Hackathon Challenges

1. DATA CLEANSER

Hack Title: Data Quality Optimization

Challenge:
Participants are tasked with developing a solution to clean and optimize master data (e.g., customer, vendor, and material data) to ensure its quality and consistency. The solution should address typical data issues such as duplicates, missing fields, and inconsistencies.

Goals:

- Migrate data for AI usage and master data integrity
- Identify and remove duplicate records
- Fill in missing fields with appropriate values
- Resolve data inconsistencies to ensure uniformity

Technical Requirements:

- **Tools and Software:**
    - Choose the tools that best suit your approach (e.g., Python, AI models, data manipulation libraries)
    - Optional: Microsoft Fabric, Power BI for data visualization and reporting
    - Optional: SAP Data Services for ETL processes
    - Optional: Cloud-based tools for data handling
    - You may use any other tools and platforms you deem fit

Data Requirements:

- Sample datasets containing customer, vendor, and material data
- Participants will need to clean and preprocess the data
- Uploading the data into a SAP system after successful cleansing is required

Hardware Requirements:

- Computer with internet access
- Required software installed (e.g., Python, libraries)

- VPN (if accessing certain tools or platforms like SAP Playground)

Submission Requirements:

- Final solution (e.g., GitHub repo, cloud-hosted solution)
- Brief documentation describing your approach and methodology
- Demo video or presentation

Judging Criteria:

- **Innovation:** How creative is the solution?
- **Impact:** Does the solution address the data cleansing challenges effectively?
- **Technical Execution:** Quality of code and solution implementation.
- **Usability:** How easy is it for end-users (data analysts, system users) to use the solution?

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2. SERVICE DESK ALERTS CHECKER

Hack Title: AI Email Categorization and Routing

Challenge:
Participants are tasked with developing an AI solution to filter incoming tasks/mails of service desk alerts and route them to the appropriate recipient. The solution should minimize unnecessary disturbances to service desk consultants by categorizing incoming emails from the service desk Outlook inbox and sending a response with the categorized information back to Outlook.

Goals:

- Categorize incoming emails based on content
- Route emails to the appropriate recipient/user group
- Minimize disruptions to service desk consultants during night hours

Technical Requirements:

- **Tools and Software:**
    - Optional: Microsoft Power Platform (Power Automate, AI Builder)
    - Optional: Any AI models or frameworks for text classification
    - You may use any platform (e.g., Python, Low-code platforms)

- **Integration:**
    - Optional: Integration between Power Automate and Outlook mailbox
    - API integration may be required depending on your approach

Hardware Requirements:

- Computer with access to Outlook mailbox (Test Environment)
- VPN and internet access to use required platforms (e.g., Power Automate)

Submission Requirements:

- Final solution (e.g., a flow created in Power Automate, GitHub repo)
- Brief documentation on how the classification and routing work
- Demo video or presentation

Judging Criteria:

- **Innovation:** How creative and efficient is the email classification system?
- **Impact:** Does it reduce unnecessary disturbances during off-hours effectively?
- **Technical Execution:** Quality of implementation and integration.
- **Usability:** Is the solution easy to use, especially for non-technical users?

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3. SAP MOVEMENT WITH PROMPTING

Hack Title: Simplified Warehouse Movement via Natural Language

Challenge:
Participants are tasked with developing a solution to create or modify an existing UI5 Dialog within SAP to allow natural language commands to trigger movements within the SAP EWM system. This solution aims to simplify warehouse interactions and reduce the need for extensive system knowledge.

Goals:

- Enable natural language commands to trigger movements within SAP (EWM)
- Simplify user interactions for warehouse employees
- Reduce the need for in-depth SAP system knowledge

Technical Requirements:

- **Tools and Software:**

- Optional: SAP UI5, JavaScript, and SAP S/4 HANA for system integration
- Optional: Any natural language processing (NLP) tools or AI models
- You may choose your preferred programming languages and frameworks for the solution

Data Requirements:

- Access to a test SAP EWM environment (or equivalent)
- Sample data for warehouse movements

Hardware Requirements:

- Access to the Internet
- Access to SAP Playground (or equivalent)

Submission Requirements:

- Final solution (e.g., a working UI5 Dialog or GitHub repo)
- Brief documentation describing your approach to integrating NLP with SAP
- Demo video or presentation

Judging Criteria:

- **Innovation:** How innovative and user-friendly is the solution?
- **Impact:** Does the solution effectively simplify warehouse operations?
- **Technical Execution:** Quality of code, integration with SAP, and NLP implementation.
- **Usability:** How easy is it for warehouse employees to use the solution?

General Hackathon Information

Timeframe / Deadlines:

- **Project Deadline:** Final submissions must be made by 5pm.
- **Presentation:** Each team will have 10 minutes to present their solution.
- **Progress Check-ins:** Optional mid-way check-ins for feedback, if needed.

Team Collaboration:

- Participants can work solo or in teams. You are encouraged to collaborate with others to combine skill sets and creativity.

Resources & Mentorship:

- Access to APIs, sample datasets, and other resources will be provided.
- Mentors will be available throughout the hackathon to offer guidance on technical challenges and platform usage.

Prizes & Incentives:

- Prizes will be awarded to the top solutions in each category.
- Winning teams will receive recognition points as prizes.

Ethical Guidelines / Data Privacy:

- Ensure all data used in your solution is anonymized, and avoid using sensitive or personal data unless properly consented.
- Solutions should adhere to ethical AI guidelines, ensuring that user privacy and data security are respected.

Good Luck to All Participants!
Let your creativity shine and choose the tools that will help you deliver the best solutions!