

Multifunctional Desk & Storage Unit with Collapsible Chairs

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Description of the Product

This product is a space-saving piece of furniture for a student's dorm that functions as a desk and storage, along with having a collapsible stool and a hook to store it. The unit has wheels (*Figure 3*) so it can be easily moved, and 2 table flaps of different sizes (*Figure 9*) - to meet the user's needs at any time - that can collapse. There are also outlets (*Figure 2*) on both sides of the table for easy accessibility no matter the position of the unit in the room. There is a hook on the side of the unit (*Figure 8*) to put the folded chair (*Figure 5 and 6*) when it's not in use.

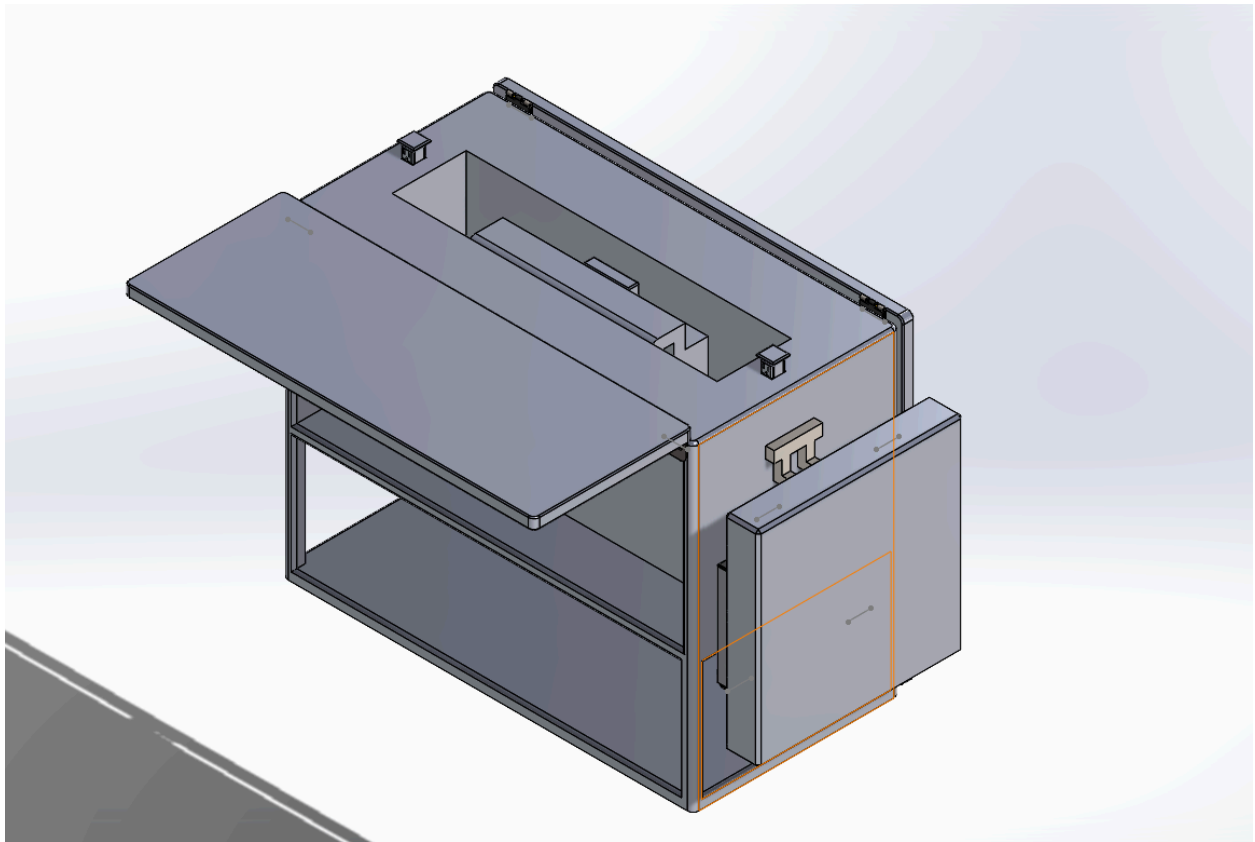


Figure 1: Isometric of the Entire Design

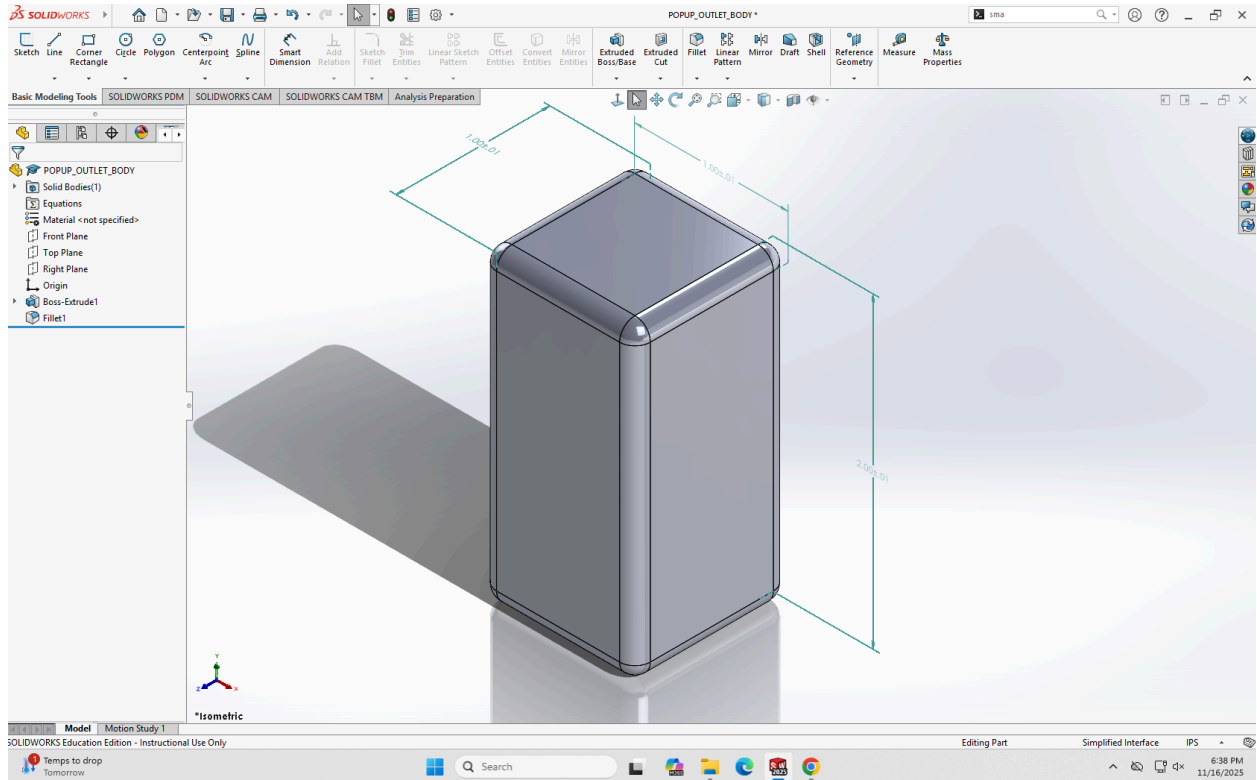


Figure 2.1: Pop-Up Outlet Body

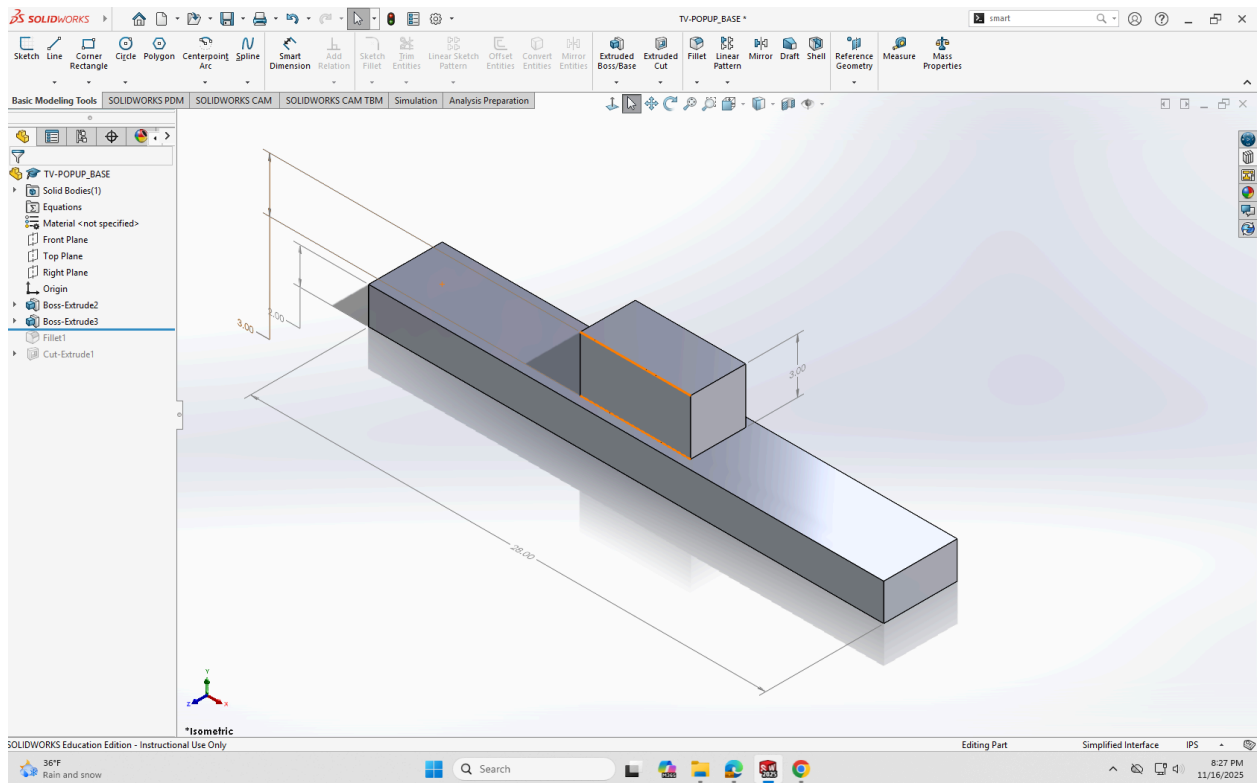


Figure 2.2: TV Pop-Up Base

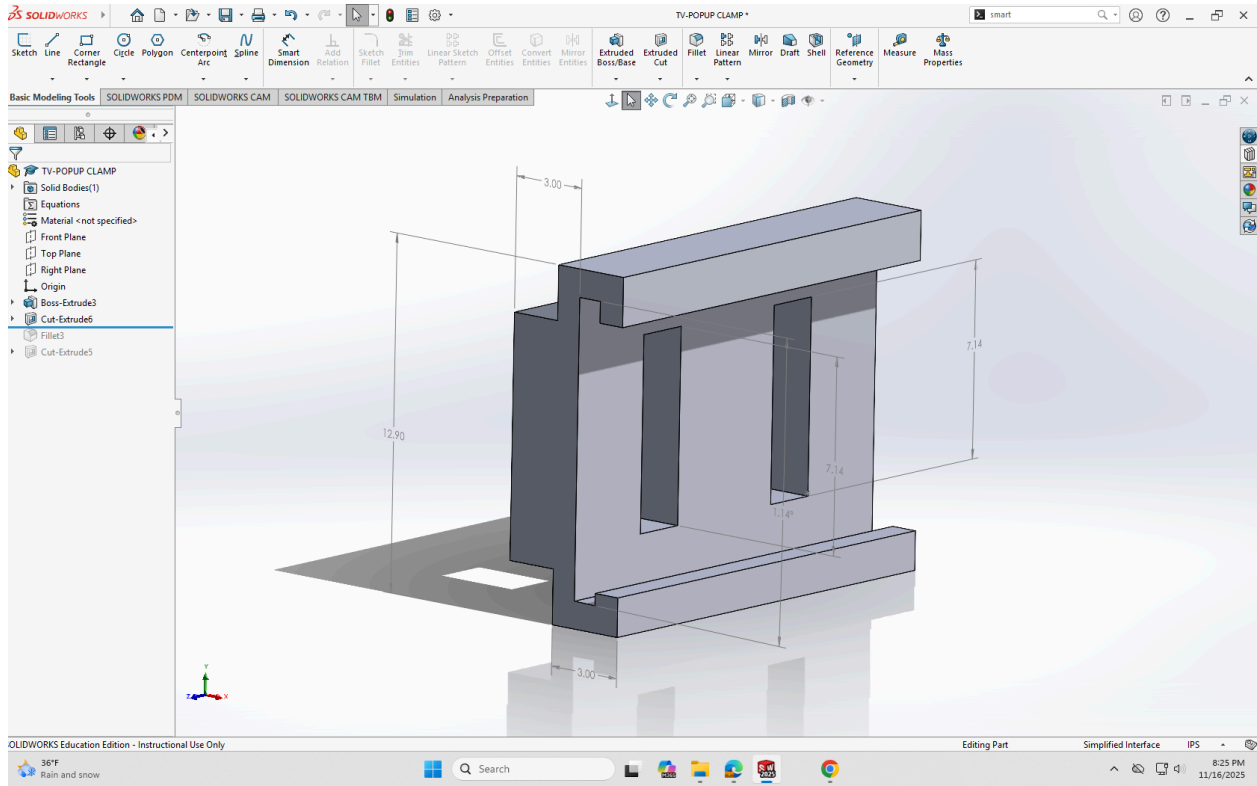


Figure 2.3: TV Pop-Up Clamp

