Vision: Play a distinct role in providing excellence in engineering and management education thereby creating human resources of value to industry and society both at national and international level.

Mukesh Patel School of Technology Management and Engineering, Shirspur

Academic year (2023-2024)
ACTIVITY REPORT
AMBIORA (Technical Event)

Scavenger Hunt

Venue: Amphitheatre
Date: 23/02/2024
Time: 2 PM to 5 PM

About the event:

With an overall participation of 60 participants, the event consisted of several teams in competition with each other to complete most tasks. The challenge was to complete as many tasks as possible within the time limit i.e. 30 mins. It was a race against time and the team that accomplished the most tasks in the given time emerged as the victorious champion of the hunt!

During the event:

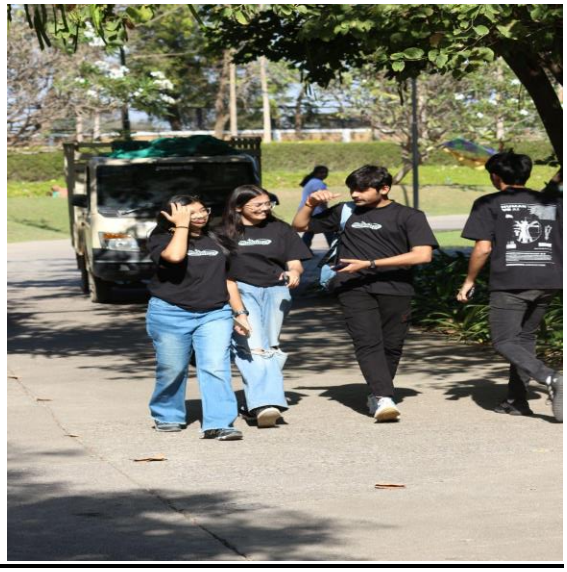
The event began at 2:15 as all the teams gathered at the amphitheatre. The Tech Heads took the initiative for a briefing session, laying out the essential rules and regulations for the upcoming scavenger hunt. Clear instructions about restricted areas were shared to ensure everyone followed the event decorum.

To kick off the event, each team received their unique clues through a dedicated website created exclusively for the scavenger hunt. The participants eagerly set off to different locations to tackle their assigned tasks, creating a chaotic atmosphere.

As the time limit was reached, a message was sent on the website, informing everyone about the end of the event. All teams were then requested to return to the amphitheatre. The Tech Heads congratulated the teams, for their efforts. The final results would be announced during the Closing Ceremony, creating excitement for the event.

Platform used:

A dedicated website for scavenger hunt https://Cryptbird.github.io was used.



Build-A-Bridge

Date: 23/02/2024
Venue: Student Lounge
Time: 6 PM - 8 PM

About the event:

With the registration of over 15 teams, this event provided a platform for students to showcase their mechanical and creative skills in a competitive and collaborative forum. This competition promised to be an engaging experience for all the participants and a good start towards the Ambiora'24.

The event kicked off with a burst of enthusiasm, and teams, ranging from a pair to an eight-member crew. To add some musical touch to the atmosphere, light songs were played in the background.

In this competition, each team had to construct a bridge using only ice-cream sticks and glue with a time limit of 90 minutes. In the end, each team's bridge was tested with the help of weights. The bridge that holds the most weight wins the competition.

The OC members supported the participants in every step of the way, offering assistance in various aspects of the bridge-building competition. A special thanks to the Logistics team, who ensured the timely arrangement of the materials.

After the intense scavenger hunt, this bridge-building event served as a refreshing break. Even the organising committee members embraced the laid-back vibes, joining in on the fun. It was a delightful experience for both the participants and the Ambiora Team.



