



IIT KHARAGPUR

INTER IIT TECH MEET 10.0

25-27TH MARCH 2022

SILICON LABS' SOCIAL ENTREPRENEURSHIP CHALLENGE

The Internet of Things (IoT), the convergence of the digital and physical worlds, has emerged as one of the fundamental trends underlying the digital transformation of business and the economy. It is an upcoming technology that is helping in the growth of socially conscious associations, by offering high connectivity to transform the world and has provided a new way to the social entrepreneurship era by efficiently collaborating profit-making business models with positive societal impact



HIGH PREP

PROBLEM STATEMENT

Develop an end-to-end IoT-based solution to solve real-world problems in one or more of the following focus areas: Agriculture, Healthcare, Logistics, Asset Tracking, Renewables, Homeland Security, Animal Conservation/Care (Husbandry/Wildlife/Domestic). After selecting the desired focus area(s), identify a pain point within the same. The pain point could be a drawback within the existing system or a new problem your team would like to tackle.

Example: A tech-based solution for increasing the penetration of healthcare facilities in the rural areas of India.

THINGS TO BE INCLUDED

- Define: Identify a problem, and describe a problem statement to be solved.
- Design: Devise a scalable solution (a high-level design) to solve the above-defined problem statement, supported by the implementation details for all the system blocks described in the solution.
- Develop: Consolidate a feasible working prototype that can be implemented. All the necessary implementation files (schematics and designs) should be submitted.
- Detail: Put in place a complete business model of the pitched solution and explain how the solution will scale and impact the target audience.
- Defend: Create a 15-min presentation that guides the judging panel through your work.

To be included in the final presentation:

- Solution validation and testing, its impact, and sustainability analysis.
- Product Discovery:
 - Identifying the problem or challenge.
 - Understanding competition: What makes this product or service unique?
 - Mapping all the crucial stakeholders along the value chain.
- Proposed User Journey:
 - Defining customer segments targeted by the solution.
 - Identifying the best delivery channels by customer.
 - Defining the process for user acquisition and retention.
- Specifications for Minimum Viable Product (MVP).
- Define a go-to-market plan along with potential milestones for the launch and adoption process.
- Underlining the success metrics / KPIs and impact estimation.
- Diligence to the commercialization aspect: Defining business model and viability, Revenue model with cost analysis, and venture journey.
- UI proposal for customer-centric IoT solutions.

SUBMISSION

MID-EVALUATION (250 POINTS)

The report needs to be submitted in PDF format. It should not exceed 15 pages (excluding the Cover Page). It should cover the following:

- Description of the design steps.
- An end-to-end working prototype of the solution - implementation of the solution.

The evaluation report, along with the implementation files should be submitted on or before 17th March.

FINAL EVALUATION (150 POINTS)

The final presentation should explain the problem, solution, business model, and other related aspects of the proposed solution. Dates of presentations will be conveyed in due course.

EVALUATION

The goal is to identify unique problems and solve them using affordable and scalable engineering solutions. The participants are expected to evaluate their designs and implementation against all possible design goals and strive to reach a balance among all of them.

EVALUATION CRITERIA:

The final scoring will be done considering the following:

1. 15% - Problem statement identification
2. 25% - Innovative Solution
3. 10% - Prototype design
4. 15% - End-to-end implementation
5. 25% - Business model analysis
6. 10% - Presentation of Idea

GUIDELINES

- Strictly refrain from plagiarism. An improvement to an existing solution is encouraged.
- Teams are encouraged to use data to justify the research at every step.
- The team would be awarded extra points if the proposed solution can also be used for other focus areas, apart from the regions for which the solution was initially designed.

Please note that the final presentation should wrap up within 15 minutes followed by Q&A (5 min). Send your submissions at this email: submissions@interiit-tech.org

Team size for this event is maximum 10 participants.
Participation awards shall be awarded to all participants.



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