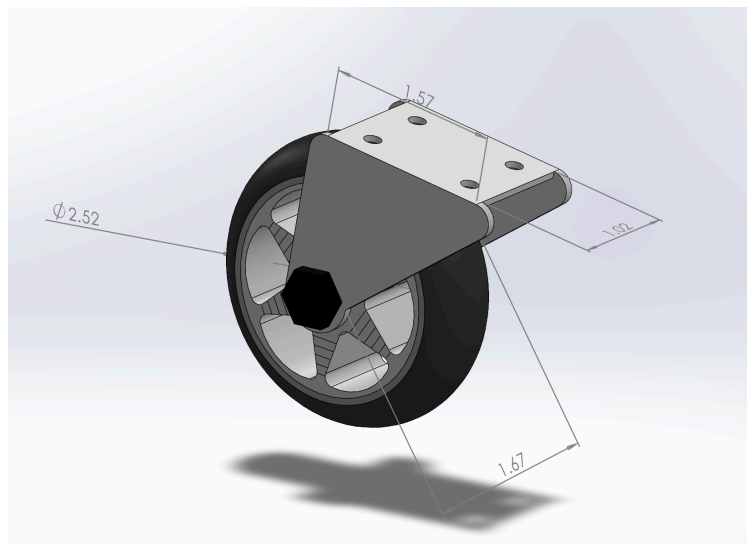


Figure 3: Table Wheels

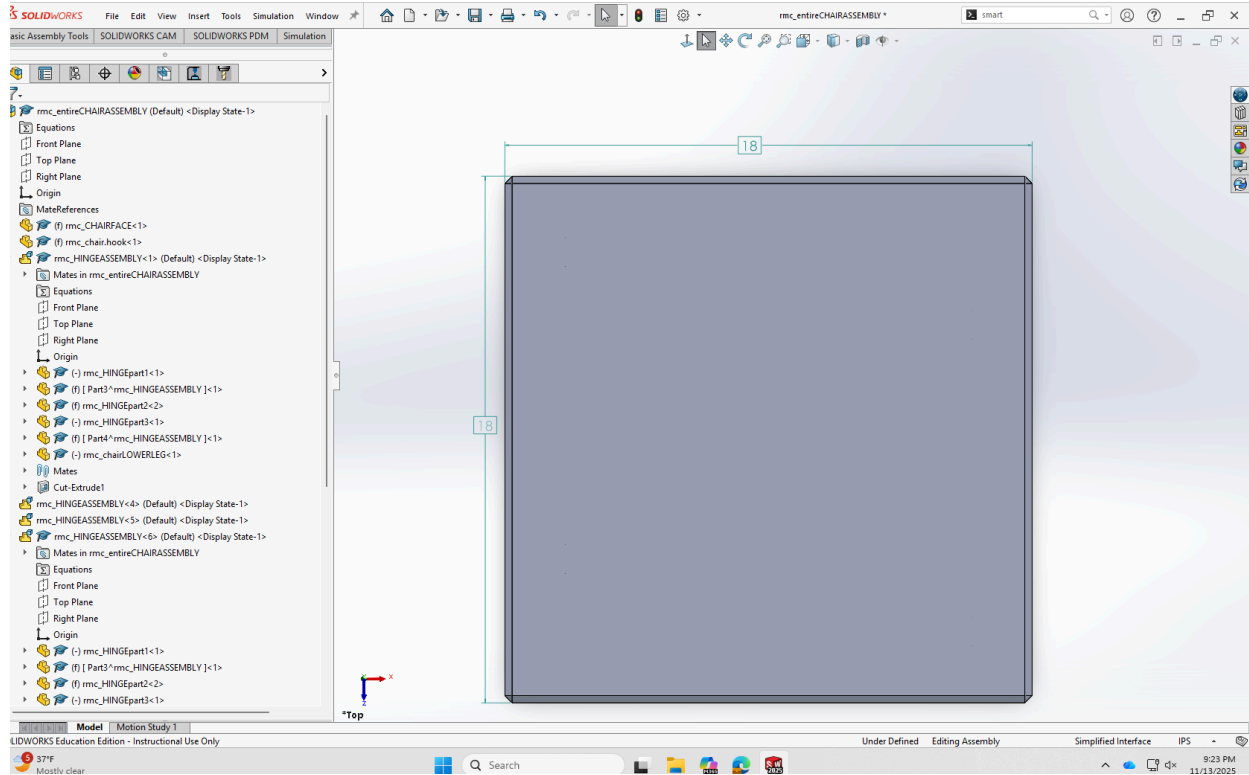


Figure 4: Collapsible Chair Folded Top View

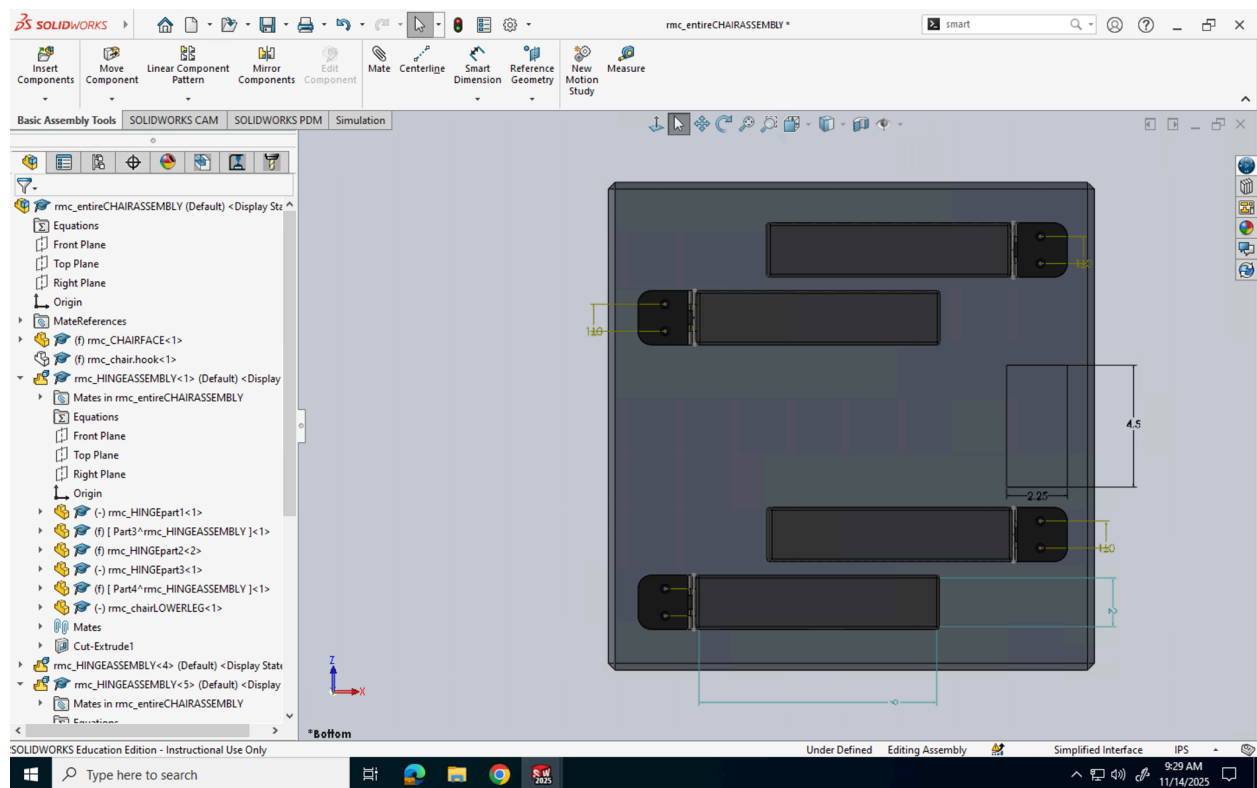


Figure 5: Collapsible Chair Folded Bottom View

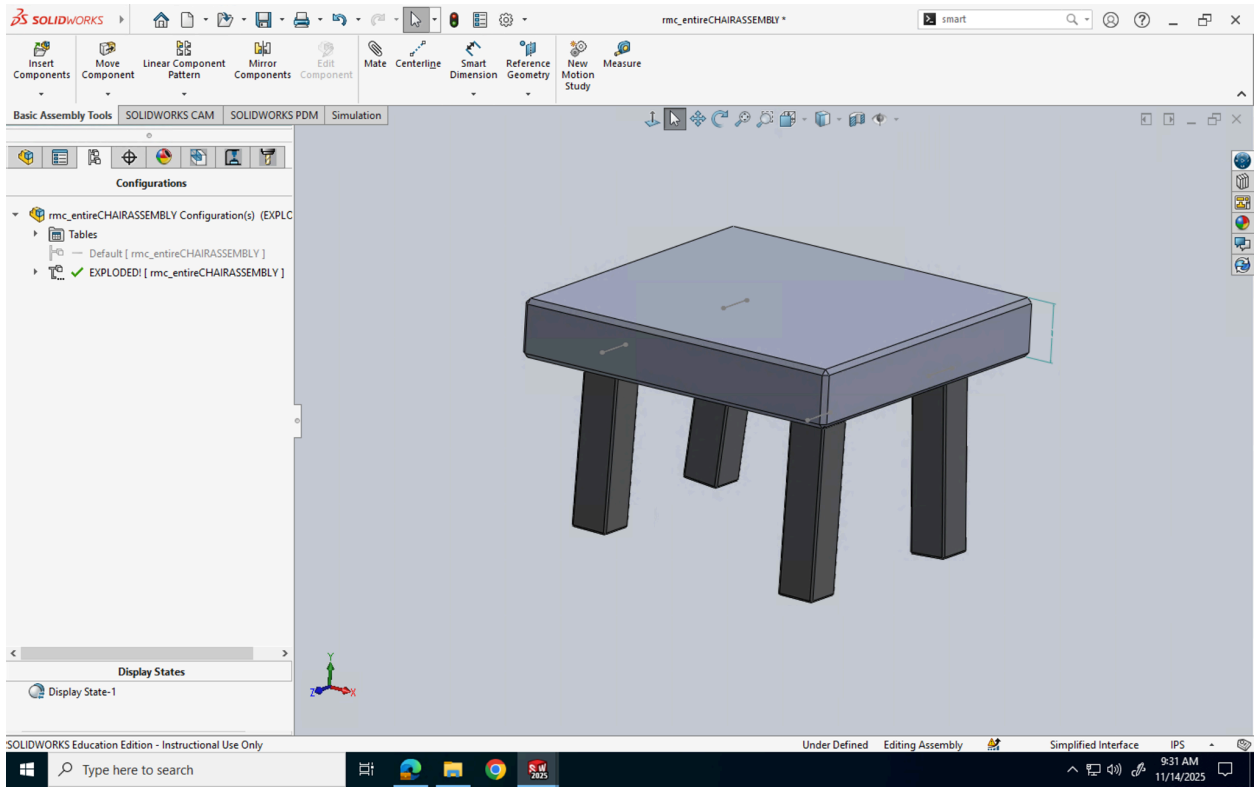


Figure 6: Collapsible Chair Extended

Figure 8: Storage Compartments

