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Vellore ▪ Chennai
CHENNAI CAMPUS
Vandalur - Kelambakkam Road, Chennai - 600127

PRODUCT DESIGN, MANAGEMENT TECHNIQUES AND ENTREPRENEURSHIP PROJECT

PROJECT PROPOSAL

SNAGGER!!!

SNACK WITH SWAGGER!

FALL SEMESTER 2016-2017

Osho Agyeya(15BCE1326)

Shubham Parashar(15BCE1318)

Shriansh Srivastava(15BCE1314)

Animesh Sen Gupta(15BCE1198)

Har Shobhit Dayal(15BCE1192)

Summary

PURPOSE: The project is aimed at the design and construction of product “Snagger”. This shall be used at cinema halls and movie theatres for ergonomic placement and accessibility of food items to maximize movie enjoyment while catering to the food needs of the audience by helping them to keep all their food stuff in a single tumbler.

SUPPORT: The project requires the help of mechanical and civil engineering students to get an insight into modelling software like Solid works and AUTOCAD.

AIM OF REPORT: The aim of the report is to convince the stakeholders and draw the attention of the readers to the multifaceted utilities of the product being developed.

This project has been developed by the students of VIT University belonging to a team of 5 students namely Osho Agyeya(15BCE1326), Animesh Sen Gupta(15BCE1198), Har Shobhit Dayal(15BCE1192) , Shubham Parashar(15BCE1318), Shriansh Srivastava(15BCE1314).

This product was taken up as a part of the project for PRODUCT DESIGN, MANAGEMENT TECHNIQUES AND ENTREPRENEURSHIP subject.

The intended target population is the students of the VIT University as well as professors who are willing to accept innovative projects for development.

- ***Length of time needs/problems have existed:*** The problem of carrying food stuff efficiently has existed in the Indian cinemas for a long time.

- ***Past actionable:*** Still, nothing has significant has been achieved as far as solving these problems are concerned.

- ***Impact of problem:*** The problem has caused the people to unintentionally spill drinks or drop bought food stuff. Also, it becomes difficult for the customer to carry more food stuff with him. He has to get up more and more times to buy the stuff separately. This becomes irritating for him.

The desired goals and objectives to address the needs/problems stated above are as follows:

- The product has been made in such a way that carrying the soft drink is no longer hectic for the customer since it is inside a cylinder in the interior of the container.
- For products like popcorn which are bought in large quantities, one big compartment has been provided which has a greater depth to muster more volume of the majority product.
- For products like samosas, sandwiches, nachos etc which are bought in minor quantities, three compartments have been provided which have lesser depth as compared to the larger compartment.
- The user can use the compartments to store their personal stuff like mobile phones, wallets, tickets etc for their convenience.

PROJECT DESIGN SPECIFICATION:

BASIC STRUCTURE:

The basic structure of the bucket is inverted frustum (actual dimensions of the product are different from those mentioned in the diagram).

MATERIAL:

- Plastic is an appropriate material since it is easily washable.
- The thickness of the plastic is 3mm.

HEIGHT:

- The proposed height of the structure is 26 cm.

BASE:

- The base of the frustum has a radius of 7.5 cm.
- The base is circular.
- The radius of the cylinder attached to the base is 3.5 cm.

TOP:

- The top of the frustum has a radius of 13 cm.

DIVIDERS:

- The dividers are fixed and have been created at angles of 70 degrees, 70 degrees, 70 degrees and 150 degrees from the vertical.
- The dividers are attached to the inner cylinder at one end and outer cylinder at the other frustum.

BASE OFFSET:

- For three compartments, the base is 6.175 cm above the actual base of the frustum.

ANGLE OF FRUSTUM:

