TA201A-FABRICATION PROJECT

STAND FAN

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CONTENTS

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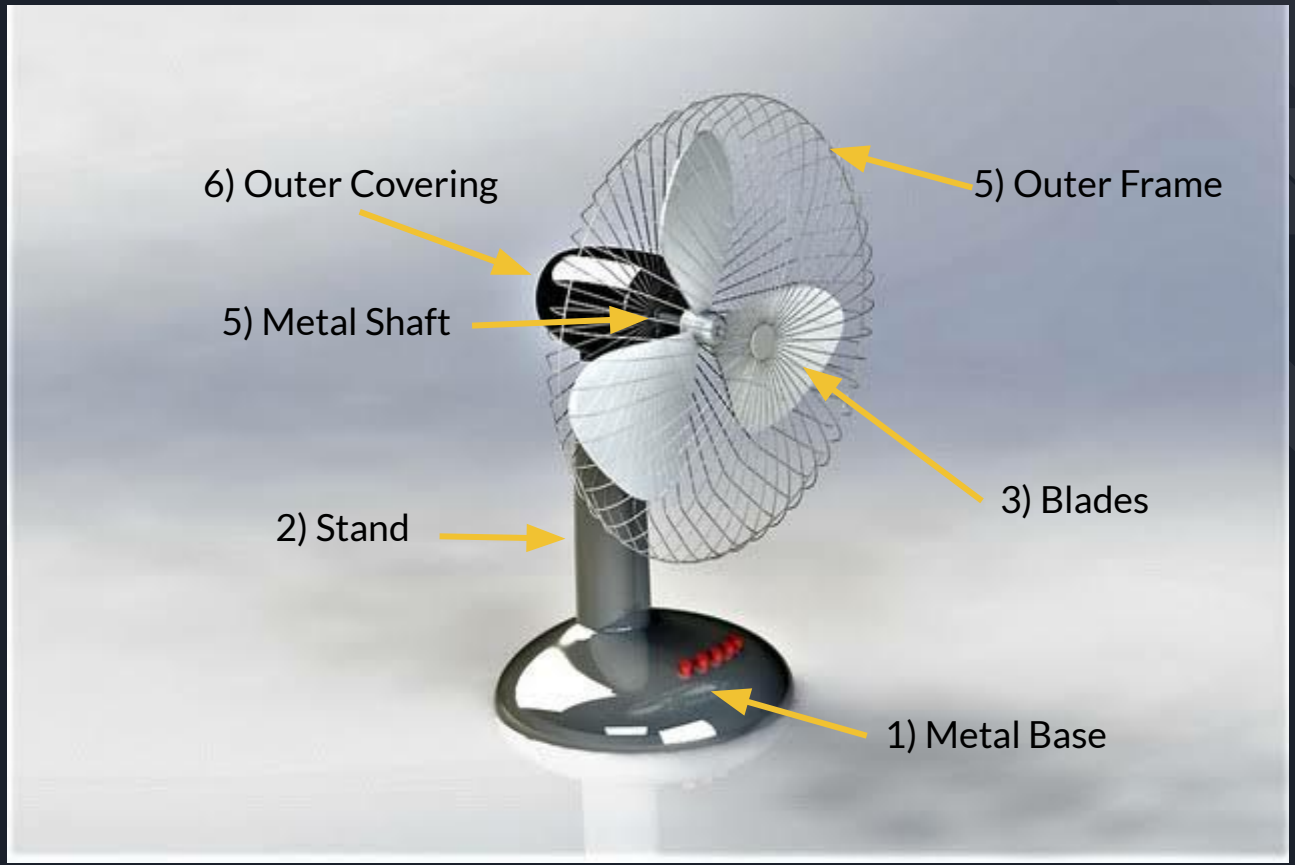
MOTIVATION

While searching and discussing the possible ideas for the TA201 fabrication project, we tried to search in our surroundings and tried to keep our thinking as environment friendly as we could. We came across a commonly used appliance called stand fan which is a very useful and safe-to-environment.

