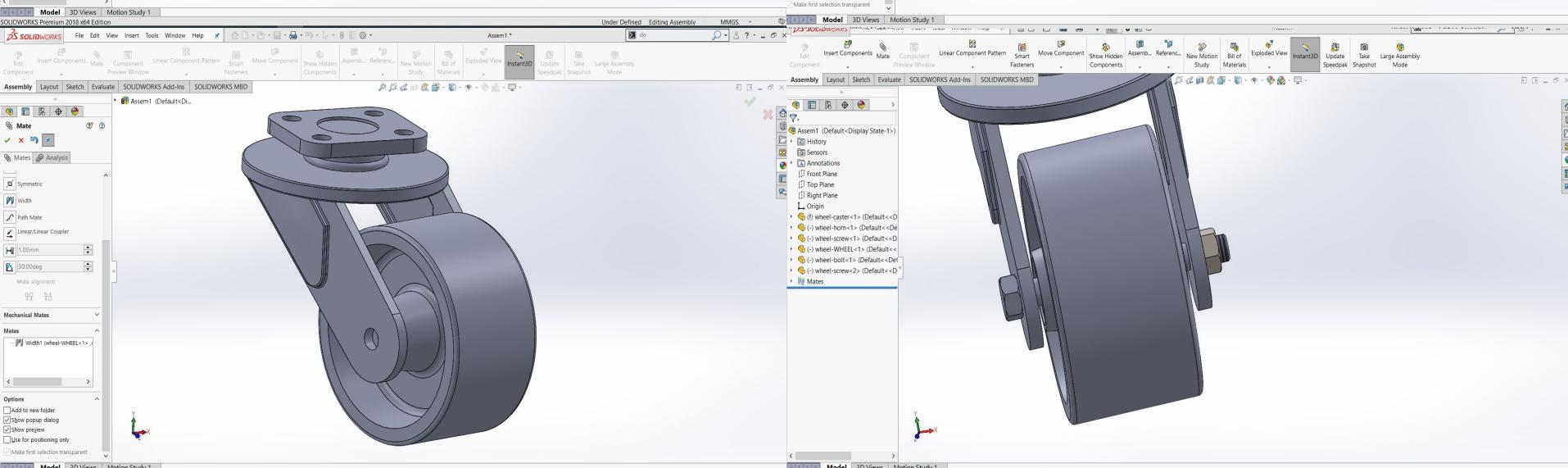
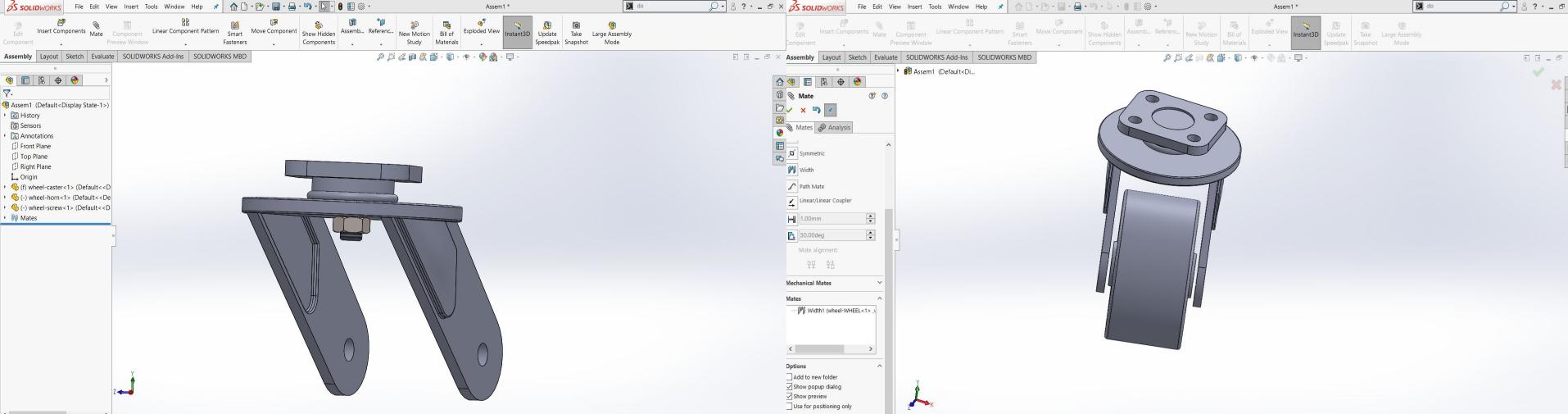
Bottom Right Window (Part2): Shows a 3D view of the completed hexagonal bolt. The FeatureManager tree on the left lists the following features:

