

Date: 27-07-2024

DEPARTMENT OF MECHANICAL ENGINEERING

Report on Automobile Club activity

- Design feasibility
- Designing
- CAE
- Drawing release
- Prototypes
- Testing

Designing

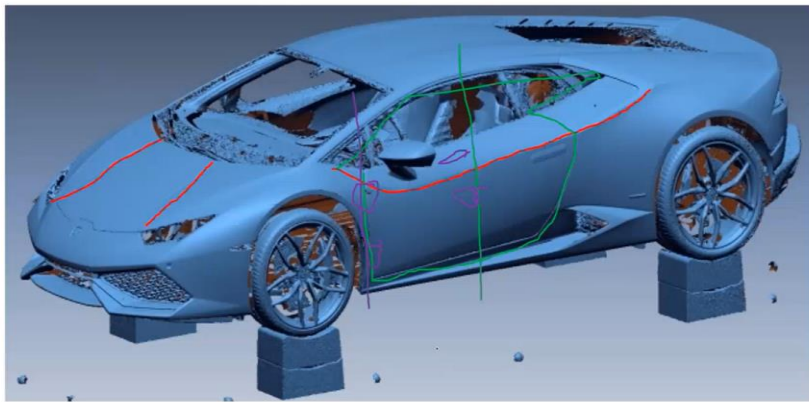







Fig 3. Class A surface/Styling surface



 Dr.P.Vijaya Kumar


 SHAIK A.


 Dr.P.Vija...


 VISWAN...


 P RAVIN...


 SEELAM ...

Resource Person:

**Shaik Areef Ahmad, Maruthi Suzuki Pvt Ltd, Noida , Delhi,
Alumni Post Graduate Student (2018-20)**

Date / Duration: 27th July, 2024. 10.30 AM to 12.15 PM

Title: Latest developments in Automobile Product Development Cycle

Name of the Coordinators:

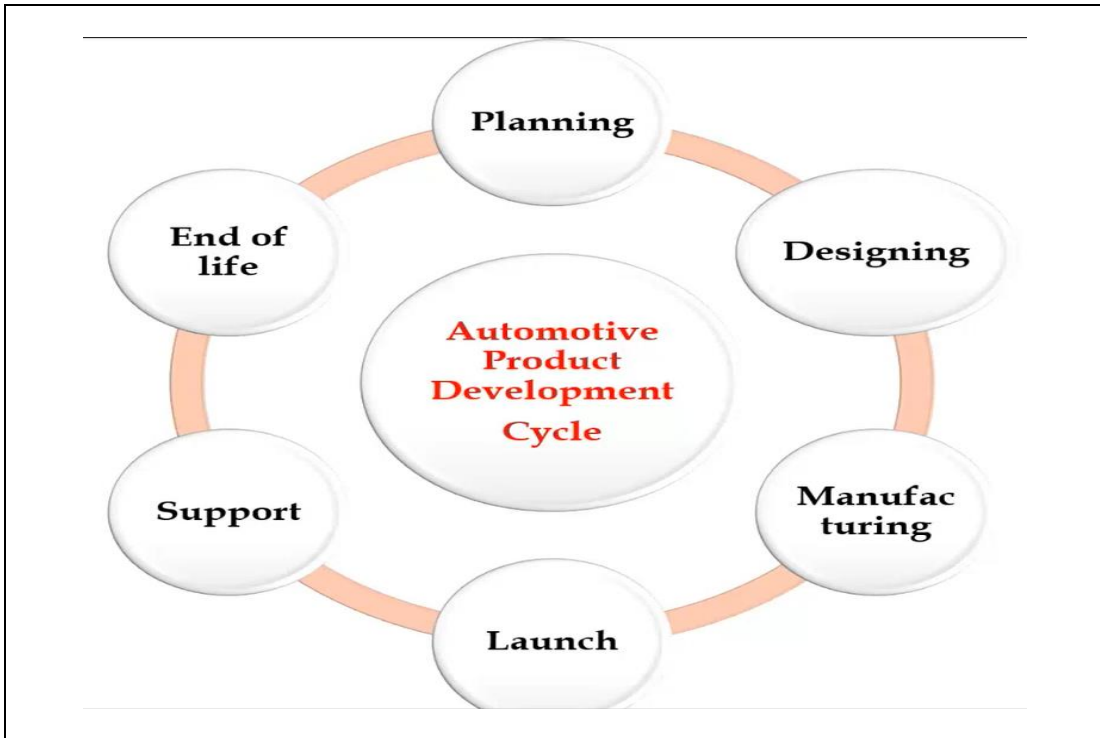
1. Dr. P.Ravindra Kumar, Professor
2. Mr. S.Rami Reddy, Sr.Asst.Professor
3. Mr. K.V.Viswanath, Sr.Asst.Professor

Audience: Mechanical Engineering 4th Year Students

Total Number of Participants: 120

Objective of the Event: To improve the knowledge levels on automobile sector, automobile club has conducted a guest lecture on 27th July -2024.

