Northeastern's Product Hackathon

PROTOTHON 8.0

Participant Handbook

Theme: Institutional Knowledge — Making University Data Discoverable

Round 1	Virtual Submission — March 8, 2026
Round 2	In-Person Finale — March 15, 2026, at Product Conference
Team Size	3 to 5 members — Open to all university students
Top 5	Announced March 8, 2026, via email

At a Glance

Problem Statement	March 1	**Round 2 Finale**	March 15
Round 1 Deadline	March 7 at 11:59 PM EST	**Location**	Product Conference, Northeastern University
Top 5 Announced	March 8	**Mixer / Team Formation**	February 27

What is Prototon?

Prototon is Northeastern's product hackathon, run by APMC. Teams identify a real problem, validate it through user research, and build a solution — from problem statement to working prototype — over two weeks. The best teams present live at Product Conference.

What makes a winning team?

Strong teams fall in love with the problem before they design anything. They talk to real users, challenge their assumptions, and build something specific rather than something generic. Creativity matters. So does execution.

About APMC

The Aspiring Product Managers Club at Northeastern University brings together people who want to learn about product management and eventually work in the field. We started in Fall 2021 with four members and grew to 1,000+ members with 40+ events. Our community is open to everyone, regardless of experience level.

Welcome to APMC, and good luck at Protothon 8.0.

Timeline

Date	Event	Details
Feb 22	**Registrations Open**	Team registration begins
Feb 27	**First Mixer**	Network, form teams, ask questions
Mar 1	**Problem Statement Release**	Challenge revealed
Mar 8	**Round 1: Qualifier Submission**	Submit deck by 11:59 PM EST on March 7, 2026
	Top 5 Announced	Check email for results
Mar 15	**Round 2: In-Person Finale**	Present at Product Conference

The Challenge

Every major research university, including Northeastern, holds decades of institutional knowledge. Co-op placement histories, research datasets, course performance records, policy archives, faculty expertise maps, advising insights, and student success patterns all exist within its walls.

Yet this knowledge is effectively invisible. It is scattered across incompatible systems, buried in department silos, locked behind role-based portals, stored in unsearchable formats, and held in the heads of staff who eventually leave.

> *"The problem is not the absence of knowledge. It is the absence of a connective intelligence layer that makes institutional knowledge discoverable, trustworthy, and actionable for the people who need it most — in compliance with the privacy standards that protect them."*

Your challenge is to find critical records and datasets across the university that have real practical value to students or faculty and develop a method to make that information more accessible.

Current Systems and Their Gaps

System	What It Holds	Who Can Access
Banner / Workday SIS	Academic records, enrollment, degree audits	Staff portals
Canvas / Blackboard LMS	Course content, grades, activity logs	Students + Faculty
NUworks / Handshake	Co-op and job postings, employer data	Students
Library Systems	Research databases, archives	Students + Faculty
Disability Services Portal	Accommodation records	Restricted
Research Administration	Grants, IRB approvals, lab datasets	Faculty + Admin
Financial Aid (Banner Aid)	Aid packages, loan data	Students + SFS

None of these systems communicates with the others. A student planning their next semester must manually piece together information from 5 to 8 different portals, each requiring a separate login.

User Segments

Choose one of the five user segments below or mix them. Each represents a distinct group facing real gaps in how institutional knowledge reaches them. Build your solution for the segment that your team connects with the most and dig deep into the problem faced

1. First-Generation Student	**Severity: Critical**
Core Problem	*The discovery gap is more severe than the access gap. They don't know what they don't know.*
Pain Point	• No awareness of what institutional data exists to help them make decisions
Pain Point	• Will never think to look for grade distribution data when choosing a course — the concept itself is unknown
Pain Point	• Relies entirely on word-of-mouth because official knowledge channels are opaque
Pain Point	• The system rewards students who already know how to navigate it, compounding existing inequity
Systems	Canvas / LMS, EAB Navigate, Banner SIS

2. International Student (F-1 / J-1 Visa)	Severity: Critical
Core Problem	*One visa question lives across 3 systems — and they often contradict each other.*
Pain Point	• Course load requirements vs. CPT/OPT eligibility windows live across the DSO portal, registrar, and co-op office — none are connected
Pain Point	• Historical CPT-eligible co-op placements are never surfaced; students navigate their search blind
Pain Point	• Visa status affects which institutional records a student can legally access, but the system never accounts for this
Systems	Banner SIS, NUworks / Handshake, EAB Navigate

3. Student with a Disability	Severity: Critical
Core Problem	*Accommodation data is split across 4 separate systems — none of them synchronized.*
Pain Point	• Accommodation records are fragmented across Disability Services, Housing, Academic Affairs, and individual faculty
Pain Point	• Accommodations must be fully re-verified every semester; no persistent record carries them forward
Pain Point	• University portals may not be screen-reader accessible — the help system is inaccessible to those who need it most
Pain Point	• IDEA and FERPA intersect here, creating compliance complexity that any solution must address
Systems	Disability Services Portal, Housing Systems, Canvas / LMS, Banner SIS