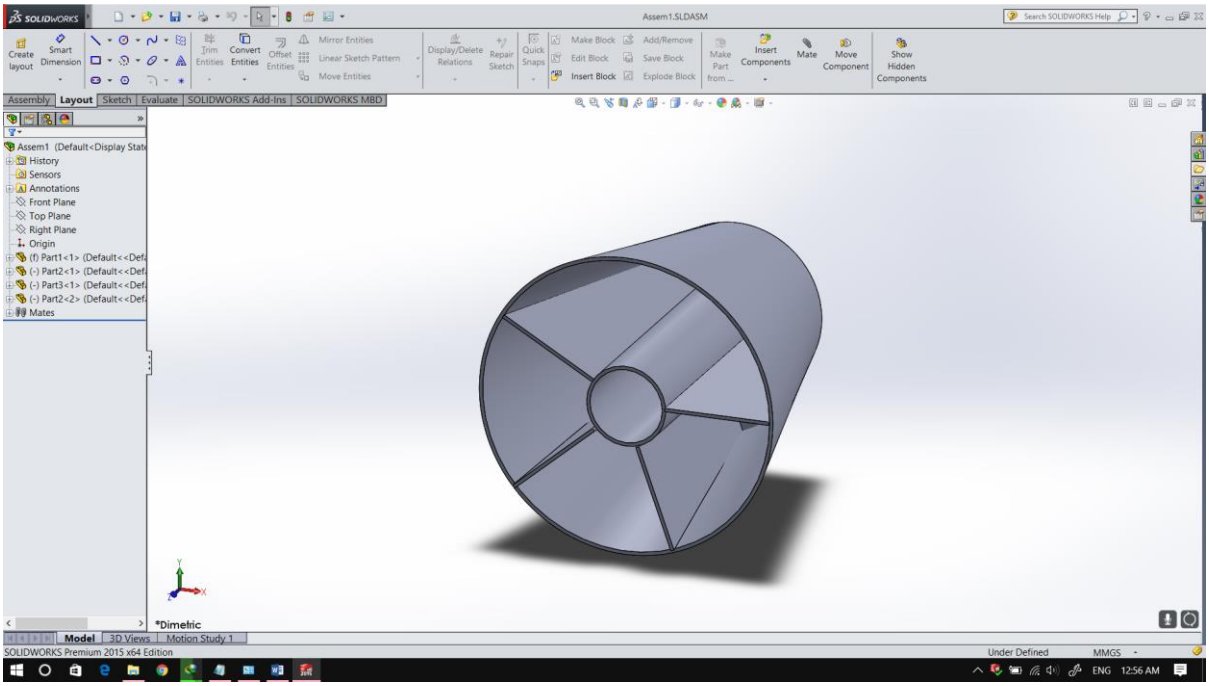
- The angle by which the frustum is slanted on the sides is 8.7692 radians.

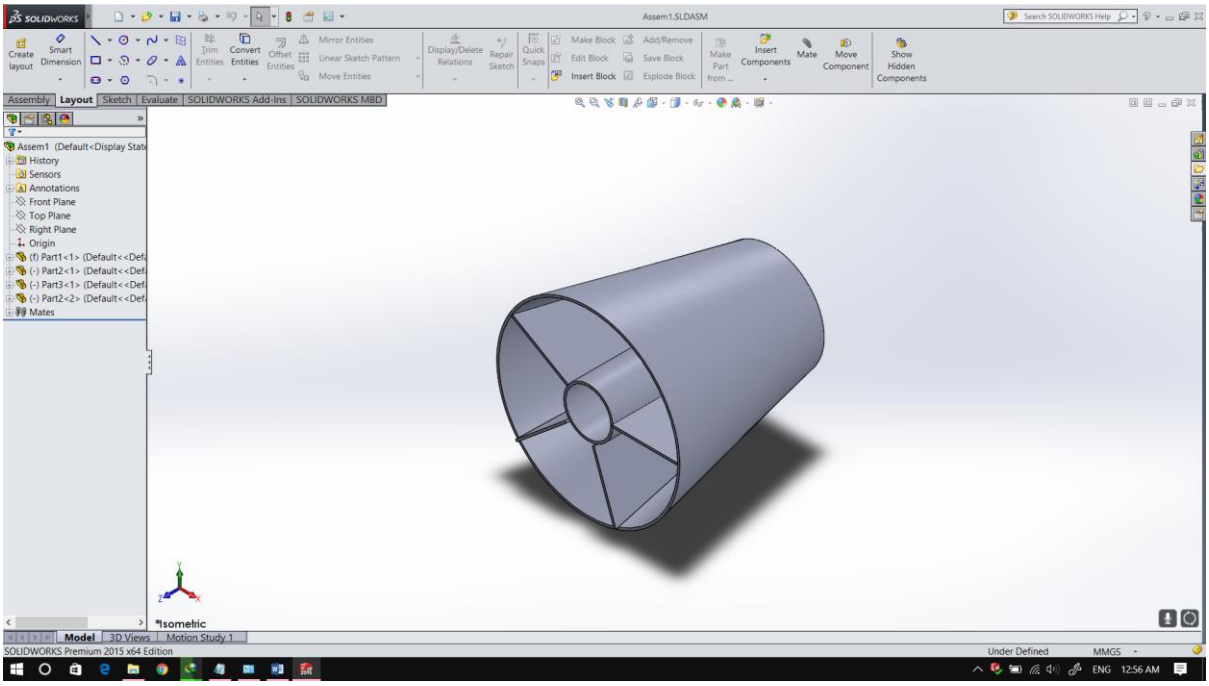
PARTITION USAGE:

