

TECHNICAL PORTFOLIO



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TEAM

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DESIGN

CONCEPT

WE TOOK OUR INSPIRATION FROM SUPER CAR MODELS.

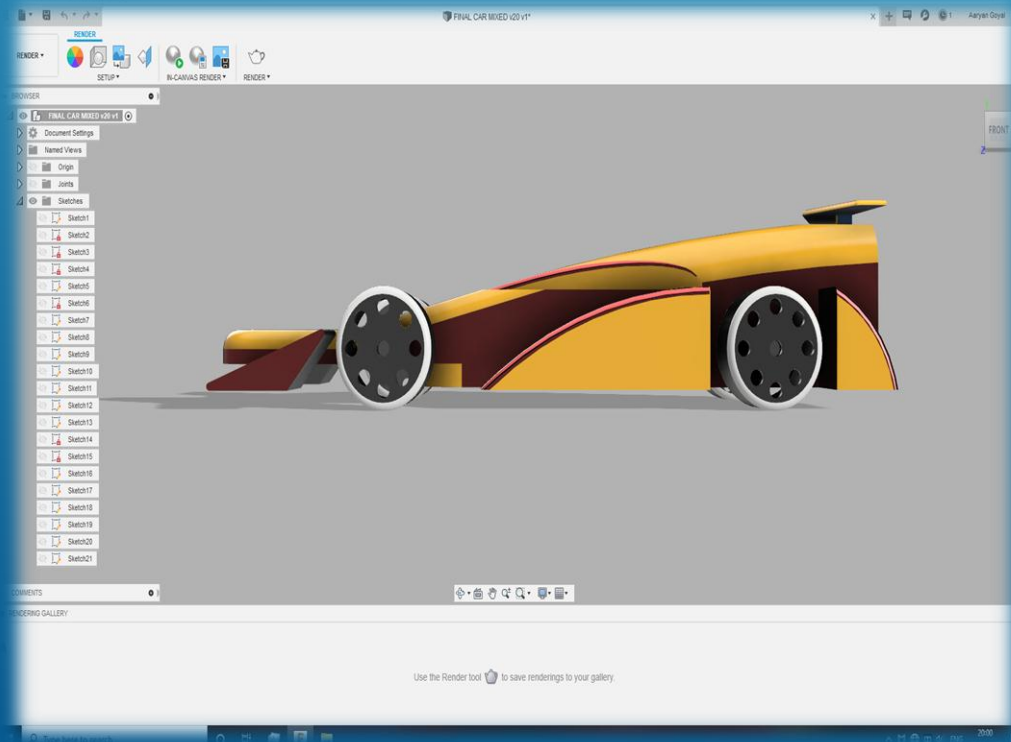
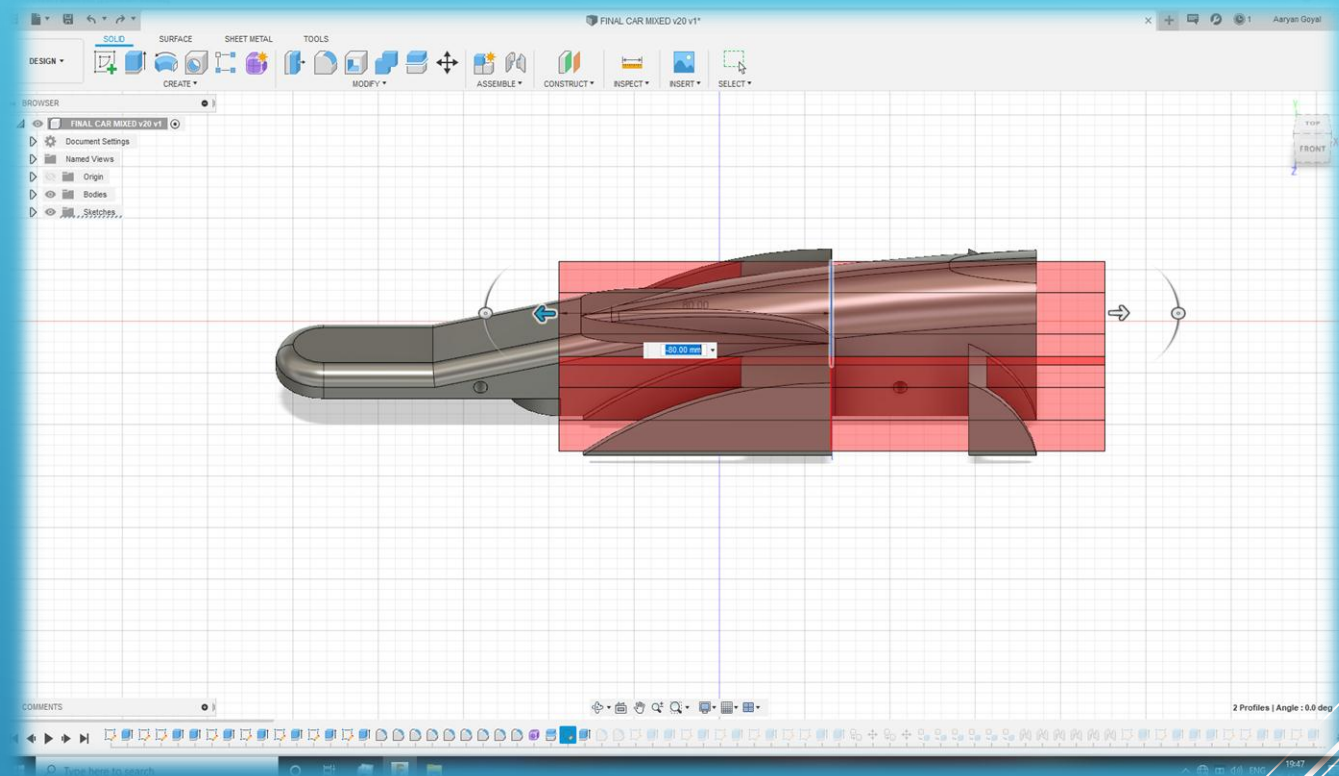
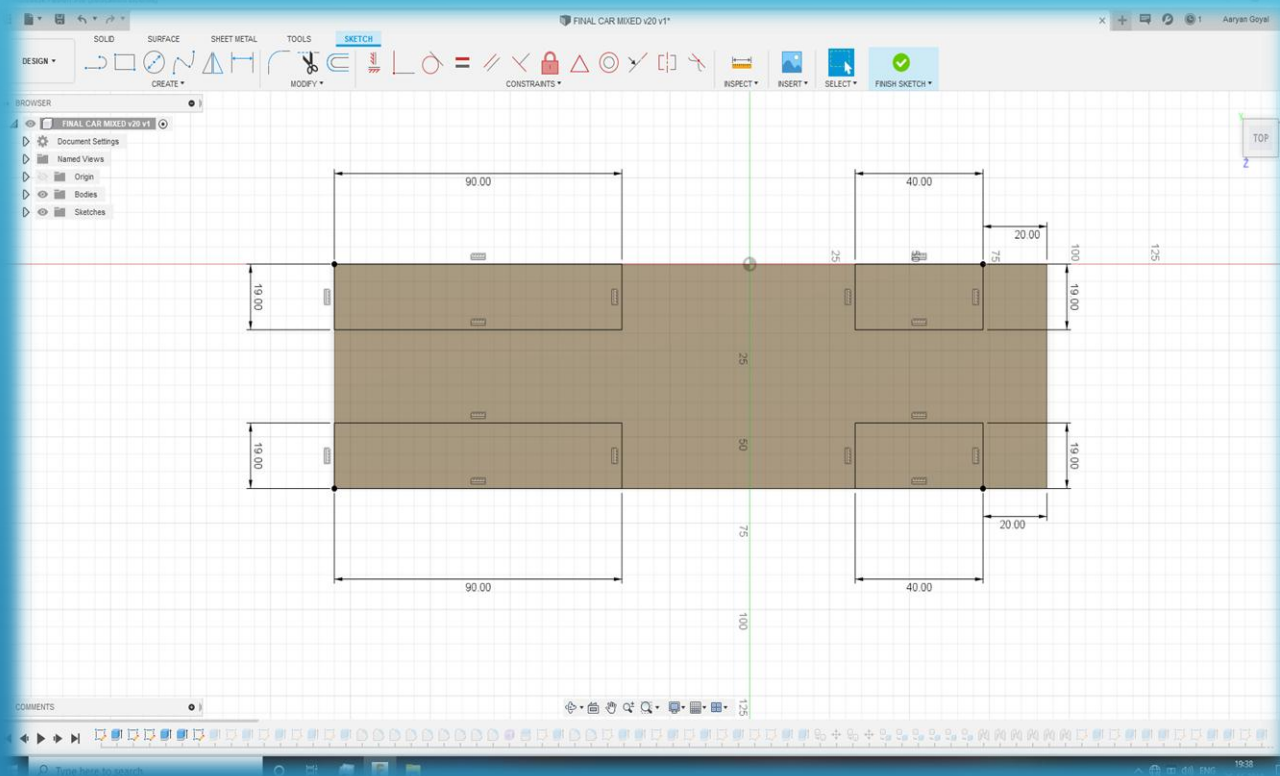
WE ALSO LOOK FOR THE CONCEPT OF CARS FROM THE PREVIOUS TEAMS OF F1 CARS.





