RETROWAVE

TECHWEEK OF IEEE SBM

RETROWAVE

IEEE
STUDENT BRANCH MANIPAL
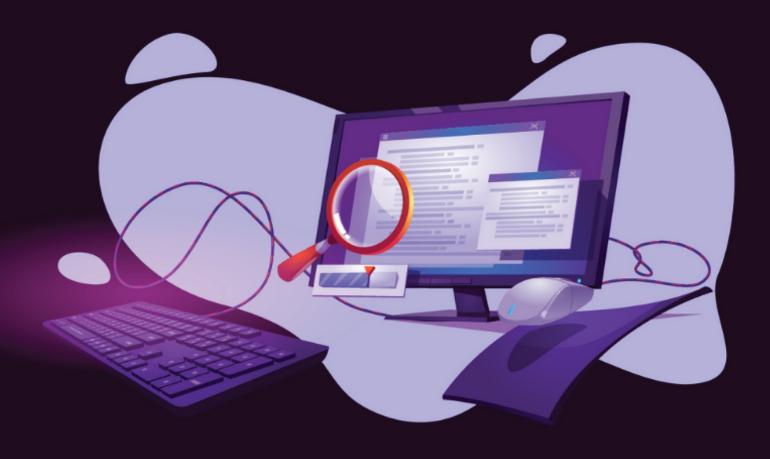
HACK4CAUSE
Post Covid Digitisation

Date: 1st and 2nd May
Time: 12:00 am
Duration: 36 hrs

PRIZES WORTH RS. 9,000

EVENT BROCHURE

Theme Description

The pandemic has taken the world by storm, changing every sector of our lives at depths we are still processing. It has accelerated the digitalisation of society and introduced a new stage of transformation. While we look ahead to an end to this life-changing pandemic, IEEE-SBM calls upon all bright and curious minds to take this opportunity of limitless growth, stunning innovation and virtual collaboration to tackle the issues in a post COVID-19 era.   We look forward to your valuable ideas!

Theme: Post COVID Digitization

Nature of the hackathon: Software, hardware, software+hardware

Date: 1st and 2nd of May

Day: Saturday-Sunday

Time: Starts on 1st May, 12:00 AM

Duration: 36 hours

Team Size: 2-4 members

Rules, regulations and eligibility

- It is a 36 hours online hackathon.

- Participating team should have at least 2 members and can have a maximum of 4 members.

- All participants must be pursuing an undergraduate course.

- Each participant can only be a member of one team.

- The team members can be from different academic levels (years/program).

Rules, regulations and eligibility

- Interdisciplinary participation is more than welcome.

- All participants must have a valid university/Institute issued ID with them throughout the hackathon, which has to be attached during registration and may be asked for, based on need, at any time throughout the competition. Participants will only be eligible for prizes once they have cleared this criteria.

- Once a team has registered, any changes in the team members will not be entertained.

- Participants will be given a list of 7 problem statements to choose from. Each team can choose any one problem statement to work on.

Rules, regulations and eligibility

- Round 1 would require the teams to submit a video entry of maximum 4 minutes and a descriptive PPT which elaborates on the idea and technical stack used. This round will be held by the end of 12 hours.

- Software submissions must be in the form of Web applications, Mobile applications or any GUI based application. A video demonstrating the working of your application in a clear manner is required. Hardware submissions will require a video demonstration showcasing the entire working of the project, alongside any required details and software implementations.

Rules, regulations and eligibility

- Protection of intellectual property rights and copyrights issues must be strictly followed, i.e. you cannot submit content that is copyrighted, protected by trade secret or otherwise subject to third party intellectual property rights or other proprietary rights, including privacy and publicity rights, unless you are the owner of such rights or have the permission from the rightful owner to post the content.

- Plagiarism will result in immediate disqualification.

- It is highly advised to use the existing datasets from data.gov.in or Kaggle. Generating own datasets is strictly not allowed. In case if the team does so, IEEE-SBM is not responsible for any consequences.

Rules, regulations and eligibility

- For the healthcare problem statement, the contestant should avoid purely database-related solutions.

- Submission of final code/project must be done by the given deadline. Late submissions will not be considered for evaluation under any circumstance. Please make sure to communicate any issue you're facing with regards to submission as soon as possible. The decision of the judges would be final.

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- IEEE-SBM reserves the rights to make any modifications to better the event, important updates would be duly informed to the participants.

- While the hackathon will be held online, we request all participants to please follow all COVID and health protocols specified by the WHO, any illness/issues as a result of working for the event would not be the responsibility of IEEE-SBM.

PROBLEM STATEMENTS

EDUCATION

Develop a referral process platform that helps teachers to raise and escalate major behavior issues in the classroom in real-time.

The platform would work like a classroom management tool that will help teachers to share real-time information on their student's classroom behaviors with students, other teachers, parents, and administrators.

The system should record all assessments made by the teachers for future reference and annual evaluations.

