





# **Specifications Document**

**Connected Systems Institute** 

April 25-27, 2025

**Sponsoring Partners** 



**LUBAR COLLEGE OF BUSINESS** 





# **Hack the Hackathon: Specifications**

Connected Systems Institute (CSI) | University of Wisconsin–Milwaukee April 25–27, 2025

#### **Overview**

Planning a hackathon is a complex, resource-intensive effort involving dozens of interconnected tasks, many of which require manual coordination, constant updates, and tight deadlines. For this challenge, your goal is to design an agentic AI system that can take initiative, communicate across workflows, and help manage the event lifecycle with minimal human intervention. A successful solution will reduce the overhead of running hackathons and make it easier for an organization like CSI to scale these events in the future.

# The Challenge

In Hack the Hackathon, your task is to design and prototype an agentic AI system capable of managing the lifecycle of a hackathon event at CSI.

From registration and sponsor engagement to logistics, communication, website updates, and post-event reporting, hackathons involve dozens of moving parts. Your team will build a system that leverages agentic AI to coordinate, automate, and proactively manage these workflows.

You'll have access to Azure AI and CoPilot 365 and host of free tools curated for this event, as well as coaching support from CSI, faculty, fellow graduate students, and industry partners. Your solution should reflect real-world utility, creativity, and collaborative intelligence between agents.

# Hackathon Lifecycle – Actions for Agentic AI

Below are some of the tasks to consider. A successful solution need not address all these issues, but a strong prototype will demonstrate how agents can take ownership of key responsibilities, interact intelligently with data and people, and handle real-world event logistics with clarity and efficiency.

#### **Pre-Planning & Setup**

- Create and maintain project timelines and to-do lists
- Draft personalized outreach emails for students and faculty
- Post announcements across platforms (website, social, campus)



#### **Registration & Communication**

- Monitor and manage registration form submissions
- Send personalized confirmation and reminder emails
- Track attendee counts and flag missing information
- Generate rosters and name tags
- Push updates to registrants (e.g., schedule changes, mentor sessions, location and time reminders)

#### **Logistics Management**

- Create campus signage
- Coordinate with UWM 20/20 catering (number of students, menu, timing, dietary needs)
- Schedule and remind workshop facilitators or judges
- Generate event agendas

#### **Sponsor & Partner Engagement**

- Track communication history with sponsors and partners
- Send reminders about swag, prizes, judge sign-ups, and deliverables
- Gather bios, logos, and talk titles from speakers
- Schedule prep calls and share relevant documents
- Send thank-you messages post-event with highlights

#### **Participant Support During Event**

- Manage Q&A or help desk workflows (via email or chat bot)
- Remind participants about deadlines
- Notify teams of last-minute updates or coaching/workshop changes
- Log and route mentor check-ins with teams

#### **Post-Event Wrap-Up**

- Generate and distribute feedback surveys to attendees, mentors, and sponsors
- Collect and analyze feedback and metrics (attendance, engagement)
- Compile summary reports for sponsors or leadership
- Recommend improvements for future events
- Archive materials and outcomes for future reuse

#### **Bonus Agentic Behaviors to Consider**

 Agents that communicate with each other (e.g., registration agent notifies logistics agent when headcount changes)



- Agents that monitor constraints or goals (e.g., stay within budget, maximize engagement)
- Agents that can adapt to changes or reschedule based on conflicts or delays

#### **Ethics Statement**

Hack the Hackathon is an educational experience designed to help students learn how to use agentic AI competently and responsibly. Participants will explore how AI can support—not replace—human decision-making, and will be encouraged to apply sound judgment, ethical reasoning, and critical thinking throughout the event.

All datasets used in the hackathon are fictitious. No real personal or institutional data will be used.

We ask students to consider the broader implications of their solutions, including fairness, inclusivity, and transparency. This event is not just about building technology—it's about learning to do so *thoughtfully* and *securely*, with care for people and systems.

#### **Team Formation**

- Teams must consist of 3–5 students.
- All participants must be current UWM undergraduate or graduate students
- Interdisciplinary and mixed-experience teams are encouraged!

# **Available Tools**

The solution should include Microsoft tools, but you are welcome to integrate other solutions. Teams will have access to the following through CSI's Azure subscription, which participants can access with their ePanther IDs:

- Azure OpenAI (build GPT-powered agents)
- Power Automate (create flows for coordination, alerts, and task automation)
- Azure Logic Apps (integrate services like Outlook, SharePoint, Forms, and Teams)
- Azure Functions (optional build custom triggers)
- Azure Storage & App Services (for hosting content or data)
- Azure Al Foundry
- CoPilot 365
- CSI GitHub Repo (coding assistant bring your personal GitHub login)
- A recommended list of free tools (shared in Canvas)
- Canvas Site (for sharing hackathon information, files, links)
- Sharepoint Folder (with fictitious hackathon data)



#### **Hackathon Timeline**

#### Friday, April 25 – Launch

- 1:00–1:30 PM | Welcome Joe Hamann, PhD, CSI
- 1:30-2:00 PM | Challenge Overview Casey O'Brien, CSI
- 2:00–3:00 PM | Azure and Agentic AI Overview <u>Srikanth Bhakthan</u>, Principal Cloud Architect, Microsoft
- 3:15 PM | Participants organize into teams
- 3:30 PM | Hacking begins!
- CSI closes at 9:00

#### Saturday, April 26

- CSI open 9:00 AM 9:00 PM
- Mentors and coaches will drop in throughout the day, both in person and online

#### Sunday, April 27

- CSI Open 9:00 AM
- Solutions due by 12:30 PM
- 1:00–3:00 PM | Final Presentations (CSI Classroom)
- 3:00-4:00 | Networking—Relax with snacks while the judges deliberate
- 4:00-4:30 | Awards Ceremony to follow immediately (CSI Classroom)

Food and beverage will be provided throughout the hackathon. Participants are also welcome to bring their own food. CSI has a refrigerator you may use to store food.