Outcome of the Event: After listening the lecture, students acquainted the knowledge on various processes involved in delivering the car from initial stage to final phase in to the market.



- Market study
- Benchmarking
- Sketching
- Modelling
- 3D Scanning

The 'Planning' section features a blue header with the word "Planning" in white. Below the header is a collage of images. On the left is a photograph of a physical orange car model on a lift, labeled "Fig. 2. Modelling". On the right are several hand-drawn sketches of a car from various angles (front, side, rear), labeled "Fig 1. Sketching".

- Design feasibility
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Designing

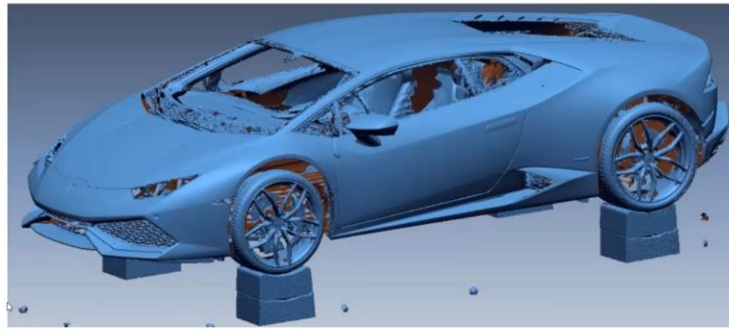


Fig 3. Class A surface/Styling surface

- CAE-External Aerodynamics

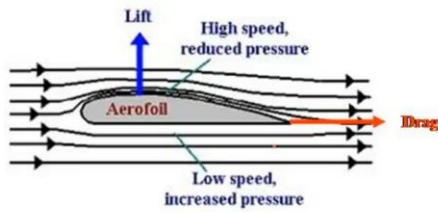


Fig 4. Basic aerodynamics

Designing

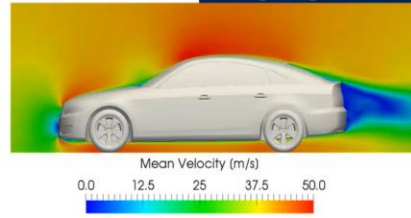
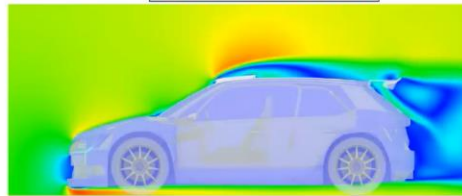
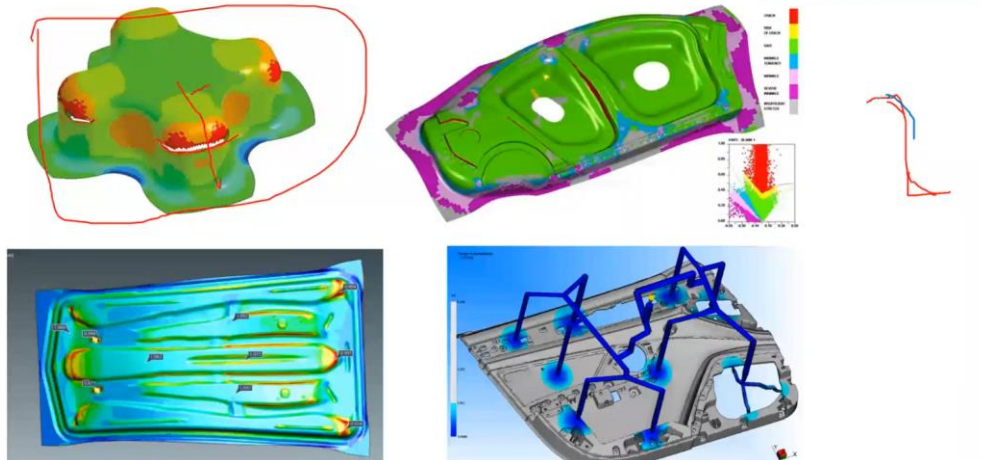


Fig 5. Flow over a car body



- CAE- Manufacturing simulation

Designing



• CAE- Strength and Durability

Designing

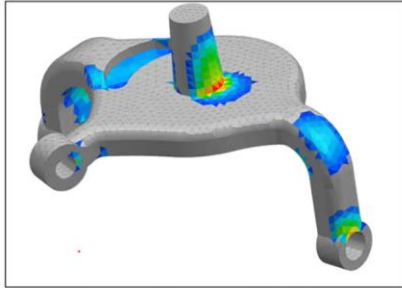


Fig 6. Part level Analysis

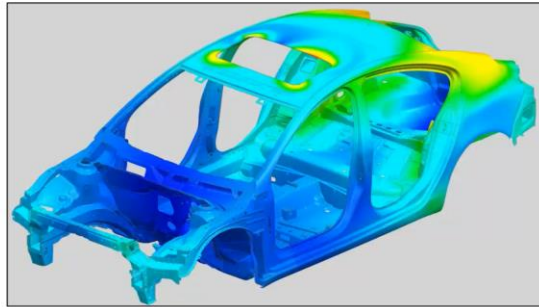
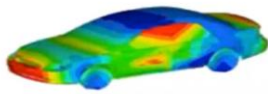
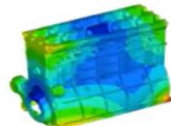


