24 hrs INTEL GenAI

Hackathon -2024

GUIDELINES AND PROBLEM STATEMENT

Code Repository Guidelines

• Participants must use GitHub for managing their codebase.

• Participants should make sure that the repository that they are sharing with us is public after 24hrs.

• Participants should not make only a single commit/push to repository with the final codebase, they should start with an empty repository and then keep on committing and pushing their code at some checkpoints of their choice.

Submissions

• Label as per your team's name.

• The working prototype must be hosted and link published on the GitHub repository by mentioning oneAPI HACK_KPR **(i.e. Project_oneAPI_hack_kpr).**

• The cleaned and well labelled code must be present in the **Intel Devmesh.**

• Figma/ Adobe XD links, Documented/ automated test cases etc (for UI/UX) to be uploaded on the GitHub repository

• Update the readme file (readme carries mark)

• Please submit the link to your GitHub repository to Intel Devmesh complete in all respects to be mailed at no later than 05.10.2024 (8.00 AM).

Rules and Regulations

The solution with an interface must include an Information Architecture and actual Figma/ Adobe XD or another designing tool

You can use any language to build your solution.

You can use any open-source tools.

Must leverage Intel toolkits (AI reference KITS).

Update readme.md file as well versed.

You need to bring the IoT related components (if applicable).

Your code must be modular and reusable across components.

Explain your project through slides to the evaluator at the end.

NOTE: All are requested to wear JEANS (if applicable), coz T-shirts will be provided.

Selection Criteria (winners, runners and special Awards):

1. **Technical Solution Presentation Requirement:**
   a. To what extent was the hack technically impressive?
   b. Did the team address a challenging technical problem?
   c. Did the team employ any exceptionally clever techniques in their solution?

2. **Design pattern requirement:**
   a. Did the team consider the user experience, and how well-designed is the interface they developed?

3. **Quality Check:**
   a. Did the team adhere to all quality parameters and conduct performance testing?

4. **Completion:**
   a. Does the hack function as intended? Did the team accomplish all their objectives of the reviews?

5. **Learning:**
   a. Did the team challenge themselves and attempt to learn new concepts or technologies?

Themes and problem statements

(**ALL SECTORS SHOULD INTEGRATE OR LEVERAGE AI and OneAPI**)

1. **Blockchain and AI-enabled Carbon Credit Management**
2. **IOT- AI**
3. **Health sector-AI**
4. **Business sector-AI**
5. **Transportation sector-AI**
6. **Consumer sector-AI**

Gen-AI sector: Develop an AI that can accurately read and interpret human thoughts and emotions in real-time, providing complete understanding and empathy in all interactions without infringing on privacy or autonomy.

☐ The AI must understand and process complex emotional and cognitive signals, considering cultural and individual differences.

☐ It should provide accurate insights without violating ethical standards or privacy laws, maintaining individual autonomy and consent.

☐ The system must adapt to various contexts, from interpersonal relationships to therapeutic settings, offering tailored solutions for diverse needs.

☐ Mind-reading capabilities must be universally accepted and integrated into society without causing fear or mistrust.

7. **Security sector** -AI
8. **Finance sector-AI**

Music sector-AI: Design an AI system that generates personalized music playlists based on users' listening habits and preferences.

Timelines:

9:00 AM: Inauguration

10:00 - 10:30 AM: Workshops to introduce participants to the intel tools and techniques required for the hackathon.

10:30 AM: The hackathon officially starts, with teams beginning their projects on their given zones .

10:30 - 11:30 AM: The statement review takes place, where the jury discusses the problem statement, methodology, and prerequisites with the teams.

11:30 AM - 3:30 PM: Development time, where teams focus on building their projects.

3:30 - 4:00 PM: Teams complete a Git push to save their progress.

4:00 - 5:00 PM:1st review, where the jury assesses the initial progress and provides feedback for improvements.

8:00 PM: 2nd review, where the jury evaluates the next phase of the projects and suggests further updates. **1:00 AM:** 3rd review, during which the jury checks the latest improvements and gives final suggestions for refinement.

**1:00 AM – **review

7:00 AM: Final Git push, where teams submit their completed projects.

8:00 AM: Final review, where the jury thoroughly examines the projects for UI, functionality, and ML model performance.

10:00 - 11:30 AM: Stage session, where all teams' projects are showcased and discussed.

12:00 - 12:30 PM: Prize distribution ceremony, where the winning team is announced.

Accommodation and others:

- If you are planning to arrive the night before the hackathon (on the evening or night of the 3rd), accommodation will be provided at a charge of ₹150

- For participants with long travel, arriving early in the morning, we will provide common rooms where you can refresh and prepare for the event.

- Please note that no accommodation will be provided on the night of the 4th, as the hackathon is a 24-hour event and a review session will be held that night.

Routes:

BUS ROUTES:

Gandhipuram Town Bus Stand -> Take 20A (somanur bus) there ->KPR institutions (LPT stop). **(after 10 pm no local buses are available)**

Train Routes:

Railway Station (CBE North Junction and CBE junction)-> Gandhipuram Town Bus Stand -> Take 20A (somanur bus) there ->KPR Institutions (LPT stop). **(after 10 pm no local buses are available)**

Intel OneAPI References:

Youtube : https://www.youtube.com/watch?v=vMZNYP4e2xo&list=PLg-UKERBljNxsCltpcXU_Haz9xQSCN_SB

https://www.youtube.com/watch?v=a4SyD2KuPuQ&list=PL3uLubnzL2TkH9IepEbx4-pbRR9xxT0Mm

https://www.youtube.com/watch?v=9jnY9PJjYVk&t=167s&pp=ygUqaW50ZWwgb25lIGFwaSByZWZlcmVuY2Uga2l0ICB0b29sa2l0IGNvZGUg

REFERENCE KIT DOWNLOADS:

https://www.intel.com/content/www/us/en/developer/articles/technical/12-new-ai-reference-kits.html

"We Intel Global OneAPI student Ambassadors welcomes You all For the hack"