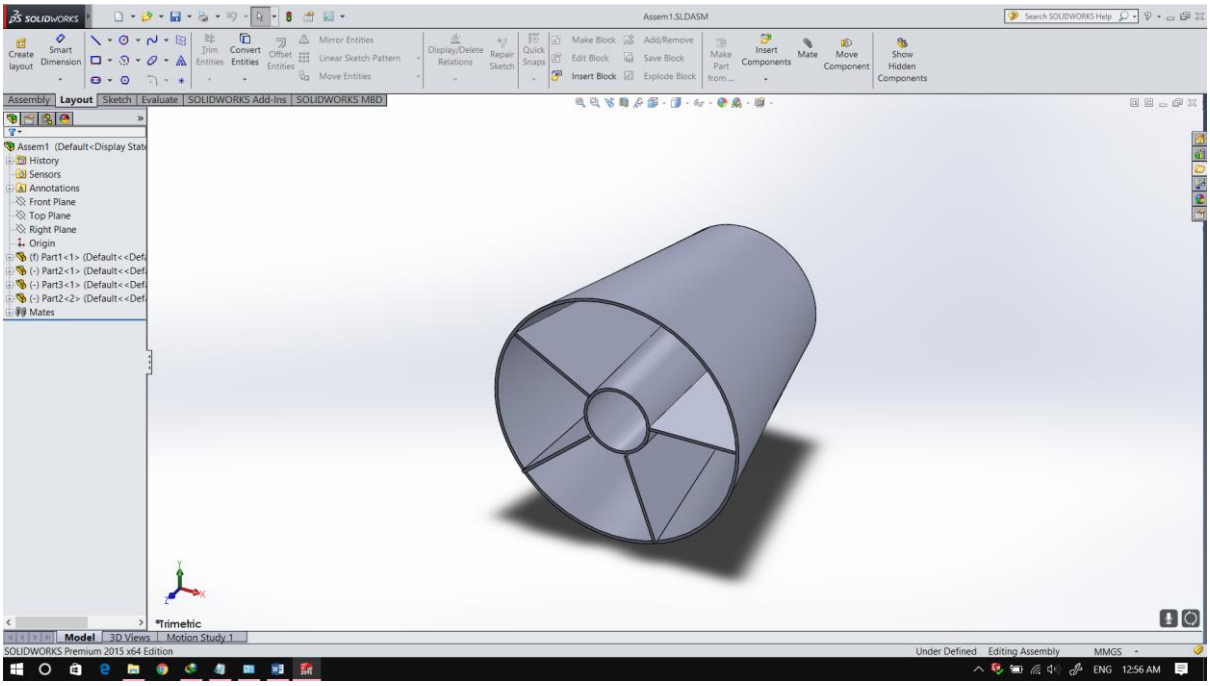
- There are total 4 partitions.

- The cylinder in the middle is used to store the soft drinks.
- The single compartment which does not have an uplifted base is used for storing popcorns or alternatively whatever food item is supposed to be bought in large quantities.
- The three compartments which have an uplifted base can be used for storing samosas, sandwiches, nachos, chicken lollipops.
- One of the three compartments can be used by the user to simply place his belongings like mobiles, bills and other personal stuff.

SCREENSHOTS FOR SOLIDWORKS FILE:



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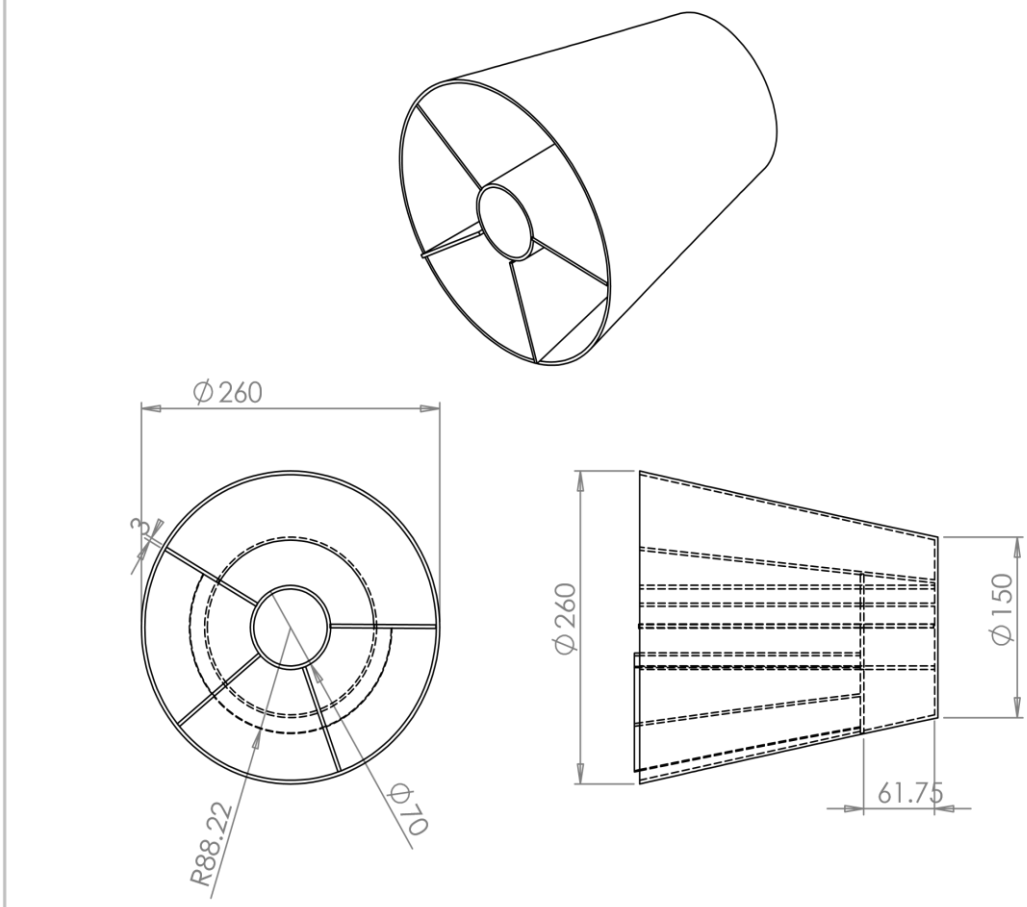