AR Workshop

Date: 24/02/2024
Venue: Seminar Hall, C-Wing 2nd Floor
Timings: 10:00 am to 1:00 pm

Introduction:

The opening ceremony began at 10:10 AM in the seminar hall, shortly after the arrival of the Associate Dean. The ceremony was initiated by tech heads Vansh Jhulka and Shruti Rai, who thanked the Associate Dean, Faculties, Tech Heads, Leads, Conveners, and the entire OC team.
At 10:15 AM, Saraswati Vandana was played for the goodwill and knowledge the participants would gain during the event. The Associate Dean then gave a short speech, urging the students to conduct workshops like the ones happening in Ambiora'24 for the betterment of students. He suggested that at least one workshop should be conducted every month, similar to the Saturday 10 AM club, who hold a session every Saturday.

The Opening Ceremony concluded with everyone applauding the arrangement of such a wonderful event. At 10:30, the event organiser of the AR workshop ADC (App Development Club), began the event.

About the event:

The Augmented Reality workshop, conducted by Ambiora in collaboration with the App Development Club, proved to be an insightful exploration of AR applications. With almost 100 participants, the event aimed to introduce the fundamentals of AR, showcase its multiple applications, and provide hands-on experience in creating a project based on AR. The workshop featured engaging presentations, practical quizzes, and some fun activities for the students.

The participants gained a solid understanding of AR technology, discovering its real-world applications across various sectors including education, healthcare, manufacturing, marketing, and entertainment. They also had the opportunity to create their own AR project during the hands-on sessions. The speakers shared their valuable knowledge with the students and guided them through the procedure of making the project.

During the Event:

The event commenced at 10:30 AM with the OC checking that everyone had the required file of Unity software that was shared with all of them through a WhatsApp group. Then they introduced everyone to the software since most of them were using it for the first time. Another software

called Vuforia Engine was made to download through Unity which helped both the software to work with each other easily.

Once the downloading process was done, a demo of the basic controls of the software like rotating and moving was shown. The workshop went smoothly with some filler events like quiz, joker act etc. The winners were awarded with coupons from a fashion brand.

After all the filler events, the workshop continued, where they showed them how to increase or decrease the height of the AR object, how to add colour to the object and how it should pop up.

At the end of the workshop, another quiz was conducted and the questions were based on the concepts taught in the workshop. This concluded the AR workshop.

Platforms Used:

Two software's, Unity and Vulforia Engine were used in the workshop.

Crypto Quest

Date: 24/02/2024

Venue: PL – 1, B-wing 1st-floor

Duration: 10:00 A.M. – 1:00 P.M.

About the event:

Crypto Quest, a Cyber Security Test, was an excellent test of participants' reasoning skills. With almost 30 participants, the event challenged their skills in the field of cyber security and other cryptography skills.

Rounds in the Event:

Round 1:-

The first round of the event involved deciphering the given cypher. This round was conducted on Windows OS via Google Forms and included 16 questions. The duration of this round was 10 minutes, and participants were provided with 4 keys to decipher the cyphers.

Round 2:-

The second round of the event was the coding quiz, in which participants had to answer a set of coding-related multiple-choice questions (MCQs). This round was conducted on Windows OS via Google Forms and included 20 questions. The duration of this event was 15 minutes.

Round 3:-

The third round was the cyber quiz, in which participants had to answer a set of cyber-security-related questions. This round was conducted on Windows OS via Google Forms and included 21 questions. The duration of this event was 10 minutes.

Round 4 (Final Round):-

The final round was Catch the Flag, where participants were asked to complete given tasks. These tasks included locating and extracting hidden pieces of information or files using terminal protocols in Ubuntu. This round was conducted on Ubuntu OS, and to supervise the participants' progress, OverTheWire software was used. The duration of this event was 30 minutes.

Platforms Used:

Round 1, Round 2 and Round 3 were conducted on Windows OS via Google Forms.

Round 4 was conducted on Ubuntu OS, and to supervise the participants' progress, OverTheWire software was used

Coding Hunt

Date: 24/02/2024

Venue: CC-1 B-wing, 1st-floor

Duration: 2:00 P.M. - 5:00 P.M.

About the event:

A thrilling quest awaited the competitive coders as they donned their thinking caps. This event promised to challenge the brightest minds in unravelling the toughest coding questions in the prestigious ICPC Finals format.