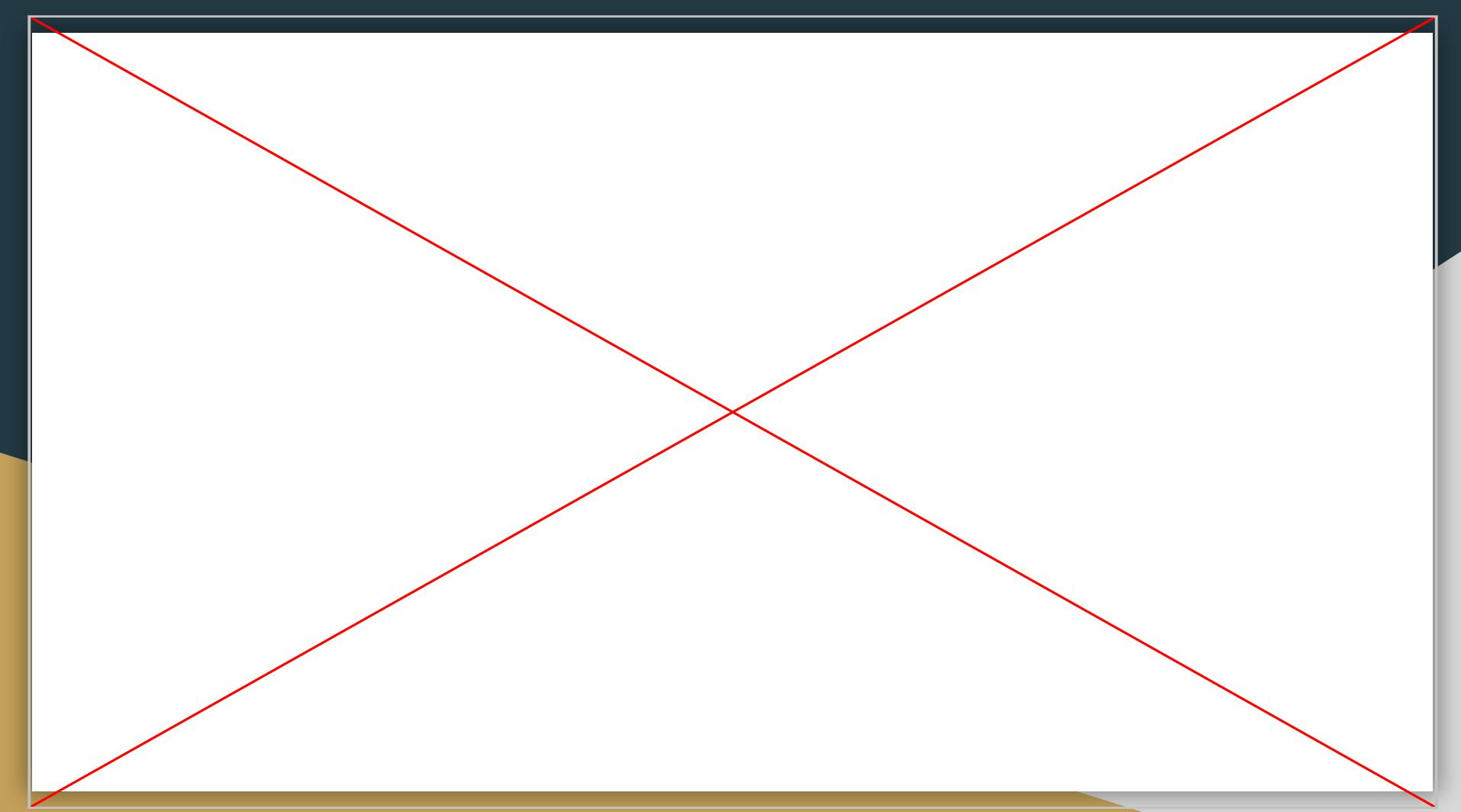
- Part2 (Default-<Default>-Display S)
- History
- Sensors
- Annotations
- Material <not specified>
- Front Plane
- Top Plane
- Right Plane
- Origin
- Boss-Extrude1
- Boss-Extrude2
- Chamfer1
- Cut-Revolve11