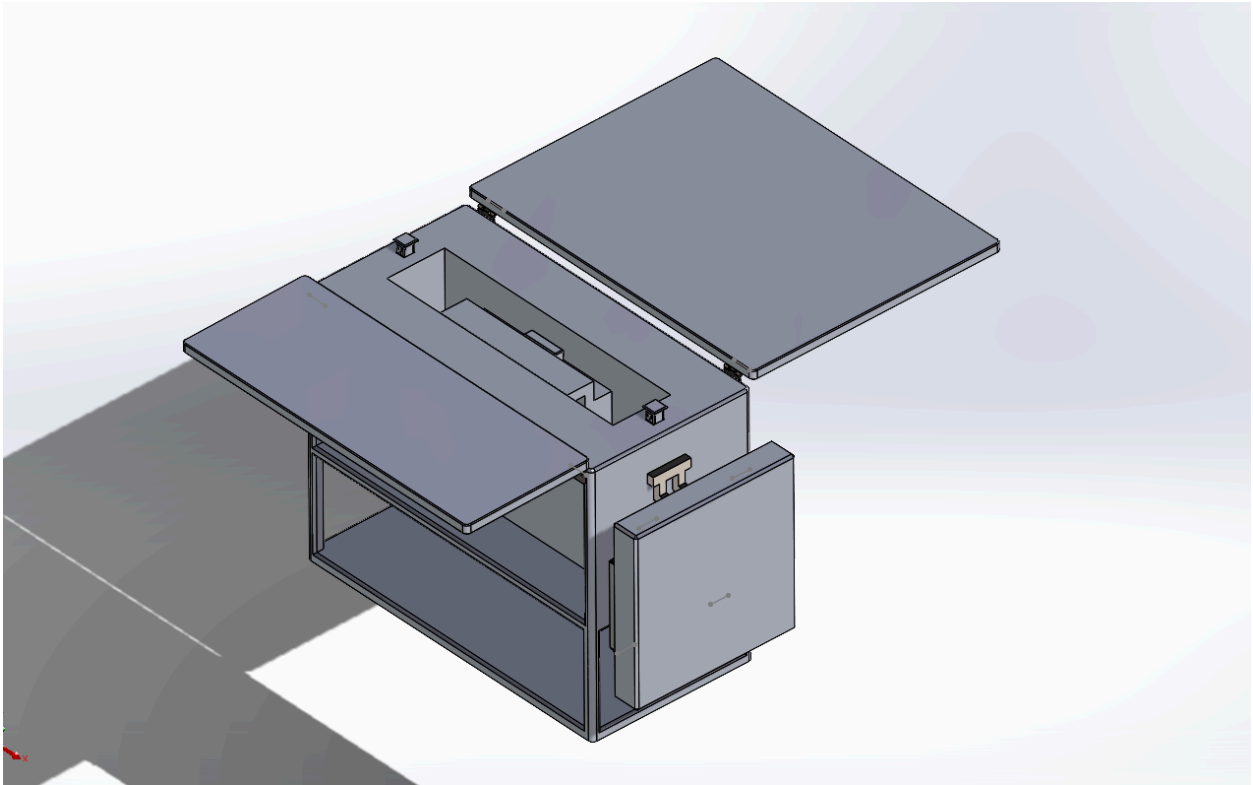


Figure 9: Table Flaps Open

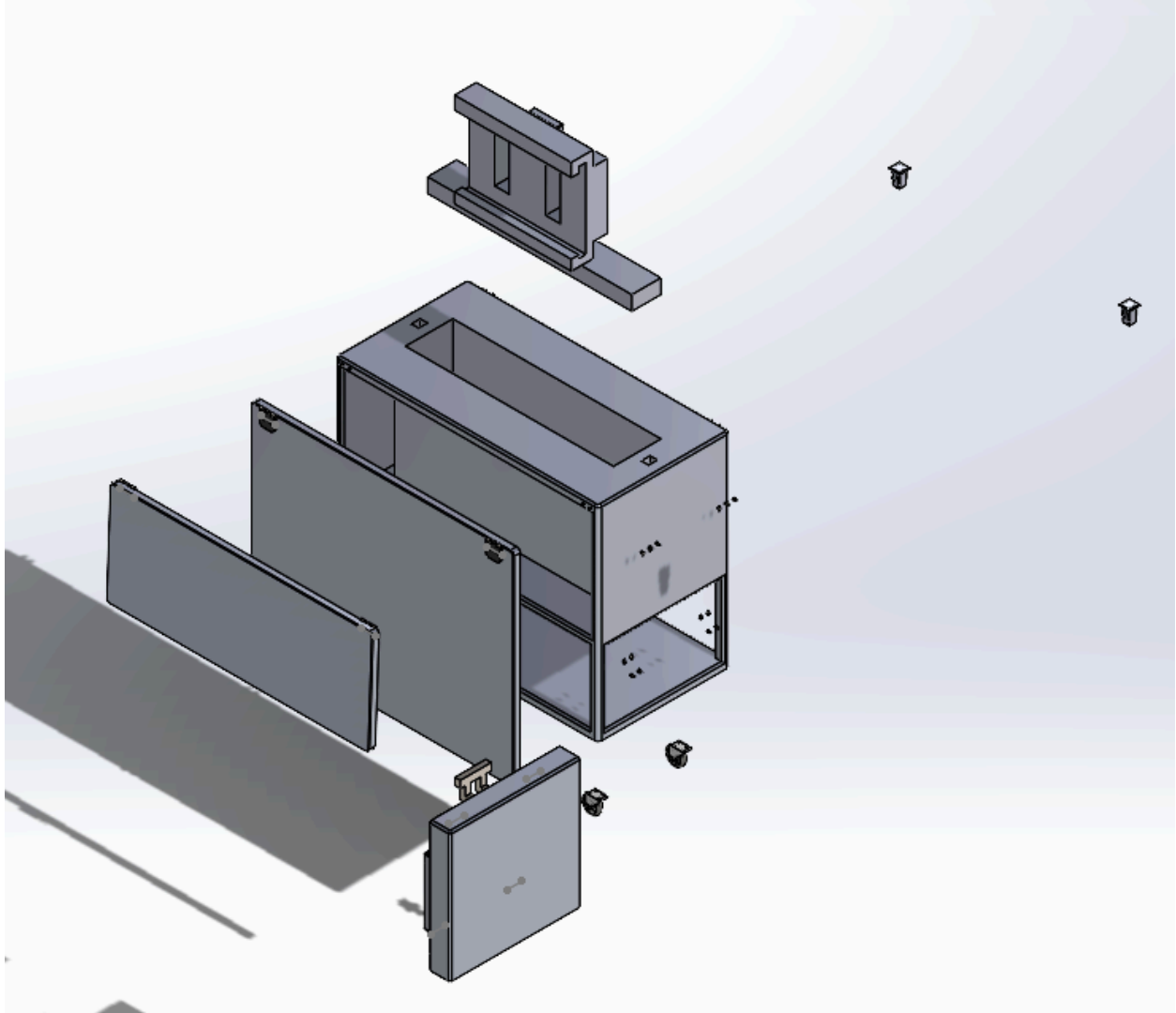


Figure 10: Desk Exploded View

Appendices

Contributions

Matt Morvillo: Responsible for creating/designing the pop up compartments for the TV/monitor and outlets in SolidWorks. Contributed to the overall design concept sketches. Created figure 10.

Alexis Bragg: Responsible for creating/designing the table wheels and 2 table flaps in SolidWorks. Assembled wheels onto final assembly. Contributed to the overall design concept sketches. Co-authored the *Introduction and Background* and *Description of the Product*. Created figure 3.

Nikolas Hemmings: Responsible for creating/designing the desk with the lower storage sections in SolidWorks. Contributed to the overall design concept sketches. Created figures 2.1, 2.2, 2.3, and 8.

Rosalinda Christopher: Responsible for creating/designing the collapsible chair and chair hook in SolidWorks. Assembled hinge for chair and table flaps. Assembled table flaps and chair onto final assembly. Contributed to the overall design concept sketches. Co-authored the *Introduction and Background* and *Description of the Product*. Created figures 1, 4, 5, 6, 7, and 9.

Contribution Percentages

- Matt Morvillo: 25% - *Matt Morvillo*
- Alexis Bragg: 25% - *Alexis Bragg*
- Nikolas Hemmings: 25% - *Nikolas Hemmings*
- Rosalinda Christopher: 25% - *Rosalinda Christopher*