Components of typical ***STAND FAN***

1) Metal Base
2) Stand
3) Blades
4) Metal Shaft
5) Outer Frame (Enclosing blades of the fan)
6) Outer Covering/hollow cylinder(Completely hides/covers the electrical equipments which is connected behind the frame)

LABELING OF THE PARTS OF STAND FAN



WORK DISTRIBUTION

TURN	WORK PROGRESS
TURN 7	PRESENTATION OF DIFFERENT IDEAS
TURN 8	FINALISATION OF IDEA(STAND FAN)
TURN 9	PART FABRICATION(BLADES, SHAFT, METAL BASE AND STAND)
TURN 10	PART FABRICATION(METAL BASE, OUTER FRAME AND OUTER COVERINGS)
TURN 11	ASSEMBLING ALL THE PARTS AND ISOMETRIC DRAWING USING BLENDER
TURN 12	MAKING PRESENTATION AND SHORT VIDEO

MATERIAL USED AND PROCESS INVOLVED

MATERIAL USED

1) STEEL SHEET
2) ALUMINIUM CAN
3) STEEL ROD
4) STEEL AND BRASS WIRE (2 mm and 4 mm)
5) FEVIQUICK
6) CELLO TAPE

TOOLS

1) HAMMER
2) SHEET CUTTER
3) PLIERS
4) SCISSOR

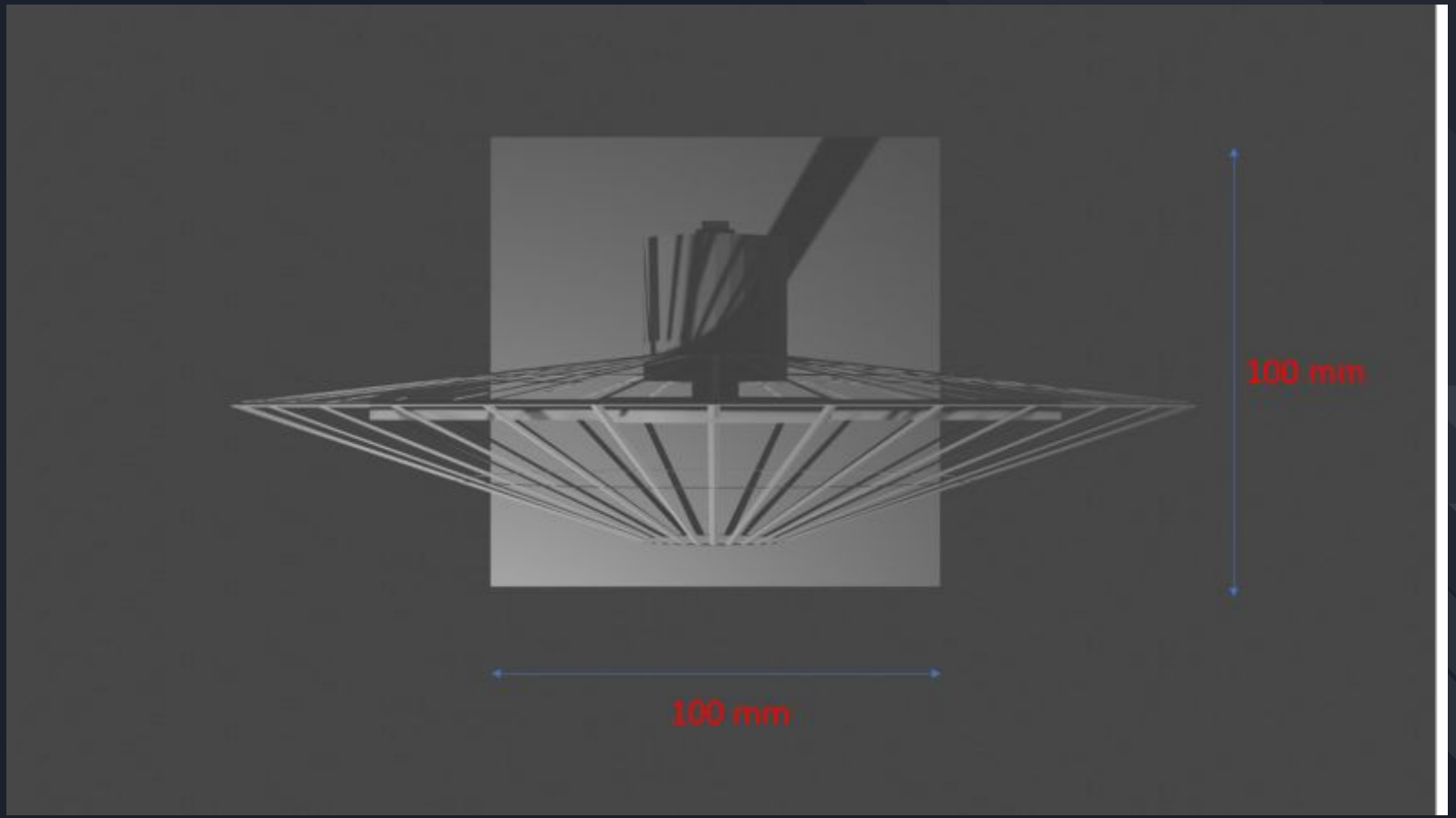
PROCESS INVOLVED

1) ADHESIVE JOINING
2) WIRE CUTTING AND BENDING
3) SHEET METAL CUTTING AND BENDING
4) SHEARING
5) WELDING AND BRAZING

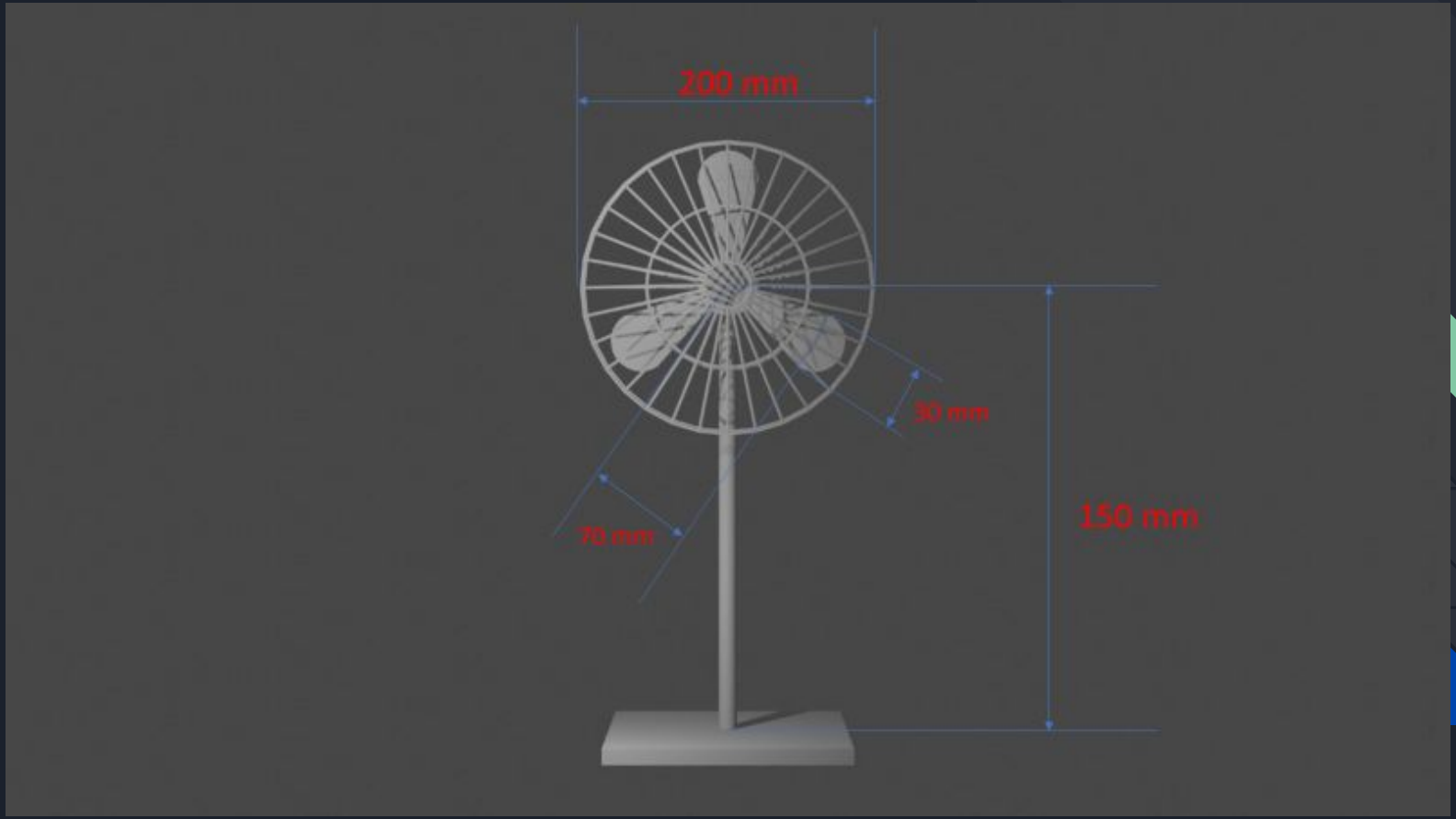
ISOMETRIC VIEW

ORTHOGRAPHIC VIEW & DIMENSIONING OF PARTS

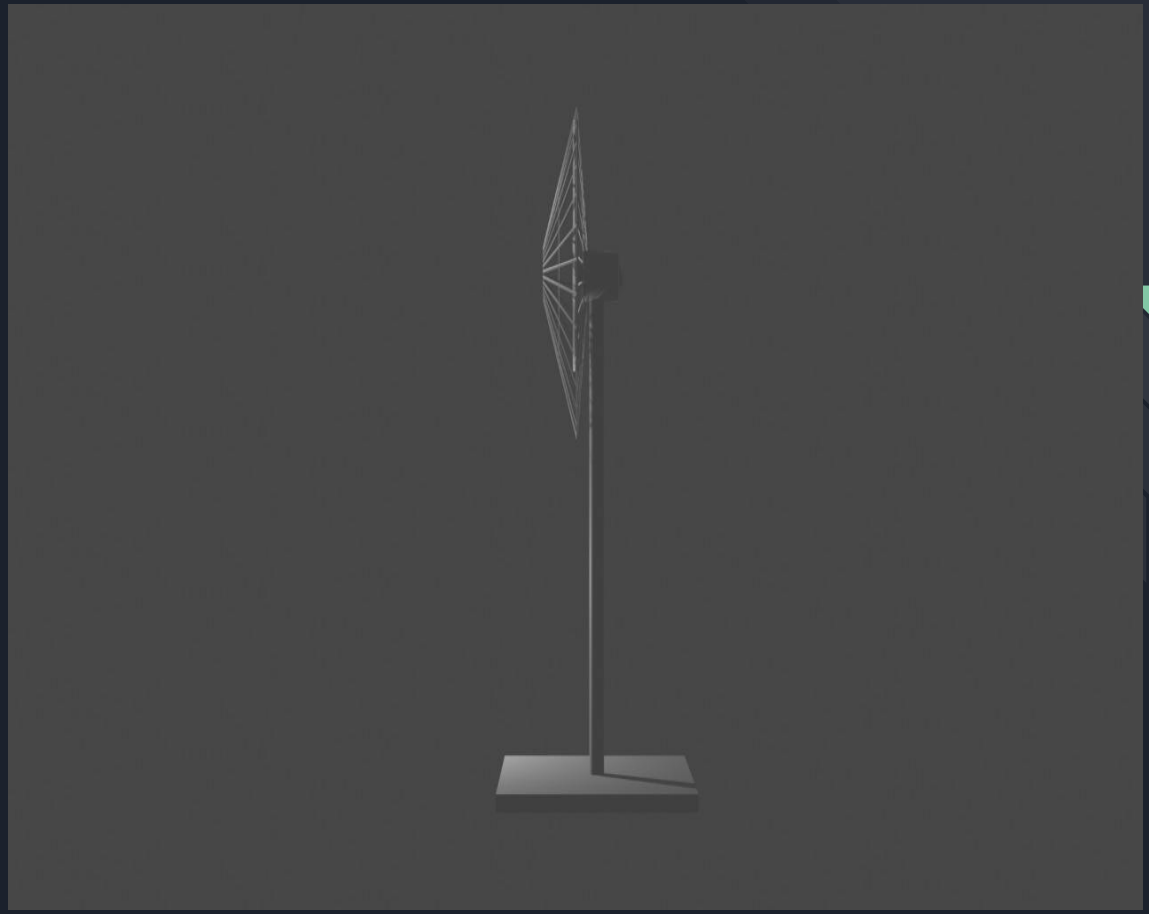
TOP VIEW



FRONT VIEW



SIDE VIEW



DESCRIPTION OF PARTS OF STAND FAN

(Material used and Process of joining)

Metal base and Stand

Material used : Mild steel rod and steel sheet

Process Used : Shearing for giving shape to the metal base and Welding to join base and stand of fan

Blades and Shaft

Material Used : Mild steel sheet and spoke of cycle

Process Involved : Sheet cutting and bending for making blades and brazing to join blades and shaft(thin steel wire/spoke)

Outer frame and Outer coverings

Material used : Steel wire and Brass wire of 2 mm diameter for frame and typical aluminium can for outer coverings of electrical equipments.
Process used : Wire cutting and Bending, Adhesive joining (Feviquick and Cello Tape)
Outer cylindrical covering made of aluminium is joined to the metal stand by using feviquick. The outer frame is made by steel and brass wire of diameter 2 mm. The wire is cut and bend into the required shape and then joined to the outer covering by using feviquick and cello tape.

Final MODEL STAND FAN


Thank
you