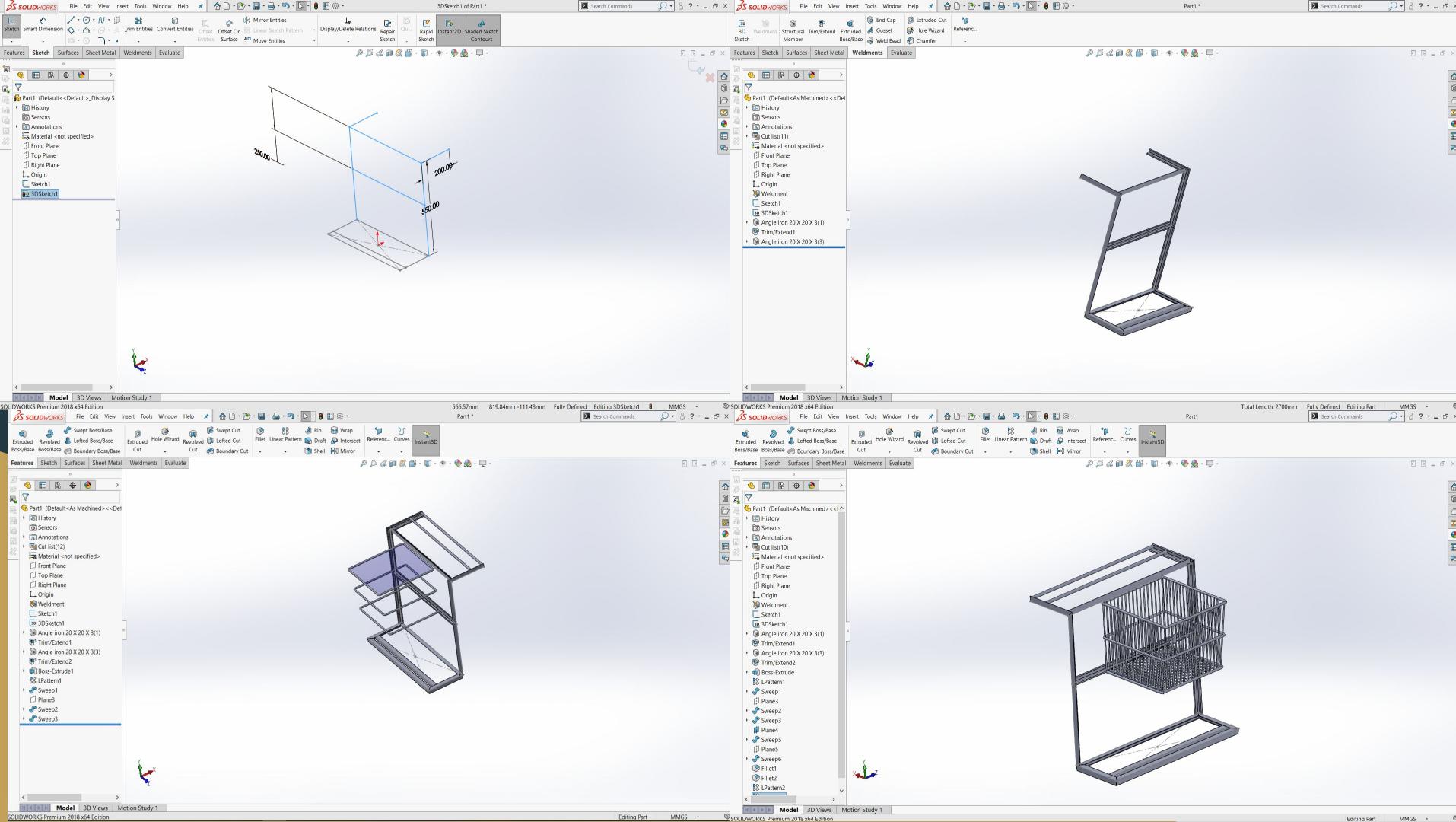


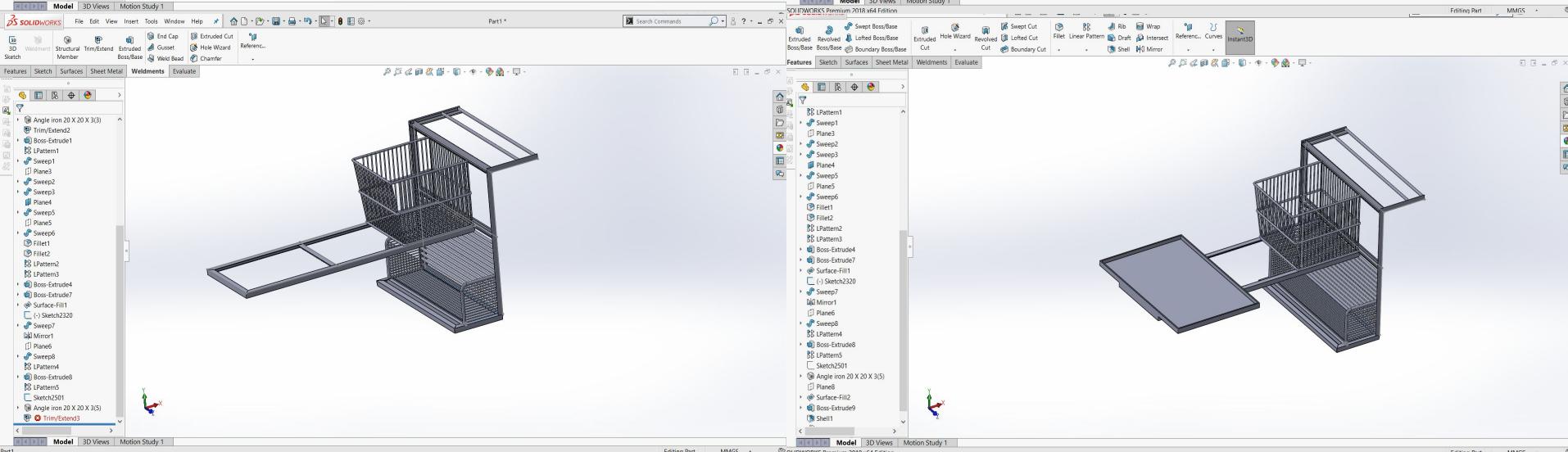
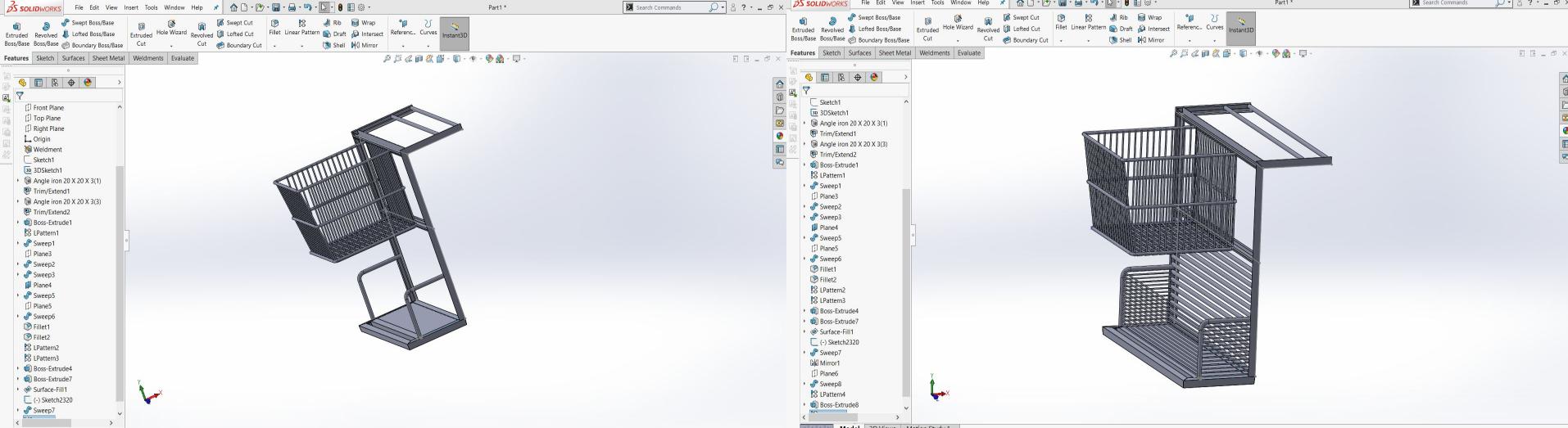