Students eagerly delved into solving coding questions in Three rounds, the first checked their general aptitude and the other two checked their logical as well as competitive coding skills, each running against time and closer to the coveted prize.

With 10-15 teams in hot pursuit, comprising 2-3 members each, the competition was fierce, demanding not only sharp intellect but also nimble agility.

Rounds in the Event:

The competition was divided into two rounds:

The first round was a quiz round, where participants were asked 30 questions related to aptitude, basic mathematics, and coding. They were given 45 minutes to answer all the questions, and each question rewarded 5 points. The participant with the highest score wins the round.

The second round was the coding round which was further divided into two sub-rounds:-

In the first sub-round, participants were given eight coding problems to solve with a time limit of 50 minutes. For every problem solved within 5 minutes, teams will earn 2 balloons (20 points), and for every problem solved within 10 minutes, teams will earn 1 balloon (10 points). Successfully solving a problem will earn 15 points, whereas an incorrect or incomplete solution will earn 0 points.

In the second sub-round, participants were given five coding questions with a time limit of 50 minutes. For every problem solved within 5 minutes, teams will earn 2 balloons (20 points), and for every problem solved within 10 minutes, teams will earn 1 balloon (10 points). Successfully solving a problem will earn 20 points, but an incorrect or incomplete solution will earn 0 points.

Platforms Used:

Testomoz for the quiz in Round 1.

Hackerank in Round 2.

Type Racer

Date: 24/02/24
Venue: DSP Lab, B-wing 2nd Floor
Duration: 2:00 P.M. – 5 P.M.

About the event:

The Type Racer Event, conducted by AMBIORA'24, turned out to be an excellent event with 30 participants. The event challenged the participants and made them make the most of their typing skills. The Type Racer event was divided into four rounds, each being an elimination round.

Before the beginning of round one, the OC members briefed the participants about the rules and regulations of the event which included:

No one should touch their PC until instructed.
When the round starts, no one is allowed to open any other website or misuse the PC in any way as it would result in the elimination of that particular participant.
Any query or doubt should only be asked to the OC member present.

Rounds in the Event:

ROUND 1:

The event started around 2:40 P.M., and the participants were briefed about the round. Round 1 was basic and simple, with only a time barrier, and was speed-dependent. The Judging Criteria for Round 1 were based on the Words Per Minute (WPM) and Accuracy of the participant. Round 1 lasted for 5 minutes, after which the results of all participants were recorded by OC members.

A filler event "DUMSHARTS" was conducted before round 2 to cheer the participants.

ROUND 2:

Round 2 began at 3:20 P.M. which was a little difficult as the dominating hand of the participant was tied to the handle of the chair. The round lasted for 7 minutes, and the judging criteria were based on the Words Per Minute (WPM) and Accuracy of the participant.

ROUND 3:

Round 3 began at 3:50 P.M. and lasted for 10 minutes where participants were put together in teams of 2, one would be blindfolded while the other one types, and for the next four minutes, the places were swapped. The timer would not be stopped during the swapping. Judging criteria were the same for this round.

ROUND 4 (Final Round):

The final round began at 4:35 P.M., where a link was shared with everyone, and all participants were asked to type the URL on Chrome on their respective PCs. Round 4 was a direct elimination, and only the last two standing would be crowned the winner. The moment someone typed incorrect words or spaces, they would be eliminated immediately. It was conducted online and lasted for a minute.

In the end, all the OC members were asked to have a group photograph, and with this, the Type Racer event was successfully concluded.

Platforms Used:

Monkeytype website was used for the conduction of the event.

Dev-o-Thon

Date: 25/02/24

Venue: Seminar, C-wing 2nd Floor

Duration: 12 Hours (8 A.M. – 8 P.M.)