PROBLEM STATEMENTS

CLIMATE ACTION

The global outbreak of coronavirus disease 2019 (COVID-19) is affecting every part of human lives, including the physical world. On the positive side, studies indicate that the pandemic has significantly improved air quality which has aided the restoration of the ecological system. On the other hand, there is an exponential increase in generation of non-recyclable and organic waste leading to waste management getting difficult day by day. The consumption of resources is increasing at an alarming rate. This is bound to give rise to a new kind of pollution. The threat to marine life with the amount of covid wastes in water bodies is grave. Brainstorm and implement a smart and economical solution for the improvement of the biosphere.

PROBLEM STATEMENTS

FINANCE

COVID 19 has disrupted financial aims of the mass. The cost of living has surged higher and people are forced to reassess their financial inflow in this situation. The pandemic witnessed a decline in investment avenues such as stock markets, mutual funds, real estate, fixed deposits etc due to loss of jobs. Several insurance companies burdened the COVID-19 economy loss on policyholders. Insurance premiums hence resulted in a hike of approximately 10-20%. Students have had to put their careers on halt while the middle-aged workers are facing a heavy cash crunch along with the retired individuals being at risk of drying up their savings. Come up with a creative and a flourishing solution to resolve the situation.

PROBLEM STATEMENTS

HEALTHCARE

The healthcare system all over the world was already in a fragile state during the pre-Covid era. The healthcare infrastructure in many countries is incapable of dealing with the covid-19 crisis today- shortage of medicines and the inability to provide adequate testing are only some of the few problems faced all over the world. A major problem faced by hospitals, both private and government-funded, is the shortage of beds, due to which high-risk patients do not get the right care that they need. Due to the increasing cost of healthcare, families are finding it difficult to pay their medical bills. Come up with a solution that will help improve aspects of the healthcare system.

PROBLEM STATEMENTS

BUSINESS RESILIENCE

The ability of an organisation to absorb and adapt in a changing environment to enable its objectives and to survive and prosper is business resilience. In the post-covid world, both small scale and large scale businesses have faced a multitude of problems. Money management has been a major problem, and the shortage of funds has caused the employees to be laid off, leaving them without jobs in this dangerous situation. Many organisations have had problems in establishing a professional-personal life balance due to the work from home situation. Small and Medium Enterprises(SMEs) need to go digital, but face problems like lack of inherent technology expertise, managing data, insufficient capital growth etc.

Keeping these in mind, design the best possible solution that you can think of to tackle problems faced by the businesses in the post-covid world.

PROBLEM STATEMENTS

RURAL SECTOR

The COVID-19 spread has disrupted life in India — the immediate effect created chaos among people. This has severely affected the lives and livelihood across rural India. The country-wide lockdown had caused massive migration of the people to their rural hometowns, rendering them jobless. Daily wage workers are finding it extremely difficult to make ends meet. Due to shortage of resources in rural areas, the people are faced with a difficult situation during these trying times. Come up with an optimal solution for the upliftment of the condition of the rural areas!

PROBLEM STATEMENTS

CYBERSECURITY AND SURVEILLANCE

The pandemic has created an enormous challenge for businesses and other firmwares. The world became digitally connected in a very short interval of time and hence, more vulnerable. Security and risk management leaders must now safeguard their companies on a massive scale. They must ensure that their enterprises' online services and digital platforms are resilient against cyberattacks. A lot of IT departments have deployed new types of collaboration software. Such software increases the risk of hacking sensitive data that may be placed in less secure remote workplaces. Design an optimum and scalable solution to battle this problem!

Judging Criteria

TIMELINE

May 1st: 12:00 AM

May 2nd: till 12:00 PM

After 12 hours: First judging round.

After 36 hours: Final judging round.

Judging Criteria

ROUND 1

- Submission of a video entry of maximum 4 minutes and a descriptive PPT which elaborates on the idea and technical stack used. Submissions will be due by the end of 12 hours.
- Teams crossing a minimum score will qualify for the final judging round.

1. Clarity of problem statement
2. Technical and Economical Feasibility

Judging Criteria

ROUND 2

- Software submissions must be in the form of Web applications, Mobile applications or any GUI based application. A video demonstrating the working of your application in a clear manner is required.

- Hardware submissions will require a video demonstration showcasing the entire working of the project, alongside any required details and software implementations.
    1. Originality, Innovation and Uniqueness
    2. Sustainability
    3. Reliability and Scalability
    4. Presentation quality

CODE OF CONDUCT

- We request you to treat all members of the hackathon, in any capacity, with utmost respect. Please put up your best professional behaviour, and do not insult or put down other attendees.

- Any form of harassment including racist, sexist, or exclusionary jokes will not be tolerated. If at any point, such behaviour comes to your notice, please talk to the nearest hackathon organizer.

- We request you to treat our sponsors, organizers, and judges with respect.

CODE OF CONDUCT

- Please keep in mind that there are minors participating in the hackathon. Be thoughtful in the spirit of education and inclusiveness.

- Attendees from all backgrounds are welcomed by us. This event is about increasing the overall amount of learning, partnership, and engagement in the developer community.

- Failure to comply with the above-stated Code of Conduct may result in the offending team's disqualification.

We are dedicated to providing a comfortable environment and harassment-free experience for everyone and request you to please contact a member of the organising team immediately if you notice any alarming behaviour.

CONTACT DETAILS

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