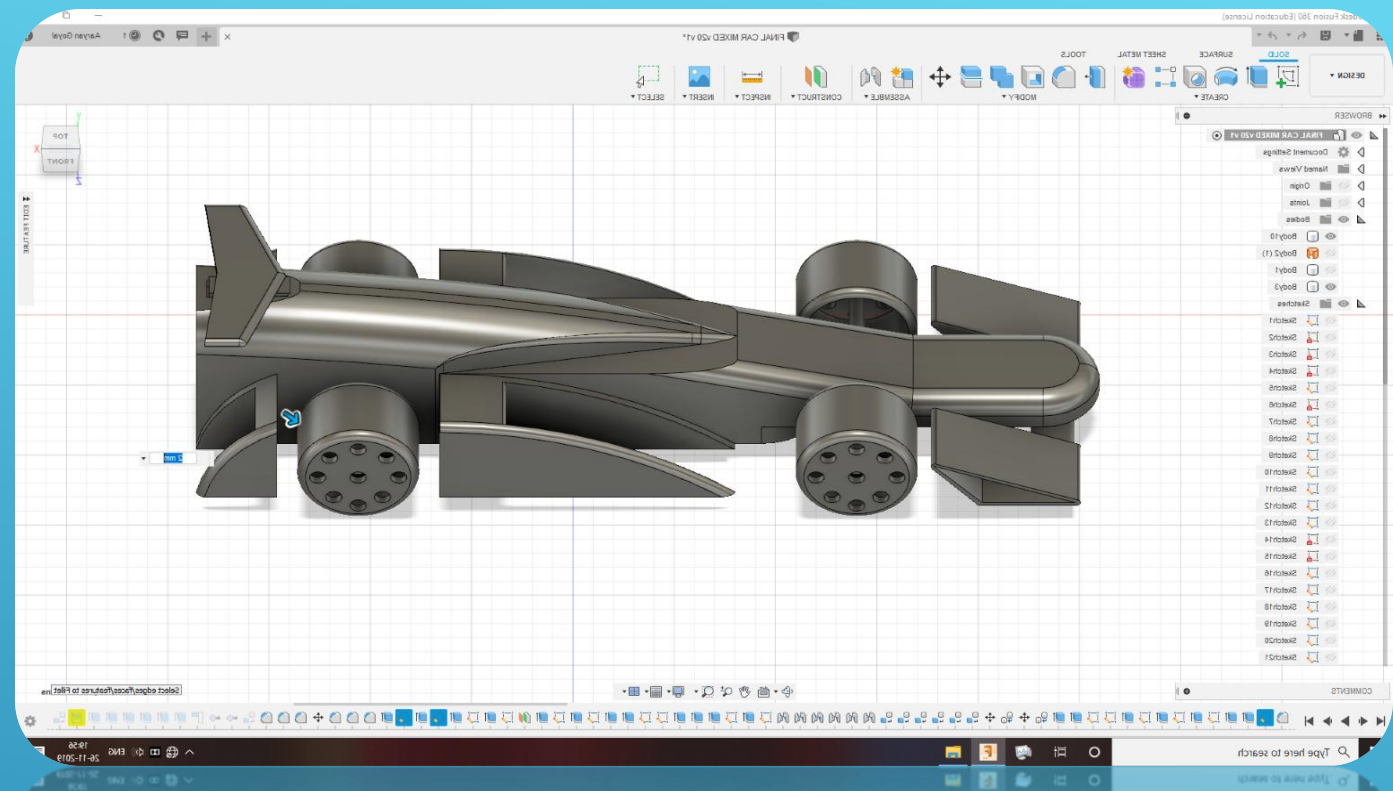
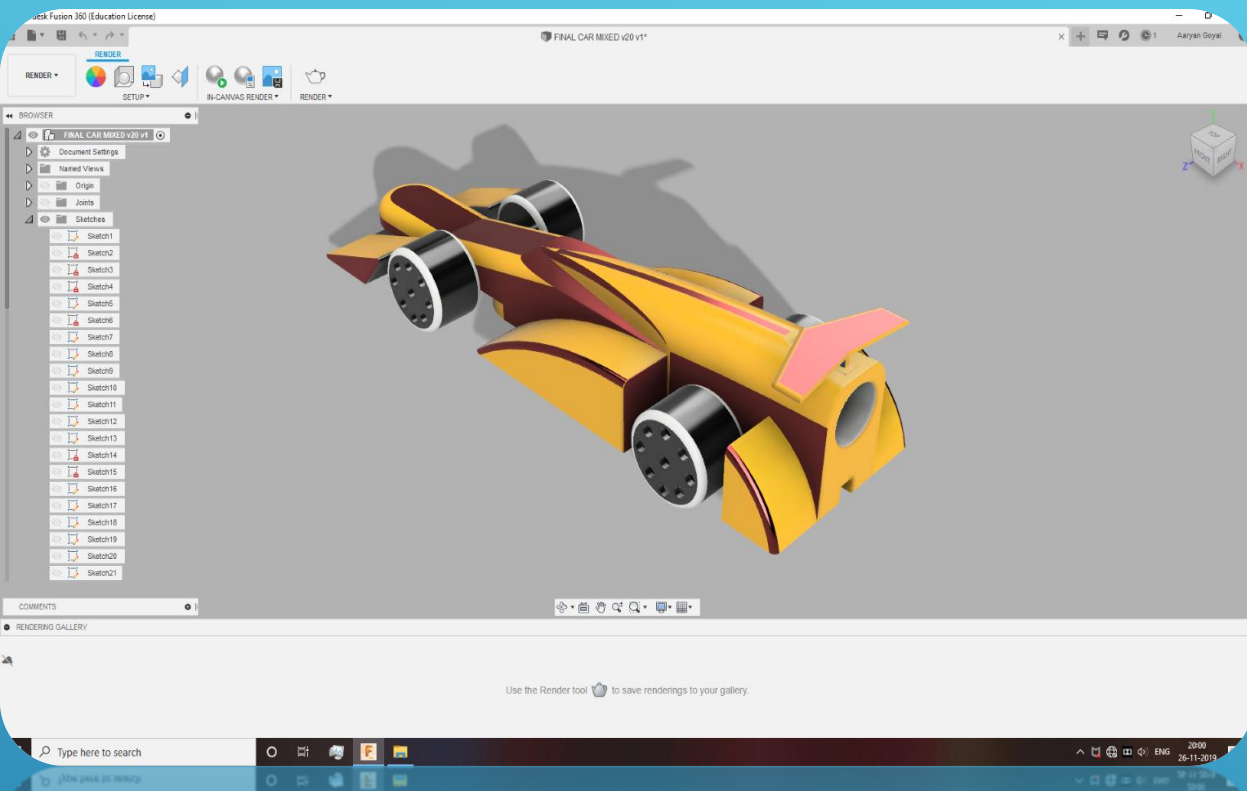
WE WENT ONLINE TO LOOK FOR IDEAS ON PREVIOUS DESIGN CONCEPTS. IT WAS QUITE HARD TO LOOK FOR THE MODEL WHICH FULLFILLS ALL OUR SPECIFICATIONS.

