

HACKATHON

Problem Statement

Introduction

The word hackathon is a portmanteau of the words hack, which means clever programmer, and marathon, an event marked by endurance.

The goal of a hackathon is to create usable software or hardware with the goal of creating a functioning product by the end of the event. This Hackathon tend to have a specific focus, which can include the programming language used, an application, an API, or the subject and the demographic group of the programmers. There is no restriction on the type of software being created.

Team structure : The teams should comprise of 2-4 members.

Structure for first year and second year

First year and second year participants have the liberty to generate any idea according to which they will have to collaborate with each other and create their project. On the last day of the hackathon all the teams are required to bring their functioning application/project source code in a USB flash drive or upload it to GitHub and give a 10 minutes presentation on the project they have made.

- Technologies that can be used:- Machine learning, Android development, IOS development, web development, Blockchain, Augmented reality, Virtual reality. Participants can also consider themes which will be stated later in this document under the heading 'Structure for third year and final year' for idea selection procedure.

NOTE:- Above given technologies are only for demonstration purposes, it is every team's decision whether or not to include any of these technologies.

- **Example:-** we are creating an image captioning system by using technologies such as machine learning and web development which would take an image as an input and provide a caption which will perfectly describe the input image. This project can be embedded in any of the social networking sites.

Structure for third year and final year

Third year and final year participants will have to oblige to given themes. Team structure is same as stated above.

Themes :

- **Smart Communication**
Designing devices which would help in easing communication channels between various communication devices and points.
- **Healthcare and biomedical devices**
Designing devices that would help in managing healthcare better.

- **Agriculture and Rural development**
Designing devices keeping in mind the need to enhance the primary sector of India - Agriculture and the lives of our Rural Population.
- **Smart vehicles**
Creating intelligent devices to improve commutation facilities, quality of travel experience and overall travel safety features hardware.
- **Waste Management**
Solutions could be in the form of waste segregation, disposal, and improved transportation system.
- **Security and Surveillance**
Creating state-of-the-art safety and security technologies for India.
- **Financial Services**
One of the industries with the most accelerated growth in the tech domain: e-wallets, mobile apps, security, and blockchain are changing our relationship with money.

Timeline for the event

The timeline of the event is divided into three phases as follows:-

PHASE 1

In this phase all the teams have to decide their idea and then submit it through a google form by 28th March 11 pm. Send the drive link of your doc/ppt/video (any) explaining your idea.

PHASE 2

Selected teams have to begin with their coding and will get a time span of 29th to 31st March. At the end of this phase each team must have a functioning project/application.

PHASE 3

This phase will start on 1st April and will include the presentation part. After the coding is done, each and every team will have to give a 10 minutes presentation.

NOTE :- After the coding part is done, the participants are requested to either bring their source code in a USB flash drive or upload their code to GitHub.

Event Heads (Final Year)

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