Introduction:

The Dev-oThon (Hackathon) conducted by Ambiora'24 is an event where individuals, programmers, and tech enthusiasts come together to solve problems given to them within a set timeframe. During the Hackathon, participants form teams or work individually to brainstorm and solve problems. Participants in Hackathon not only focus on coding but also engage in activities such as preparing presentations and pitching their ideas. Hackathons serve as platforms for creativity, learning, networking and collaboration.

About the Event:

The Dev-o-Thon conducted by Ambiora'24 proved to be a thrilling and amazing event. The event attracted a diverse pool of participants all eager to push their boundaries and gain a new and different experience as after submissions, the judgements will be made by the faculties based on how optimized the code is, and the working/usability of the final product. During the event, faculty also paid a visit to encourage the participants.

Filler events were also included during the hackathon such as FIFA Finals, to freshen up the participants and make an engaging environment.

Rounds in the Event:

In this 12-hour Hackathon, participants were asked to complete their development by 6 PM (10 hr approx). The event consisted of 10 questions associated with various domains such as web, game and app development, blockchain and cryptocurrency, deep learning, cyber security, networks and generative AI.

The App dev questions required the participants to create an app that must Involve certain predetermined features and functionalities.
The Web dev questions on the other hand required the participants to create a web application having certain key features which required them to have knowledge of both frontend as well as back-end.

Platforms Used:

All the participants who participated in the event were allowed to work on any platform and present their solutions such as VS Code, Code Blocks, Android Studio Notepad+, other IDEs etc

Placement Simulator

Date: 25/02/2024
Venue: Seminar Hall,
Time: 2 PM - 5 PM

About the event:

The Placement Simulator is a unique event designed to provide participants with a hands-on experience of the actual placement process conducted by the campus placement department. Modeled after real-life scenarios encountered during internship and job placements, the simulator offers a comprehensive understanding of what candidates can expect in such situations.

Rounds in the Event:

Round 1 (Aptitude Round):

The objective of the first round was to narrow down the pool of participants. It lasted for 30 minutes, featuring 30 aptitude questions with 1 point awarded for each correct answer. The quiz was conducted on Testmoz, commencing at 2:47 pm and concluding at 3:17 pm. The questions resembled those typically found in company aptitude rounds, presenting a mix of difficulty levels. Despite some challenging questions, 12 participants were eliminated during this round.

Round 2 (Technical Round):

The objective of the second round was to assess participants' technical knowledge and skills. This round comprised a 15-minute segment featuring 8 multiple-choice questions. Participants tackled questions related to code snippets and theoretical technical concepts. Round 2 commenced at 3:55 pm, resulting in the elimination of 10 participants.

Round 3 (HackerRank):

During Round 3, candidates were asked to solve two HackerRank questions, each to be completed within a time frame of 20 minutes. Round 3 commenced at 4:50 pm and concluded precisely at 5:10 pm. Participants were required to demonstrate their problem-solving skills and coding skills within the time limit. The questions likely covered a range of technical topics to evaluate the candidates' aptitude and efficiency in tackling coding challenges.

Group Discussion Round:

Following the technical assessments, a Group Discussion (GD) round commenced at 5:44 PM. Seven students who made valid submissions in the HackerRank round advanced to this stage, while the remaining participants were eliminated. The GD topic centred around "the ethics of whistle-blowing and the circumstances under which it is justified to expose wrongdoing". The discussion lasted for 12 minutes, with an additional 3 minutes allotted to conclude.

Platforms used:

Testmoz.com was used for conducting quizzes in Round 1 and Round 2.
Round 3 was conducted on HackerRank.


Project Expo

Date: 24/02/2024
Venue: Chemistry Lab, B-Wing, Ground Floor
Time: 10 AM- 3 PM

About the event:

During the workshop, there were 6-7 teams who had to prepare and present projects to the visitors. The projects were diverse and included things like Live Detection of the surroundings of the car, Tourism websites, medical-related projects and many more.

During the Event:

All the GDSC team members were fully engaged in the event and the projects were impressive with outstanding results. Visitors were asked to rate all the projects on a scale of 1-10 using a QR code. The winner would be chosen based on the feedback given by visitors and faculties who also visited and provided their feedback.