DESIGN WORK



FIRST OF ALL WE DESIGNED OUR CARS ON PAPER TO CHECK THEIR FEASIBILITY.

BY TAKING THE CONCEPT FROM SUPER CAR, WE CAME TO ONE CONCLUSION THAT SPEED IS AN IMPORTANT FACTOR.



IN DESIGNING THE F1 CAR ITS' VERY IMPORTANT TO KKEP A CHECK OF DRAG FORCE. IT IS A VERY IMPORTANT COMPONENT TO CHECK DRAG COEFFICIENT OF CAR.

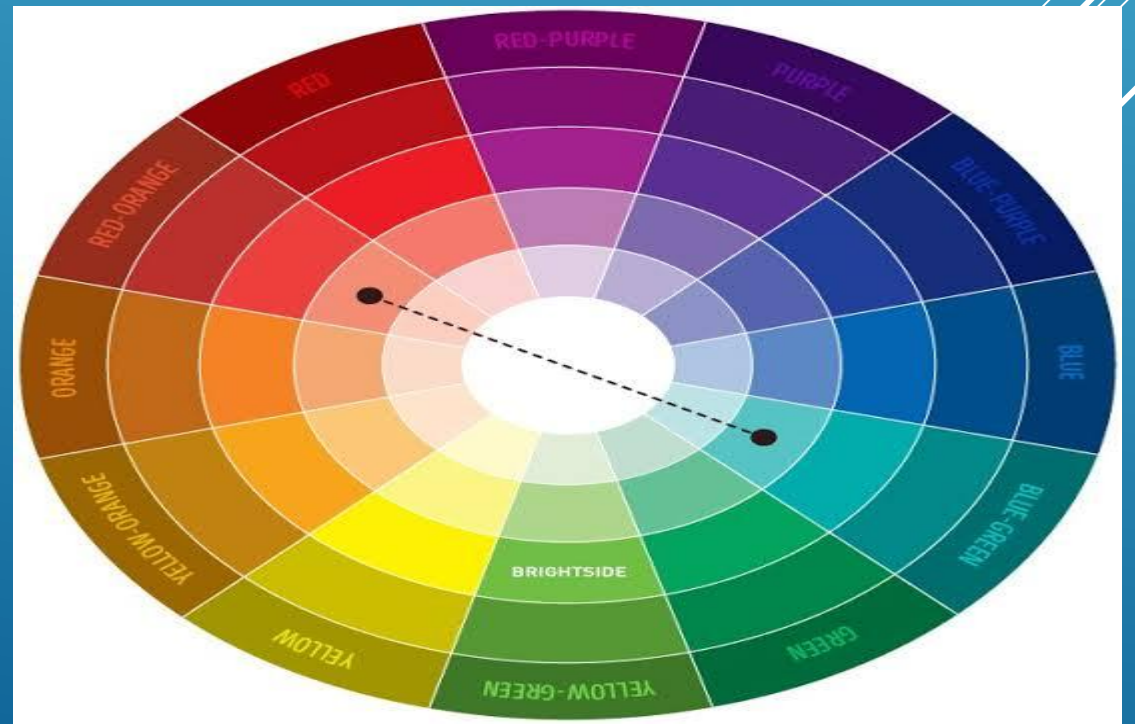
BASICALLY, IT IS AFUNCTION OF CAR WORKING ON THE TOTAL CROSS SECTIONAL AREA OF CAR.

ZENITH

ABOUT THE APPEARANCE



AFTER SANDING THE CAR WITH VERY LESS EFFORTS, WE WERE READY FOR COLOURING OUR CARS. WE TOOK THE HELP OF PROFESSIONAL PAINTERS TO PAINT IT.



MANUFACTURING

PROCESS

CNC MILLING

WE HAVE MANUFACTURED OUR CAR BODY THROUGH A CNC MACHINE, WHICH WAS PROVIDED BY TIMES OF SPORTS. THIS LET US CUT OUR CAR ACCURATELY AND AS PER OUR GIVEN DESIGN. WE HAD MADE THE DESIGN ON AUTODESK FUSION 360 - THE MOST COMMON CAD.

3D PRINTED COMPONENT

WE BELIEVED THAT THE WHEELS ARE ONE OF THE MOST IMPORTANT COMPONENTS OF THE CAR AS SPEED AND AERODYNAMICS ARE DEPENDENT ON THE WHEELS. THE SPOILERS AND THE WINGS ARE ALSO VERY IMPORTANT COMPONENTS TO MINIMIZE THE DRAG COEFFICIENT.

CNC MACHINE

NUMERICAL CONTROL IS THE AUTOMATED CONTROL OF MACHINING TOOLS AND 3D PRINTERS BY MEANS OF A COMPUTER. A CNC MACHINE PROCESSES A PIECE OF MATERIAL TO MEET SPECIFICATIONS BY FOLLOWING A CODED PROGRAMMED INSTRUCTIONS AND WITHOUT A MANUAL OPERATOR.



TESTING

WE HAVE USED AUTO DESK FLOW DESIGN SOFTWARE FOR TESTING OUR FIRST CAR MODEL FOR WIND TUNNEL TESTING .

WE FOUND SOME GLITCHES ALSO IN THE DESIGN AS IT WAS INITALLY PRODUCING A HUGE AMOUNT OF DRAG WHICH WOULD MAKE OUR CAR GO VERY SLOW.