All dimensions are in mm; the thickness of the model is 3mm

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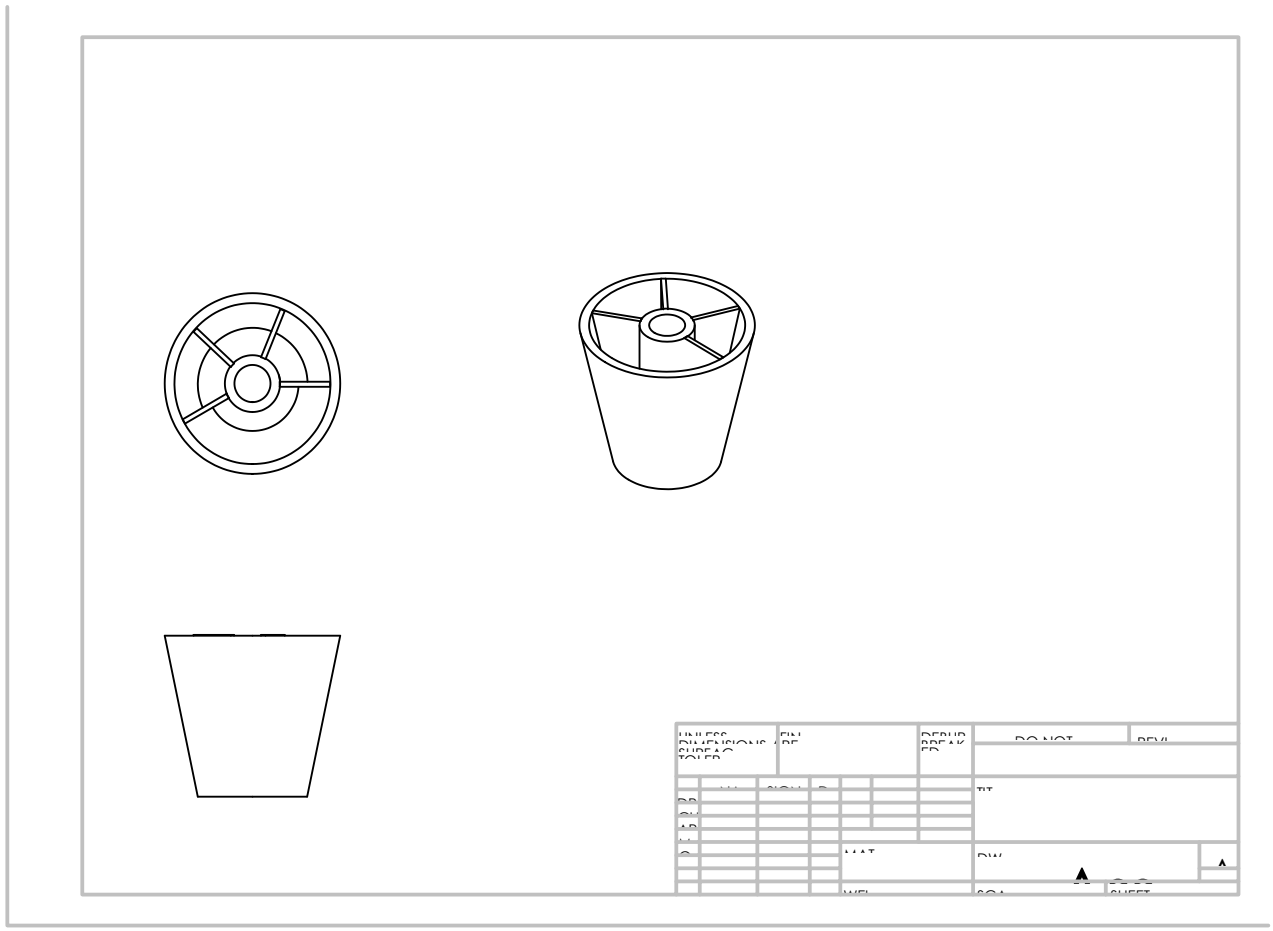