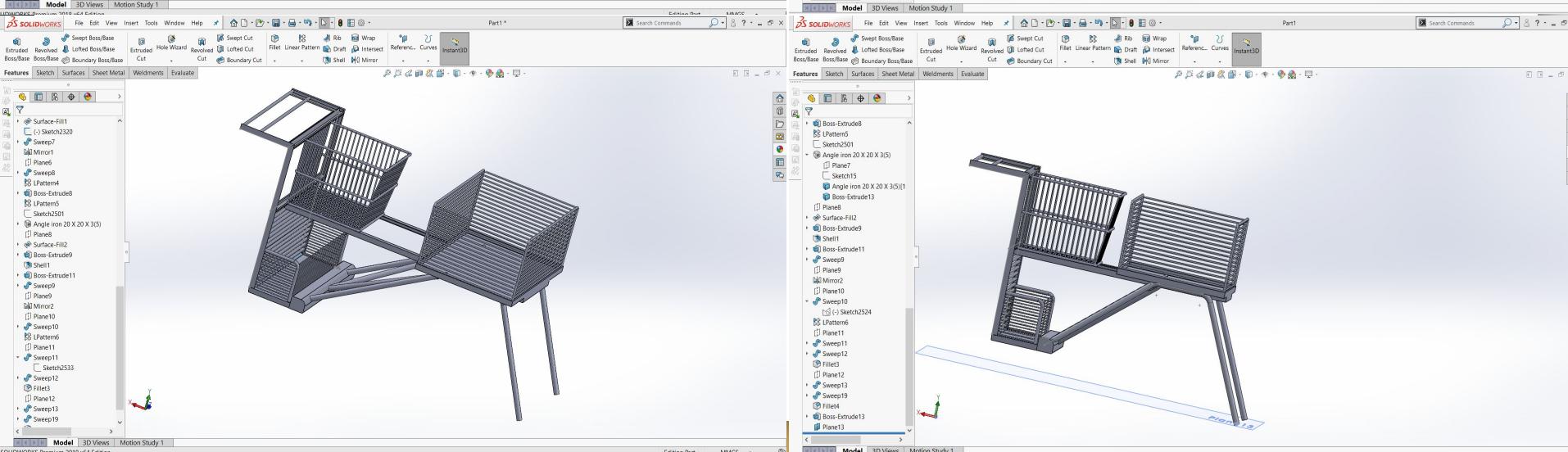
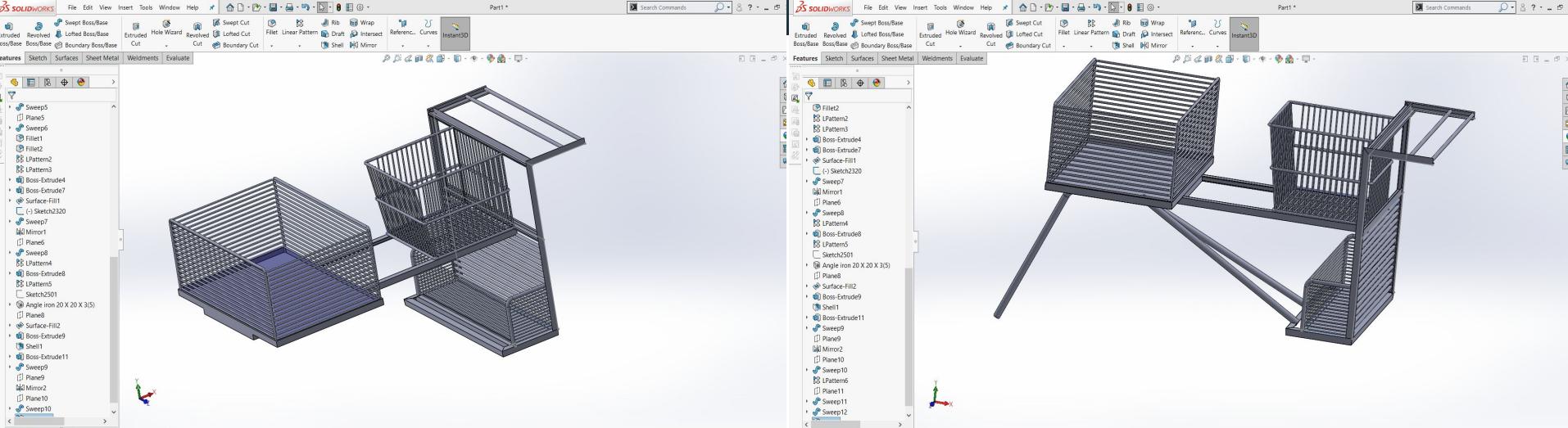