Fig 7. Vehicle level Analysis

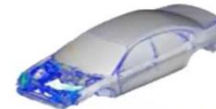
Designing



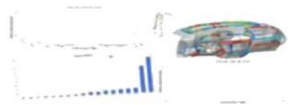
Full Vehicle NVH



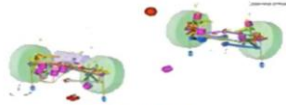
Powertrain NVH



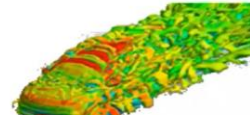
Body/Chassis NVH



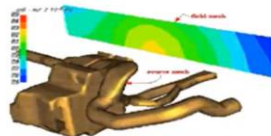
Squeak & Rattle



Ride NVH



Wind Noise



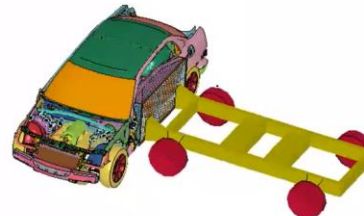
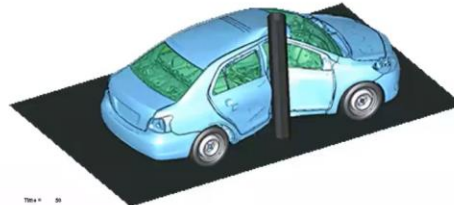
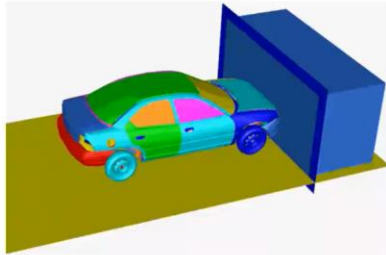
Radiated Noise



Brake NVH

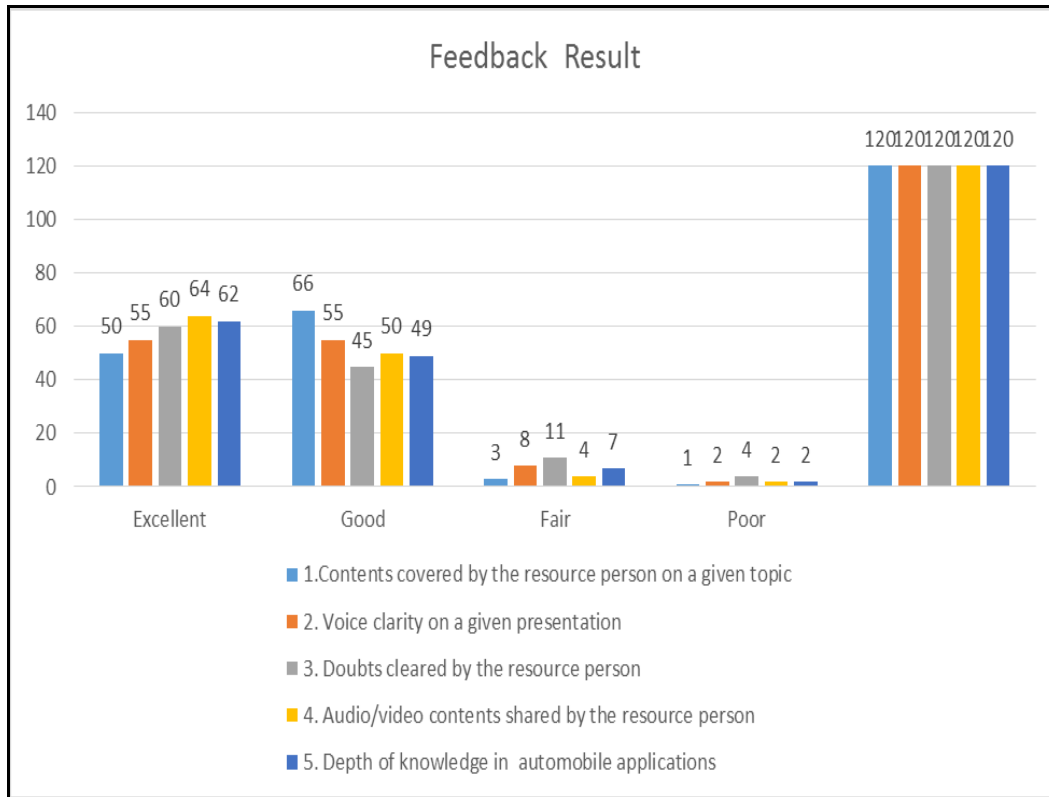
• CAE - Crash and Safety

Designing





Feedback Analysis



Miss Reddy

HEAD
 Dept. of Mechanical Engineering
 LAKIREDDY BALI REDDY COLLEGE OF ENGG.
 MYLAVARAM-521 230., KRISHNA DT, A.P