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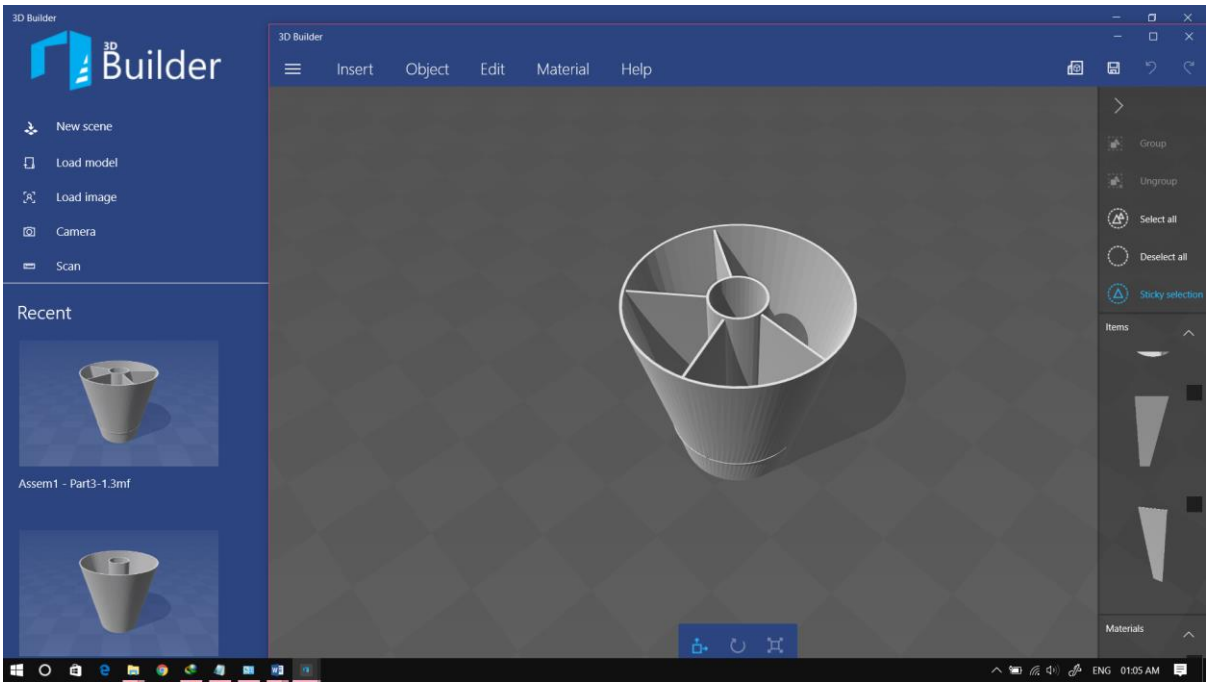