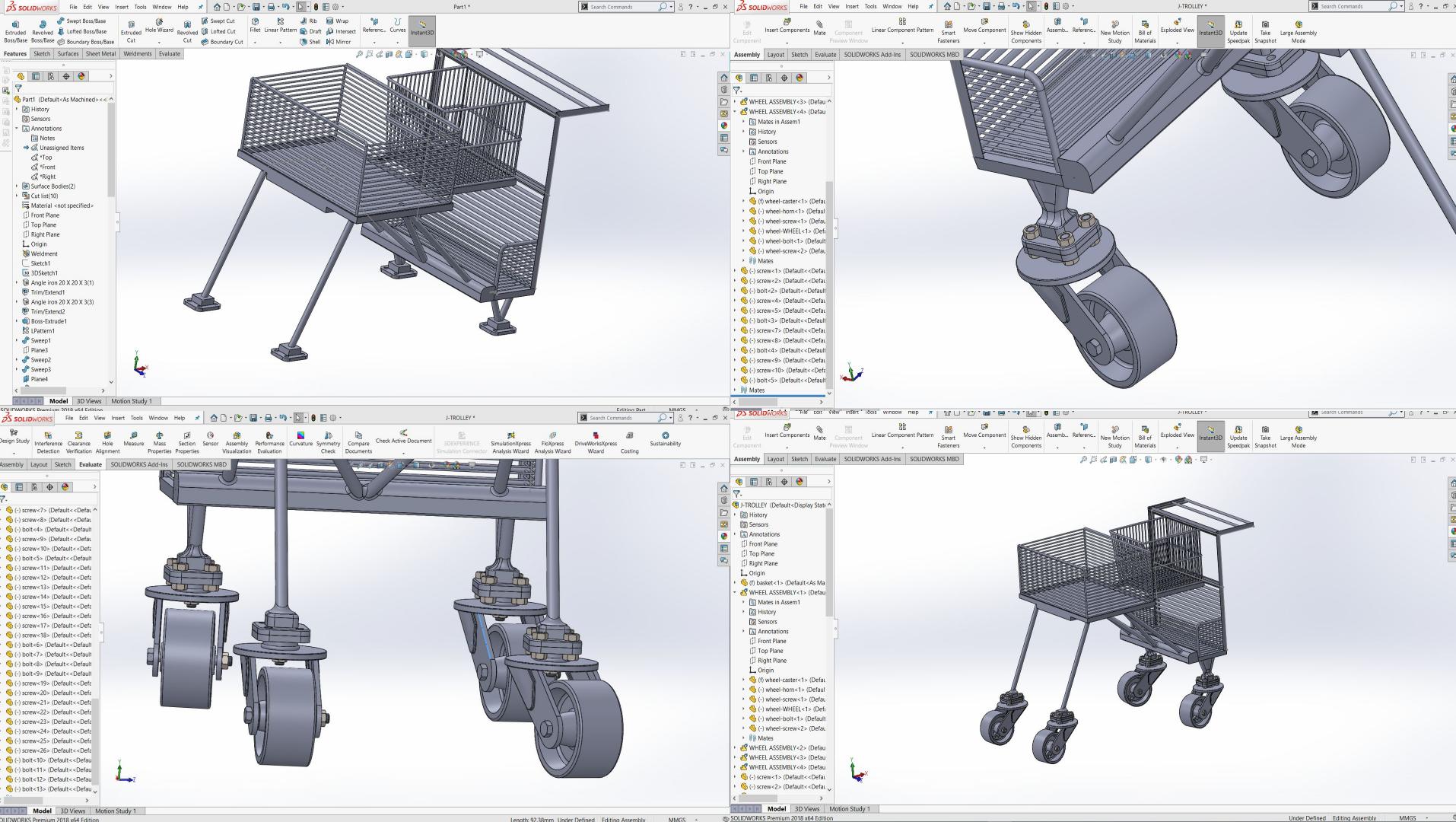




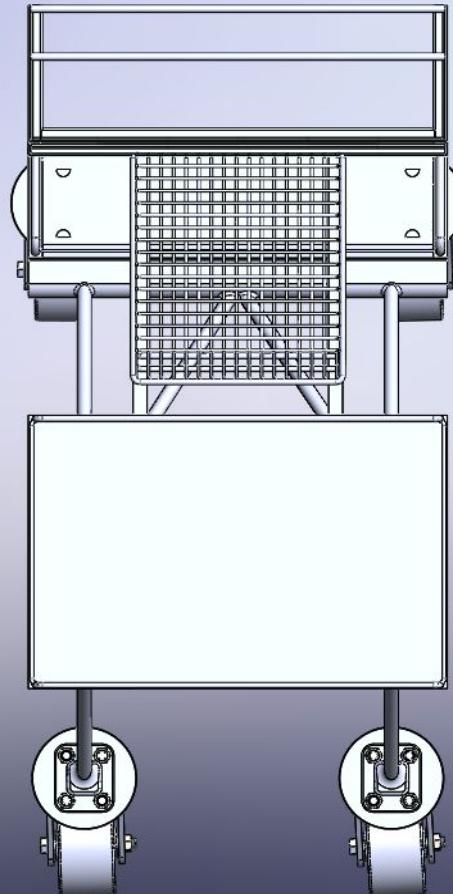




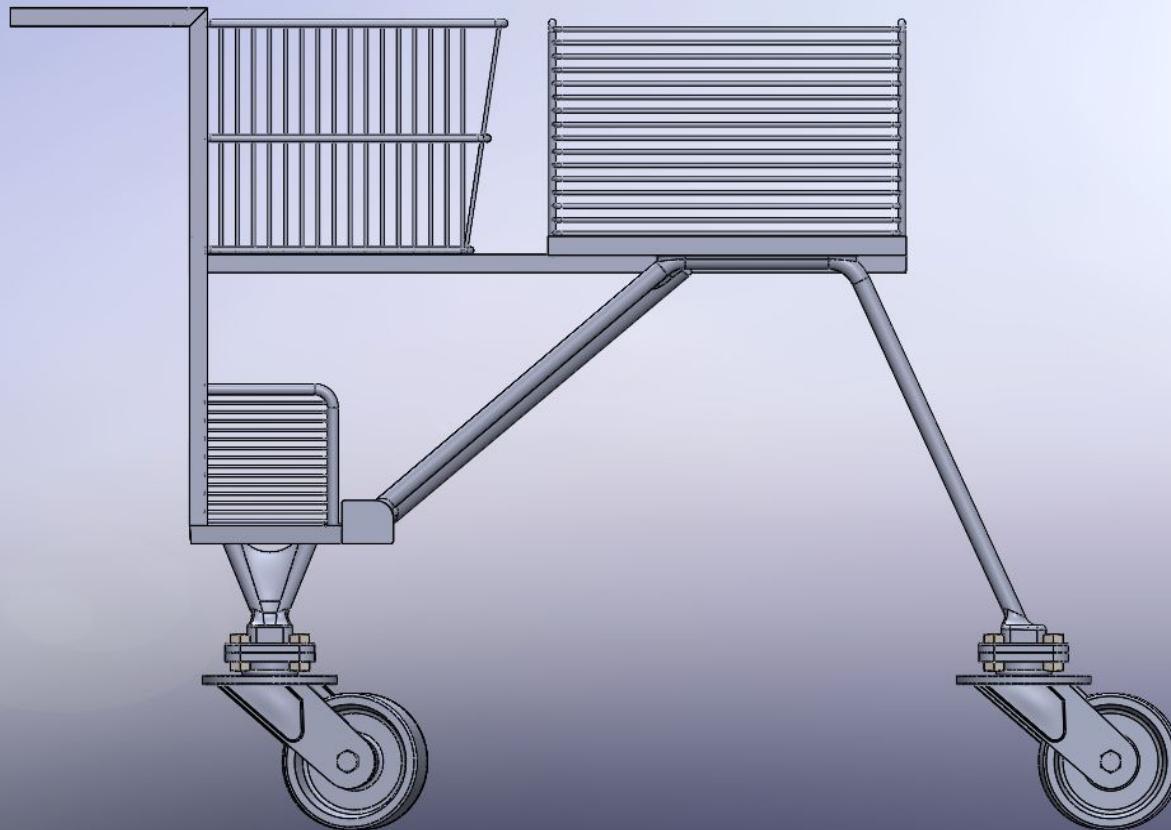




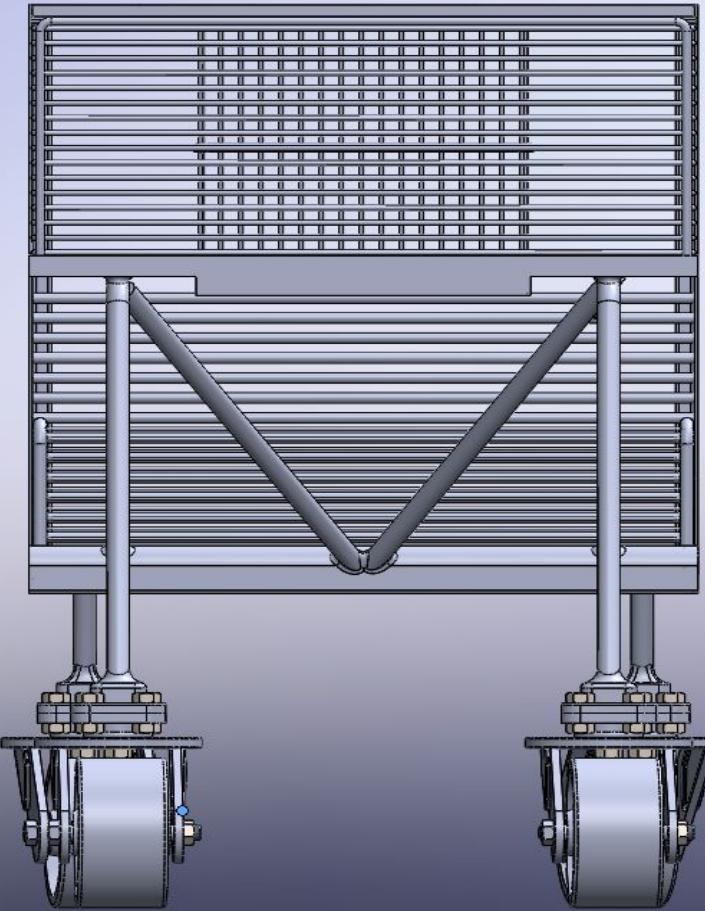
TOP VIEW



SIDE VIEW

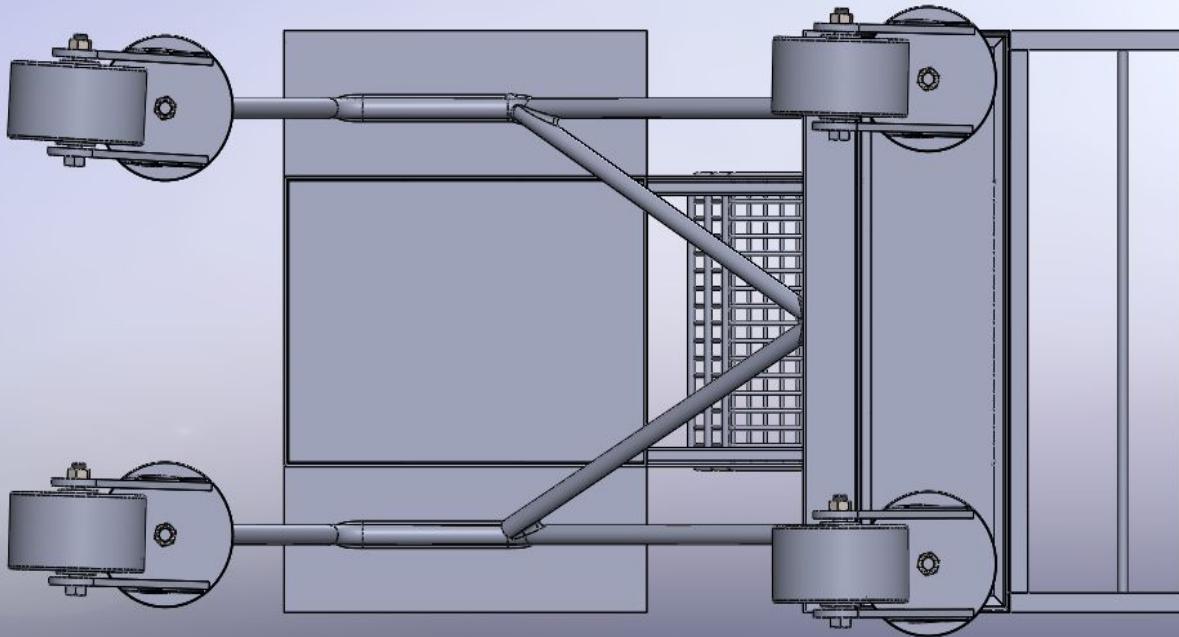


FRONT VIEW

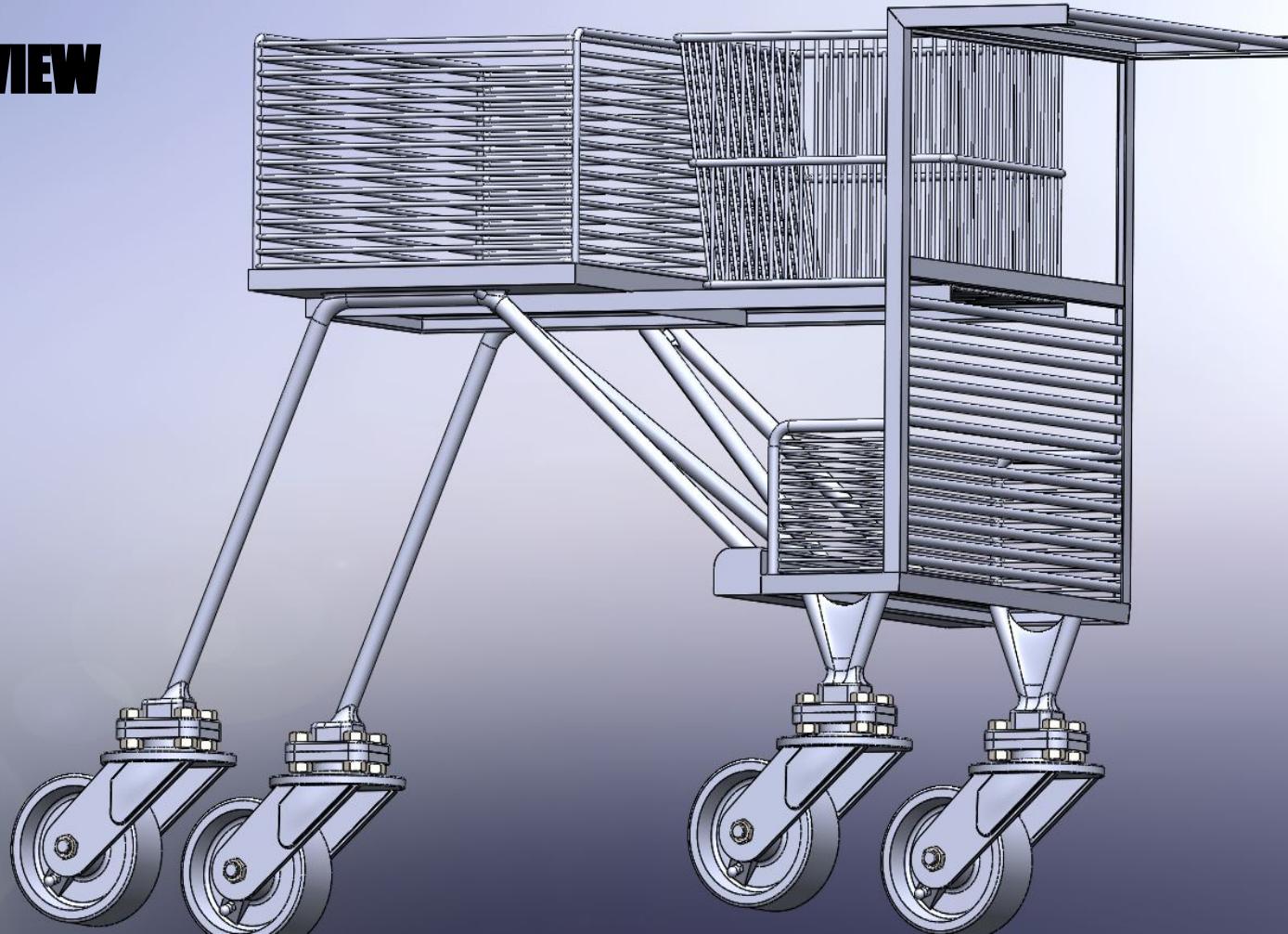


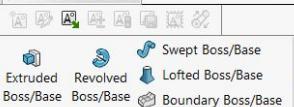
Y
Z

BOTTOM VIEW

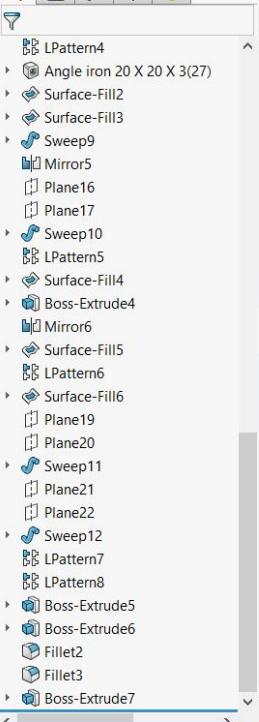


ANGLE VIEW