At the end of the workshop, the Associate Dean paid a visit and showed keen interest in every project. He carefully observed the language used while explaining and the body language of the team members. The GDSC Lead took remarks and reviews from the Associative Dean and he also questioned the team members about their projects. interest in every project.

Platforms Used:

All the members were allowed to work on any platform such as CodeBlocks, VS Code, Google Collaboratory etc. and present their projects.

Game Development Workshop

Date: 25/02/2024

Venue: Seminar Hall

Time: 10 AM to 1:30 PM

Introduction:

The aim of the workshop was to introduce participants to the different tools and techniques required for designing and creating games from the beginning. With a total of 35 participants, the workshop provided them with a complete understanding of the creative process involved in game development, which includes the technical aspects of game design, programming, and graphics.

About the Event:

During the workshop, Mr. Sparsh Khandelwal, a fourth-year student at NMIMS Shirpur MPSTME, delivered an introduction to game development. He has experience working with various technologies related to game development and full-stack development. He provided a live practical demonstration on how to use the software Unreal Engine for developing games.

The invited speaker introduced the participants of the workshop to Unreal Engine and explored various features of the software. These included night and day background settings, centre 3D objects, sunrise/sunset, and deploying obstacles like rocks and grass.

The workshop was an informative and engaging experience, with attendees receiving a practical demonstration on how to effectively use a variety of resource packages provided by Unreal Engine. The speaker was thorough, taking the time to address all queries and doubts raised by the participants.

Overall, it was a valuable learning opportunity for those looking to improve their skills and knowledge in game development.

Platforms used:

Unreal Engine

E-Sports

Date: 24/02/24

Venue: PR Lab, SS Lab, ACN Lab, Seminar Hall 2 and Main Seminar Hall

Time: 10 AM to 6 PM

About the Event:

E-Sports competition is a thrilling virtual gaming event that puts the participants' gaming skills to the test as they compete against each other in various games. With an immense registration of 68 teams, this exciting competition featured popular games such as Valorant, BGMI, FIFA, and F1, and the team that emerges victorious will be crowned the ultimate champion.

Rounds in the Event:

Valorant

The event organizers took all necessary measures to ensure that the competition was run smoothly and fairly. A total of 8 teams registered for the event. To avoid any delays, two matches were conducted simultaneously, and each team was assigned to a separate lab to prevent any cheating or confusion.

The initial matches, which included four teams, started at 10:30 AM and lasted for 45 minutes. After a quick break, the knockout rounds began, and the next set of matches started at 11:20 AM, concluding at noon. The finalists then went head-to-head in a series of intense matches that kept everyone on the edge of their seats.

Qualifier 2 began at 1 PM, and the competition was fierce. The last two teams emerged victorious, earning their spot in the finals. After a short break, the finals began at 2:30 PM, and it was a nail-biting experience for everyone involved. The teams battled it out, round after round, and the excitement was palpable. Finally, after an intense showdown, the final team emerged as the champions concluding the tournament at 5 PM.

BGMI

The BGMI tournament was a highly engaging and thrilling experience for all the participants who took part. The event had an impressive turnout of 20 teams, and before the actual matches began, a demo match was played to explain the rules.

To ensure that the event was conducted smoothly and fairly, the participants were given strict instructions. Any gadget other than phones was strictly prohibited to ensure fair gameplay for all. After the demo round, the participants geared up for the main matches. They were provided with the room ID and password and were given a short amount of time to join the room.

As soon as everyone joined, the match began with intense gameplay. Three matches were played in total, and points were awarded based on position and kills. The final points table after the three matches determined the ultimate winner.

FIFA

During the event, two halls, Seminar Hall 1 and Hall 2, were used to conduct FIFA matches. There were 32 participants, and two players played against each other at a time. Controllers were provided, and the players focused on playing on their laptops. The laptops were connected to screens via HDMI cables to provide a better experience for the audience. There was a lot of excitement for FIFA, and the audience was cheering for their favourite player.