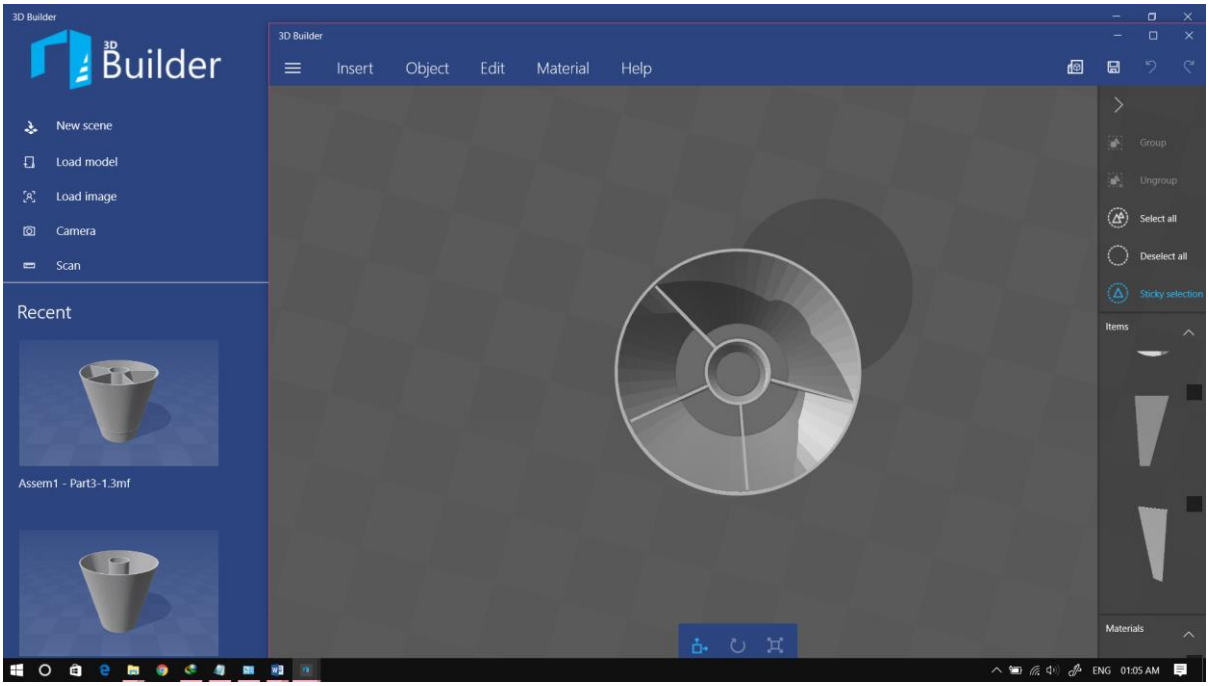

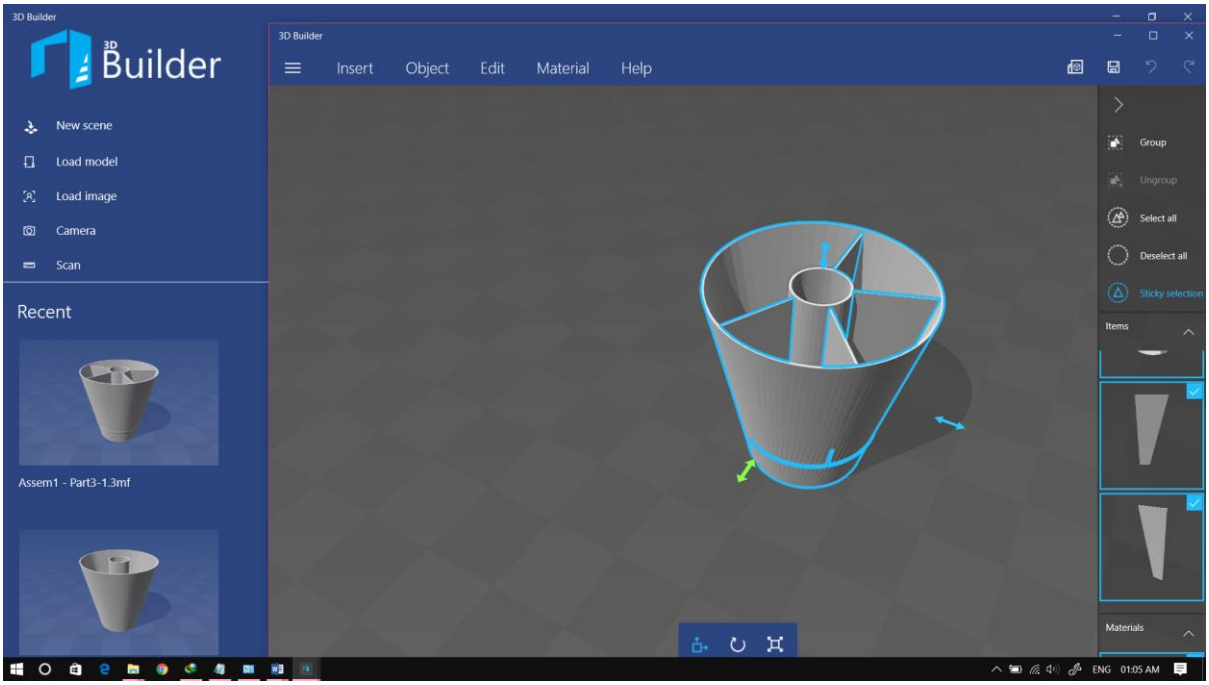
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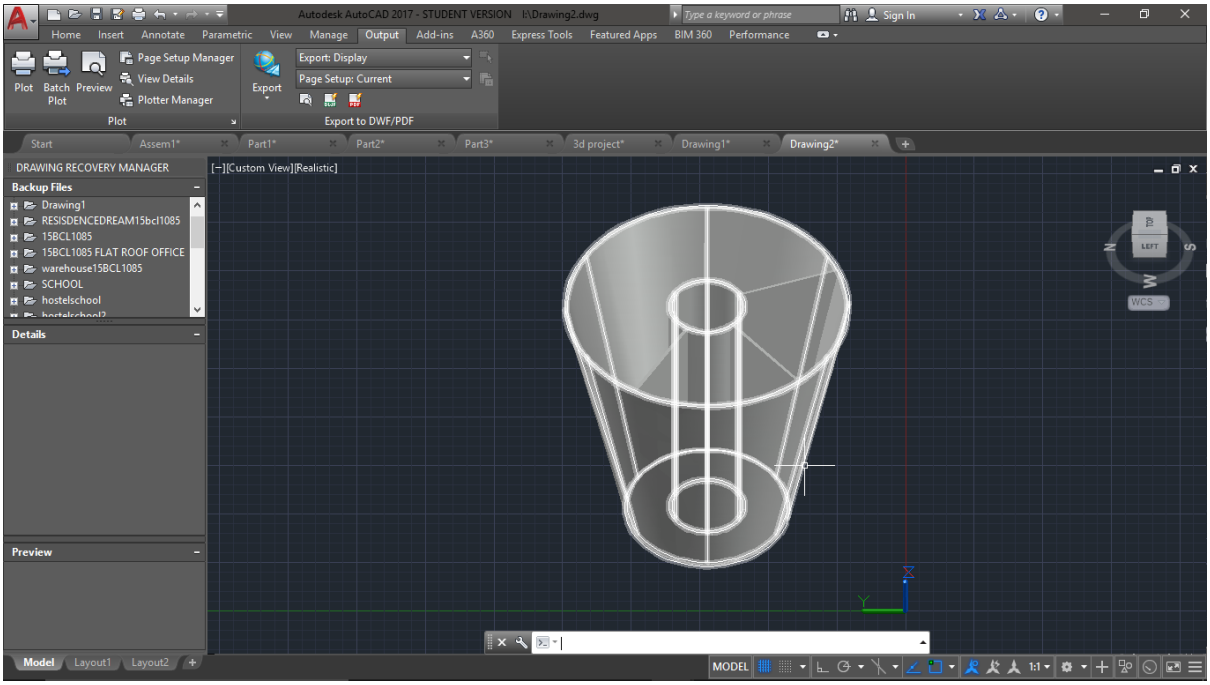