# **What to Deliver**

By **Sunday, April 27, 12:30**, each team must share their code to CSI's GitHub and upload their presentation to the Agentic AI Hackathon Canvas site.

#### **Upload into Canvas Site:**

- An **8-minute presentation/demo** of your agentic Al solution
- A brief slide deck
- Optional: A link or mp4 of a 2-minute demo video

#### **Upload into CSI's GitHub repo:**

- Source files (code, flows, assets)
- A README with:
  - Description of the system



- Roles of each agent
- Technologies used
- How to redeploy

Teams will be given 8 minutes to present and 4 minutes to answer questions. See the **Presentation Expectations** and **Criteria** below for more specifics.

# **Presentation Expectations**

- Introduce your team and the problem you set out to solve
- Explain the core agents in your system and their responsibilities
- Demonstrate how the agents work—live or recorded
- Highlight collaboration, decision-making, and initiative among agents
- Discuss what went well and what you'd improve with more time
- Be ready to answer questions from judges and mentors

# **Prize Categories – \$5,000 in Awards**

- Best Overall Agentic Al Solution \$1,500
- Best Use of Azure Al Tools \$1,000
- Most Collaborative Multi-Agent System \$1,000
- Best Implementation Potential \$700
- Audience Favorite \$500
- Best First-Time Hacker Team \$300

Descriptions and criteria of each category follow:

#### **Best Overall Agentic AI Solution - \$1,500**

Awarded to the team that delivers the most complete, innovative, and technically sound solution across all judging dimensions. Judges will look for strong alignment with the hackathon's challenge, smart agent behavior, effective use of AI tools, real-world relevance, and a polished presentation. This category rewards well-rounded excellence in vision, execution, and delivery.

What we're looking for:

- Clear understanding and creative interpretation of the hackathon challenge
- Seamless, intelligent interaction between agents
- Technical strength and thoughtful use of available tools
- Real-world viability and scalability
- Clear, confident communication of your work



#### Best Use of Azure Al Tools – \$1,000

This award goes to the team that makes the most effective and creative use of Azure technologies to power their solution. Whether it's Azure OpenAI, Power Automate, Logic Apps, or other Microsoft tools, this prize celebrates technical fluency and integration.

#### What we're looking for:

- Thoughtful selection and application of Azure tools
- Creative use of AI capabilities (e.g., GPT, automation, orchestration)
- Integration of multiple services into a cohesive system
- Strong understanding of each tool's role in the overall solution

#### Most Collaborative Multi-Agent System – \$1,000

This prize recognizes the team that builds the most well-orchestrated network of agents working together to achieve shared goals. Judges will evaluate how well your agents communicate, delegate, and support one another across workflows.

#### What we're looking for:

- Multiple agents with distinct roles and responsibilities
- Inter-agent communication (e.g., triggering actions, sharing data)
- Dynamic responses to changes, delays, or constraints
- A system that feels more like a team than a collection of tools

#### **Best Implementation Potential – \$700**

This award honors the solution with the strongest potential to be deployed in a real-world setting. Judges will consider usability, feasibility, and how well the system could scale to manage future CSI hackathons or similar events.

#### What we're looking for:

- A clear, understandable system architecture
- Practicality: easy to deploy, maintain, and extend
- Appropriate trade-offs between complexity and usability
- Attention to real-world constraints like time, staffing, and cost

#### Audience Favorite – \$500

This is a new award! Chosen by your fellow participants, mentors, and visitors during the final presentations. This award goes to the team that captures the imagination of the audience with a creative, compelling, or inspiring solution.



What the audience is looking for:

- Strong storytelling and presentation style
- Engaging demo or visual design
- Original, memorable concept
- Broad appeal across backgrounds and experience levels

#### Best First-Time Hacker Team - \$300

Also new!!! This award is open to teams made up entirely of first-time hackathon participants. This prize celebrates new voices in innovation and recognizes impressive effort, creativity, and learning in your first event.

What we're looking for:

- Demonstrated growth and problem-solving throughout the weekend
- A functional, thoughtful solution—even if simple
- Willingness to explore new tools and ideas
- Teamwork, enthusiasm, and resilience

### **Additional Info**

- CSI facility open **until 9:00 PM** on Friday and Saturday to provide a collaboration space. We reopen at **9:00 a.m.** on Saturday and Sunday to reconvene.
- Meals, snacks, and beverages will be provided throughout the event.
- Bring your laptops and chargers.

We're looking forward to a weekend of creativity, collaboration, and future-forward solutions. Good luck, and let's *Hack the Hackathon*!