The qualifying matches were held in two groups. Each group was divided into four sub-groups, and the winner of each sub-group faced each other in the semi-finals. The semi-finals were conducted in the main Seminar Hall at 5:30 PM. The finals were held on 25 February 2024 in the

main Seminar Hall in the middle of the hackathon as a fun activity. The atmosphere was electric as the finalists executed their best strategies, and the enthusiastic spectators cheered them on.

F1 (Formula 1 racing)

During the event, eight participants competed in a virtual Formula 1 championship. The competition had two rounds, one in the Bahrain circuit and one in the Saudi Arabia circuit. Participants raced five laps, using their own modified car settings, and the best time was recorded. At the end of each round, points were tallied based on the leaderboard.

The event was held in a cutting-edge gaming arena that offered an immersive experience for the participants. The Formula 1 2023 game by EA Sports was used as the platform for the competition. The graphics were highly realistic, and the controls were precise, providing a genuine F1 experience. The organizers aimed to create an environment that allowed gamers to feel the adrenaline of the track.

Platforms used:

Participants were required to bring their own equipment for Valorant and BGMI, whereas controllers were provided for FIFA and Formula 1 2023 by EA Sports for F1, with screens connected to the senses board for a more realistic gameplay experience.

CineTech

Date: 23/02/2024 to 25/02/2024

Venue: All event locations

Duration: All event hours.

Introduction

Cinetech is an engaging competition that encourages innovation and creativity among enthusiasts of photography and videography. Creators get the opportunity to showcase their talent in capturing incredible moments through this lively event.

About the event:

There were 9 teams overall, and each team was focused entirely on catching the most genuine and inventive moments from each person attending the event. Every participant was required to turn in their top seven photos from each of the three days of the event, along with a reel and a movie that lasted for two to five minutes on the last day. Over the course of the three days, every member engaged in active participation, constantly covering events and recording precious moments without fail.
The Cinetech was a boom, and our Ambiora'24 received lots of amazing photos that both justified the success of every event and did credit to the accuracy of every shot.

Platforms Used:

Creators were allowed to use cameras, phones, tripods etc for videography.

The Ambiora Technical Fest witnessed an overwhelming participation of over 800 students, who actively took part in a wide range of events and activities. The fest provided a platform for the participants to showcase their skills and talents, and they used this opportunity to make the most of it. From complex technical challenges to fun-filled games and competitions, the participants were thoroughly engaged and had a wonderful time. Their enthusiasm and passion for learning were remarkable, and their collective efforts contributed to making this technical fest a grand success.

PO's Mapping with justification

PO	Justification

PO-1	Technical festivals include events like coding competitions, hackathons, and technical quizzes, which require a strong foundation in mathematics, science, and engineering principles to solve complex problems.
PO-2	Participants engage in identifying, formulating, and solving complex engineering problems, often involving research and analysis of existing literature or data to reach substantiated conclusions.
PO-3	Many events involve designing solutions to engineering challenges, which requires consideration of safety, cultural, societal, and environmental impacts, making this outcome highly relevant.
PO-4	Research-based competitions and experiments are a core part of technical festivals, where students design experiments, analyze data, and draw valid conclusions.
PO-5	The use of modern engineering tools and IT resources is crucial in technical festivals, where participants often create models, simulations, or software solutions, understanding the limitations of these tools.
PO-9	Collaboration is key in many technical festival events, whether in team-based competitions, projects, or workshops, making teamwork and leadership highly relevant.
PO-10	Effective communication is essential in presenting technical ideas, writing reports, and delivering presentations, which are common in a technical festival setting.
PO-11	Management principles are applied in organizing and managing projects or events within the technical festival, requiring an understanding of engineering and management concepts.
PO-12	Technical festivals substitute an environment of continuous learning, encouraging participants to stay updated with technological advancements and engage in

Event In-charge

Associate Dean/Director