# "Crafting Next-Gen Experiences: AI-Powered Tools, 3D Spatial Desktops, and Multimodal Interaction"

## 目標

Our focus is on creating intelligent and immersive user experiences. Innovate smart tools such as dynamic game assistants, AI for sustainability, context-aware user interfaces, or adaptive performance optimizers to enhance user interaction.

- AI-Powered Tools
  Build intelligent tools that enhance user interaction, think dynamic game assistants, Ai for sustainability, context-aware UI, or adaptive performance optimizers.
- Next-Gen Spatial Desktop — 3D, Webcam & Interaction explorations
  Design new interaction concepts for 3D desktops—leveraging webcams, spatial inputs, and display innovations to enhance digital workflows.
- Multimodality — XR, Glasses & Mobile Integration
  Create seamless multimodal interfaces combining AR/VR, gesture, voice, and mobile for unified user engagement.
  For this challenge, the participating team will receive Logitech keyboards, mice, gaming headsets, and webcams to help them work with different types of interactions. They’ ll also get the Logitech MX Ink spatial stylus and Meta Quest 3S headset, which will help them make innovative mixed reality applications. Additionally, to streamline the development process,

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an engineer from the Swiss office will give them some tips on setting up and making their Unity development environments work smoothly. This year, this is the only subtopic that will include a session on MX Ink and Unity environment setup.

[中文]
我們專注打造沉浸式的使用者體驗。創新智能工具,例如動態遊戲助手、永續發展人工智慧、情境感知使用者界面或自適應性能優化器,以增強使用者與產品的互動體驗。

- AI-Powered Tools
  打造增強使用者互動的 AI 工具,例如動態遊戲助手、永續發展人工智慧、情境感知使用者界面或自適應性能優化器。

- Next-Gen Spatial Desktop 3D, Webcam & Interaction explorations
  設計新的 3D 桌面互動概念——利用網路攝影機、空間輸入和顯示創新來增強數位工作流程。

- Multimodality — XR, Glasses & Mobile Integration
  創建無縫的多模態介面,結合 AR/VR、手勢、語音和行動裝置,實現統一的使用者參與。
  挑戰 Multimodal interactions 的隊伍，除了可以使用提供高階鍵盤/滑鼠/電競耳機/視訊相機，更將提供羅技 MX Ink 混合實境空間手寫筆與 Meta Quest 開發混合實境的應用，並安排瑞士辦公室工程師講授建置 Unity 開發環境的技巧，而今年只有此子題目會有講授 MX Ink/Unity 環境建置。

## 題目選擇與分配

Participating teams will be asked to rank their preferences among the three subtopics listed above. To ensure that each subtopic has participating teams, there will be at least one team assigned to each subtopic. For the “**Multimodality**

— XR, Glasses & Mobile Integration” subtopic, we plan to allocate 2 to 3 teams. The final topic allocation will be determined based on the preference form provided to and completed by the teams admitted to the Logitech group, which will be included with the admission notice.

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參賽隊伍將於上方三個子題進行志願序選填，為確保各題目均有參賽隊伍，每個子題目至少會有一組參賽。其中，「Multimodality — XR, Glasses & Mobile Integration」題目預計安排 2 ~ 3 隊伍。最終題目分配將依據錄取為羅技組參賽隊伍，於錄取信中附上之志願序表單填寫與安排。

## 提供資源

On-site Workshop (Sept 5th)

- As a guide for development direction, we will introduce the Main theme and its related sub-topics, including goals, scope, and expected outcomes, and conduct Q&A with the participants from each team.
- Provide each team with an opportunity to experience Logitech products and SDK in advance, discuss project ideas and technical architecture, including Q&A.

Event (Sept 20-21)

- Provide Logitech products and SDK for development and verification.
- Provide technical consultation.

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On-site Workshop (9月5日)

- 作為引導開發方向,將介紹 Main theme 與其相關子題,包含目標,範疇與預期結果,與各團隊參與者進行 Q&A

- 提供各組提前體驗羅技產品與 SDK,討論專案構想與技術架構,包含 Q&A

Event (9月20-21日)

- 提供羅技產品與 SDK 作為開發驗證
- 提供技術諮詢

## 評分標準

Innovation (30%)

- How original and creative is the idea?
- Does it push boundaries and introduce novel solutions or approaches?

Technical Execution (20%)

- How well does the project demonstrate technical skill and proficiency?
- Is the implementation effective?

Presentation (20%)

- How clearly and compellingly is the project presented?
- Is the communication effective and engaging?

Completion (15%)

- To what extent has the project been completed within the given timeframe?
- Is it functional and demonstrates the core concept?

Feasibility (15%)

- Is the project realistic and achievable given the available resources and constraints?
- Does it have potentially scalability for further development or real-world application?

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創新性(30%)

- 該想法是否獨具匠心、富有創意?
- 是否突破了現有框架,引入新穎的解決方案或方法?

技術執行(20%)

- 該項目在技術技能和熟練度方面表現如何?
- 是否能在有限時間內有效率地實作?

表達(20%)　＊羅技所屬之參賽隊伍需使用英文製作簡報和報告

- 該專案的展示是否清晰、具有說服力?
- 溝通是否有效、攫取聽眾的注意力?

完成度(15%)

- 該專案在規定時間內完成的程度如何?
- 是否功能完善,並展示了核心概念?

可行性(15%)

- 考慮到可用資源和限制,該專案結果是否切實可行?
- 是否具有進一步開發或實際應用的潛力?