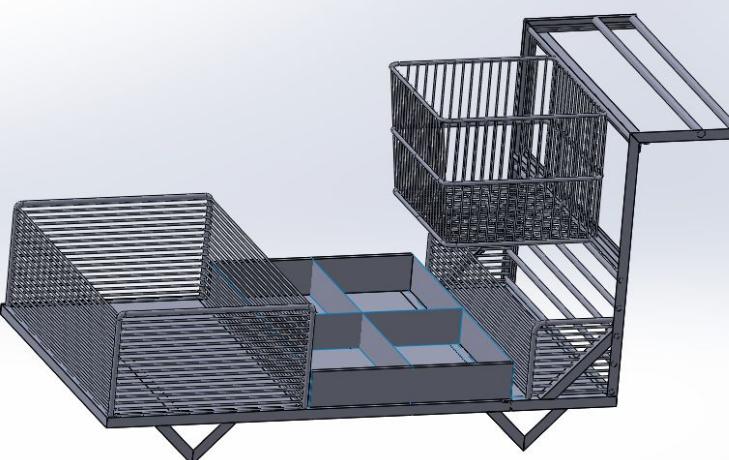




Features Sketch Surfaces Sheet Metal Weldments Evaluate



INITIAL ITERATION DESIGN



SOLIDWORKS Resources

Welcome to SOLIDWORKS

SOLIDWORKS Tools

- Property Tab Builder
- SOLIDWORKS Rx
- Performance Benchmark Test
- Compare My Score
- Copy Settings Wizard
- My Products

Online Resources

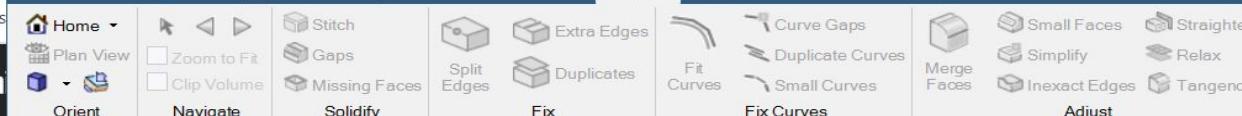
- 3DEXPERIENCE Marketplace
