Year Report

Name of the Team: Veloce Racing India	
Main Objective of the Team: Building a Formula Student Electric Vehicle Prototype	
Number of events conducted in AY 2023-2024	**4**
Name of the events:	1. Pi-Ev – Electric Vehicle Concept Competition 2. Formula Bharat 3. CAE Workshop by Veloce Racing 4. CFD Workshop by Veloce Racing
Number of Team Members:	60
Name of Key Organisers:	Aditya Shinde Anay Maheshwari Aamir Shaikh
Provide the link of your Social Media Handles	Instagram: https://www.instagram.com/veloce_racing_india/ Facebook: https://www.facebook.com/TeamVeloce/ LinkedIn: https://www.linkedin.com/company/team-veloce-racing/

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Individual Event Reports (Copy paste the same table and add to the report if number of events is more than 1)

Event 1

Name of the event:	**Pi-Ev – Electric Vehicle Concept Competition**
Dates of event:	
Online Platform/ Venue:	**Ather Energy, Head Quarters, Bengaluru**
Event span (hours/days)	**15 Days**
Footfall/Total attendance	**-**
Name and contact of the key organiser(s)	**Anay Maheshwari - 9834240541**
No. of people involved in the organising committee (all levels of hierarchy included, Core team to Volunteers)	**15**
Objective of the event	**Developing the first formula student electric vehicle prototype**
Brief description of the said event	**The purpose of the 7th Annual FSEV Concept Challenge, "Pi-EV 2023″, is to provide teams with an opportunity to conceptualize and design a Formula Student Electric Vehicle Powertrain Package which meets technical guidelines.**
Key event outcomes	**The team stood 4th, among 15 teams at the international level**
Milestones set by the event (if any)	**-**
Name and bio of chief guest along with social media links (if any)	**-**

Add any kind of additional information or a ready report if you wish to which can be used by team Vaatchal (Optional): The Pi-Ev 2023 event served as a significant milestone for Veloce Racing India as it embarked on the journey of designing and manufacturing a formula-style electric vehicle. Positioned as a stepping stone, the event aimed at providing valuable insights, guiding the team in the right direction, and offering a glimpse into the challenges that might be encountered in the future. The competition was segmented into three crucial aspects: Engineering Design, Procurement Strategy, and Team Management Strategy.

Add minimum 2 photographs of the said event (Mandatory):

Event 2

Name of the event:	**Formula Bharat 2024, Kari Motor Speedway**
Dates of event:	**19th to 24th February 2024**
Online Platform/ Venue:	**Kari Motor Speedway, Coimbatore**
Event span (hours/days)	**6 Days**
Footfall/Total attendance	**-**
Name and contact of the key organiser(s)	**-**
No. of people involved in the organising committee (all levels of hierarchy included, Core team to Volunteers)	**60**
Objective of the event	**Developing the first formula student electric vehicle prototype**
Brief description of the said event	**Formula Bharat is an Indian Formula Student-style engineering design competition in which students from colleges and universities all over the country, compete with a life-size formula-style vehicle in areas of engineering design, overall cost, marketability and dynamic performance. The series replicates the global student Formula series hosted in around 11 countries per year.**
Key event outcomes	**Team Stood 5th all over India in the Electric Category**
Milestones set by the event (if any)	**-**
Name and bio of chief guest along with social media links (if any)	**-**

Add any kind of additional information or a ready report if you wish to which can be used by team Vaatchal (Optional): The purpose of this competition is to encourage students to gain hands-on practical experience, while applying engineering theories studied in the classroom. In addition, students learn the art of management and teamwork, which are essential skills required in the 'real-world'. These student teams are required to build a new vehicle from scratch year-after-year and seek sponsorship and donations by their own means to fund the project.

The challenge to the student team is to design and fabricate a prototype vehicle that best meets the goals and intents as stated per the Rules Book. Over the course of a five day competition, a jury of experts from the motorsport, automotive and supplier industries judge the design, cost and business planning of all the teams to determine the best team and vehicle; in addition the team's on-track performance scores will demonstrate how well they hold up under real life conditions.

Add minimum 2 photographs of the said event (Mandatory):

Event 3

Name of the event:	**CAE Workshop by Veloce Racing**
Dates of event:	**7th to 12th October 2023**
Online Platform/ Venue:	**Vishwakarma Institute of Technology**
Event span (hours/days)	**6 Days**
Footfall/Total attendance	**-**
Name and contact of the key organiser(s)	**-**
No. of people involved in the organising committee (all levels of hierarchy included, Core team to Volunteers)	**45**
Objective of the event	**The CAE Workshop by Veloce Racing, held from October 7th to 12th, 2023, meticulously structured its program to cover various aspects of engineering analysis across five days.**
Brief description of the said event	1. **Introduction to CAE: Start with an overview of what CAE is and its significance in modern engineering practices. Discuss how CAE tools streamline the design process, reduce costs, and improve product quality.** 2. **Fundamentals of Engineering Analysis: Cover the basic principles of engineering analysis, including stress analysis, fluid dynamics, heat transfer, and structural analysis. Explain the importance of these concepts in designing and optimizing engineering systems.** 3. **CAE Software Overview: Introduce popular CAE software packages such as ANSYS and provide an overview of their capabilities, features, and applications.**
Key event outcomes	**Conducted a successful and informative 5 – Day session by teaching fellow college students**
Milestones set by the event (if any)	**-**
Name and bio of chief guest along with social media links (if any)	**-**

Add any kind of additional information or a ready report if you wish to which can be used by team Vaatchal (Optional): 1. Hands-On Sessions: Conduct hands-on sessions where students can use CAE software to solve real-world engineering problems. Provide

tutorials and guidance on how to set up simulations, define boundary conditions, and interpret results.

2. Case Studies and Examples: Present case studies and examples from various engineering domains to demonstrate how CAE is used in practice. Show how CAE tools have been employed to optimize designs, predict performance, and troubleshoot issues.

3. Optimization Techniques: Discuss optimization techniques and methodologies used in CAE, such as parametric optimization, topology optimization, and sensitivity analysis. Highlight how these techniques can be used to improve the performance and efficiency of engineering systems.

Add minimum 2 photographs of the said event (Mandatory):

Event 3

Name of the event:	**CFD Workshop by Veloce Racing**
Dates of event:	**21st to 24th February 2024**
Online Platform/ Venue:	**Vishwakarma Institute of Technology**
Event span (hours/days)	**5 Days**
Footfall/Total attendance	**-**
Name and contact of the key organiser(s)	**-**
No. of people involved in the organising committee (all levels of hierarchy included, Core team to Volunteers)	**47**
Objective of the event	**The CFD Workshop by Veloce Racing, held from 21st to 24th February 2024, meticulously structured its program to cover various aspects of fluid engineering analysis across five days.**
Brief description of the said event	1. **Introduction to CFD: Begin with an overview of CFD, explaining its importance in engineering design and analysis, and its applications across various industries, including aerospace, automotive, and energy.** 2. **Fundamentals of Fluid Dynamics: Cover the basic principles of fluid flow, including continuity, momentum, and energy equations. Discuss concepts such as laminar and turbulent flow, boundary layers, and turbulence modeling.**
Key event outcomes	**Conducted a successful and informative 5 – Day session by teaching fellow college students**
Milestones set by the event (if any)	**-**
Name and bio of chief guest along with social media links (if any)	**-**

Add any kind of additional information or a ready report if you wish to which can be used by team Vaatchal (Optional):

Add minimum 2 photographs of the said event (Mandatory):