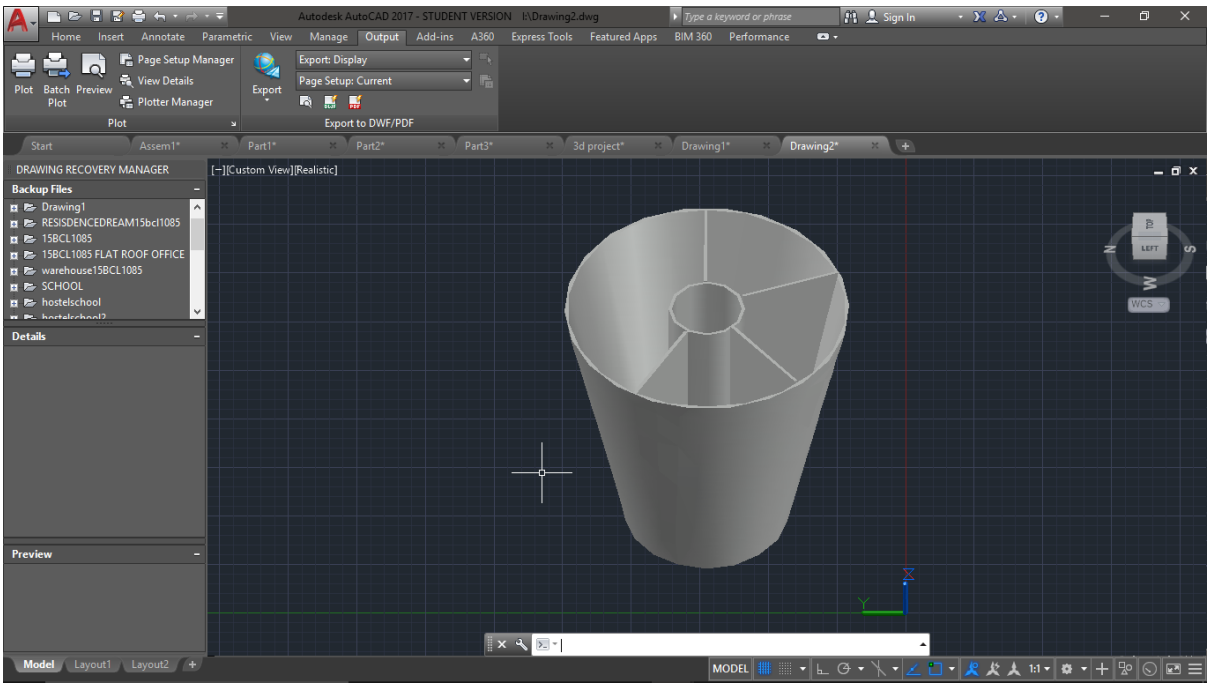

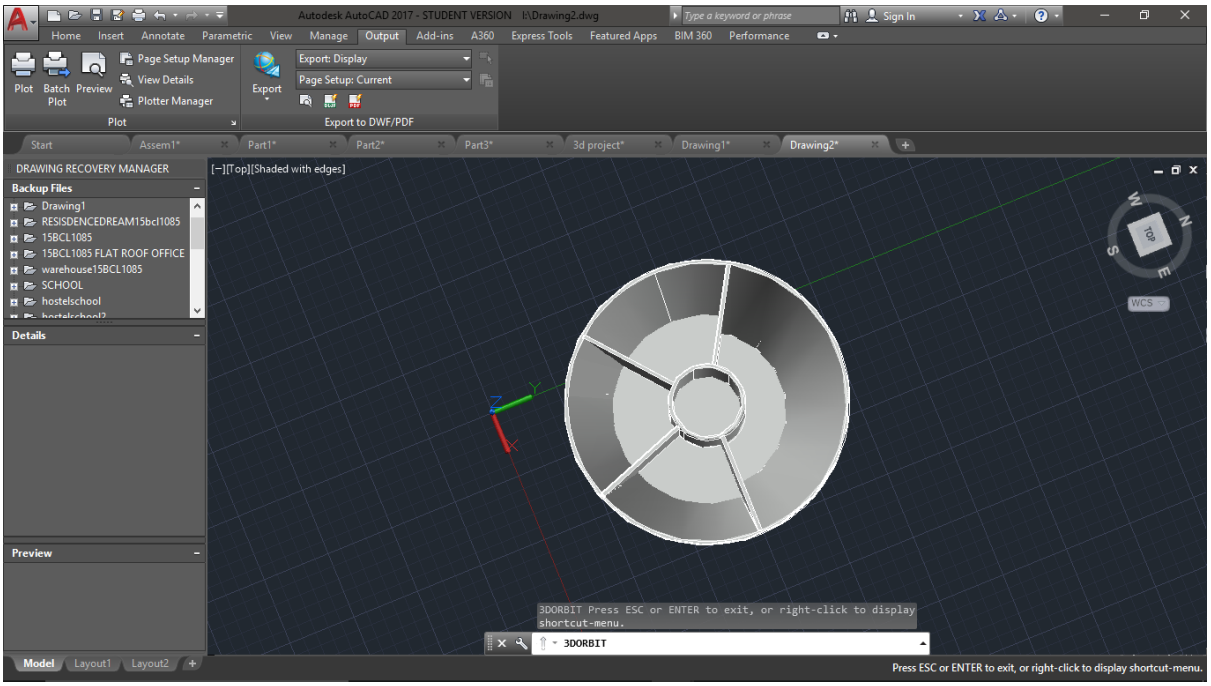
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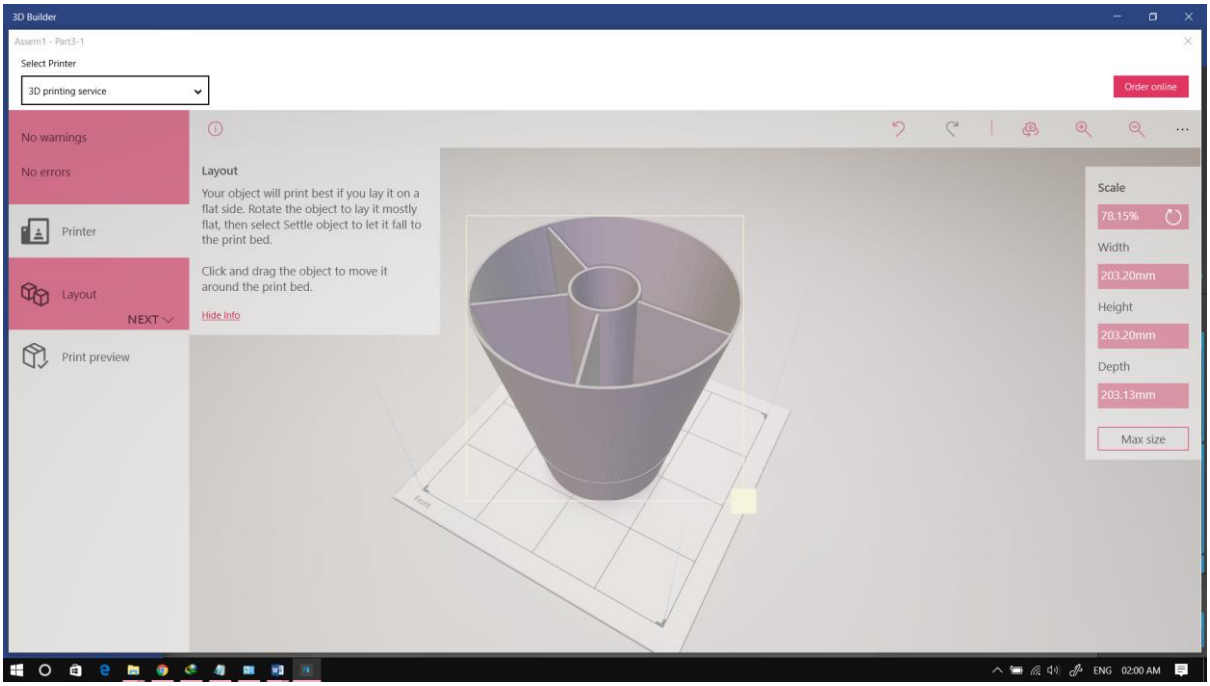

Timetable

	Description of Work	Dates
Phase One	Generation of idea and review 1	23rd August
Phase Two	Creation of product specifications	12th August
Phase Three	Creation of Windows Builder File	29th August-10th September
Phase Four	Creation of Solid Works file	15th September-29th September
Phase Five	Creation of Auto Cad file	15th October- 26th October
Phase Six	Creation of final report	31st October-6th November

Key Personnel Acknowledgement

NAME	REGISTRATION
Tanay Honey Dash	15BCL1085
Prateek Patil	15BME1245