- Partner Solutions

Subscription Services

- Subscription Services

MOST OF THE EDGES AND GAPS WERE REPAIRED IN
SPACECLAIM(ANSYS TOOL)

File Design Display Assembly Measure Facets Repair Prepare Workbench Detail Sheet Metal Tools KeyShot Momentum



Structure

- ✓ basket2*
 - ✓ Surface1
 - ✓ Surface2
 - ✓ Surface3
 - ✓ Surface4
 - ✓ Surface5
 - ✓ Surface6
 - ✓ Surface7
 - ✓ Surface8
 - ✓ Surface9
 - ✓ Surface10

Structure Layers Selection Groups Views

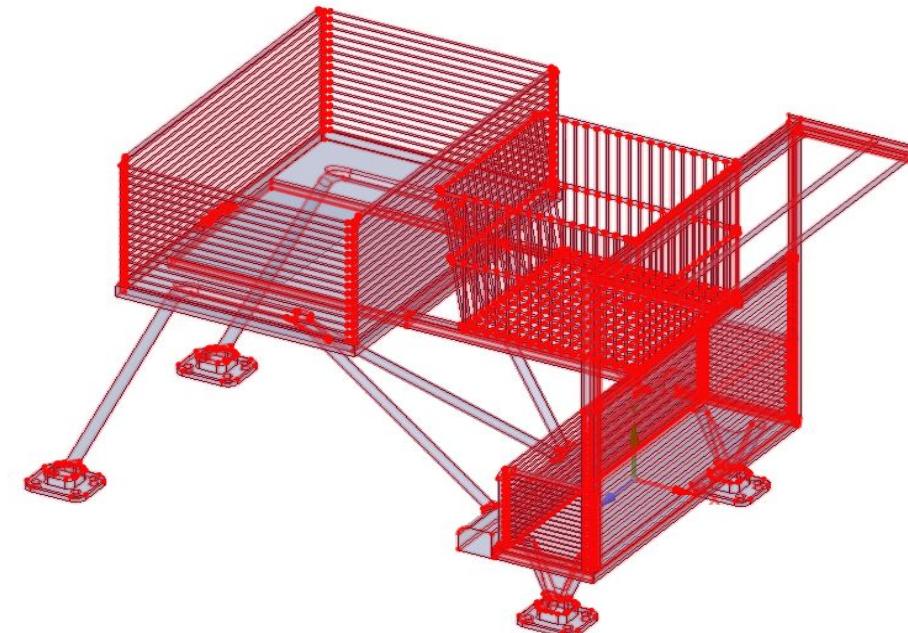
Options - Find/Fix

Find Options

Maximum distance: 0.1mm

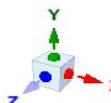
- Check for coincidence
 Maintain components

3 stitchable edges. Click an edge to be stitched.



ANSYS
R19.2

Properties



Properties Appearance



3 stitchable edges. Click an edge to be stitched.



Thank You!