4. PhD / Research Student	Severity: High
Core Problem	*Internal research is invisible — duplication of effort is the norm, not the exception.*
Pain Point	• No internal index of research conducted at the institution; researchers routinely duplicate work done in other departments
Pain Point	• Cross-department collaboration is invisible — a CS PhD student cannot discover a Health Sciences lab with a relevant dataset
Pain Point	• Grant histories, IRB approvals, and lab data are locked behind faculty sponsorship
Pain Point	• Thesis archives are keyword-searchable, but no semantic or methodology-level discovery exists
Systems	Research Admin (COEUS/InfoEd), Library Systems (Ex Libris), Dept. SharePoints

5. Co-op Seeker	Severity: Critical
Core Problem	*All the data to optimize their co-op search exists within the university — students just cannot see any of it.*
Pain Point	• Historical placement data — which companies hired from which major, at which GPA, in which semesters — is never surfaced
Pain Point	• The relationship between elective choices and co-op outcomes is completely invisible to students planning academics
Pain Point	• Employer feedback from past co-op cycles exists as internal records but is never shown to students selecting employers
Pain Point	• International co-op seekers need CPT eligibility mapped to specific roles — a filter the system never does proactively
Systems	NUworks / Handshake, Banner SIS, EAB Navigate

Note: User groups overlap. An international student may also be a co-op seeker. When building your solution, consider how intersecting identities affect user needs.

Round 1: Qualifier Submission

Format	Virtual Submission	Deadline	March 7, 2026 — 11:59 PM EST

What to Submit

- PPT or PDF deck (maximum 15 slides, excluding cover and thank-you slides)
- Solution overview with the clear problem identified and proposed approach

Submission Rules

- Max file size: 50 MB. Accepted formats: .pptx or .pdf
- Late submissions are not accepted
- UI/UX design is NOT required — concept sketches or low-fidelity wireframes are welcome but optional
- Focus on problem validation and solution strategy — save prototype development for Round 2

Scoring Rubric

Category	Weight	What Judges Look For
Problem Statement	**30%**	Clear problem definition, user research evidence (3+ interviews), target user identification, problem validation and significance
Solution	**35%**	Addresses the problem effectively, innovation and creativity, competitive differentiation, technical feasibility
Clarity and Structure	**20%**	Clear narrative flow, professional presentation, logical organization, visual quality
Marketing Strategy	**15%**	Go-to-market approach, success metrics defined, growth plan, customer acquisition strategy

Scoring scale: 5 = Excellent, 3 = Good, 1 = Needs Improvement

Round 2: In-Person Finale

Format	In-Person Presentation at Product Conference	Date	March 15, 2026 at 2:00 PM

What to Present

- 10-minute presentation including Q&A
- Updated pitch deck
- Working high-fidelity prototype — clickable Figma, coded app, or AI-built prototype (lovable.dev)
- Live demo (optional, but strongly encouraged)

Presentation Rules

- 10-minute hard cap — a 30-second warning sounds at the 9:30 mark
- Hard stop at 13 minutes
- Minimum 3 of 5 team members must present
- Time penalty: -1 point per minute over 10 minutes (max -3 points)

Scoring Rubric

Category	Weight	What Judges Look For
Prototype and Design	**30%**	High-fidelity UI/UX design, working prototype or demo, clear user journey, app walkthrough quality, design polish and usability
Design Thinking	**20%**	User-centric approach, research-informed decisions, justified design choices, meaningful impact
Presentation	**20%**	Pitch effectiveness, time management (10 min max), team coordination, Q&A performance
Market Evaluation	**15%**	Target market clarity, market sizing (TAM/SAM/SOM), competitive analysis, market trends understanding
Marketing and Growth	**15%**	Positioning and value proposition, adoption strategy, metrics alignment, scalability plan

Prototype built using Figma (clickable), coded prototype, or AI tools like lovable.dev. AI tool usage must be disclosed.

What Strong Teams Do

For Round 1

- **Fall in love with the problem, not your solution.** Spend the first half of your time really understanding the problem before you design anything.
- **Validate through real conversations.** You need at least 3 user interviews. Find people who fit your chosen user segment and ask open-ended questions.
- **Be specific.** Vague problems get generic solutions. Pick one pain point and go deep on it.
- **Define success metrics early.** Know how you would measure impact before you build anything.
- **Know your competition.** Show you understand the landscape and explain clearly how your approach is different.

For Round 2

- **Build a real prototype.** Clickable Figma is the minimum. A working coded demo will stand out.
- **Practice your walkthrough.** Make the demo smooth and purposeful. Every screen should serve the narrative.
- **Polish your UI.** Design quality is 30% of your score in Round 2. Make it count.
- **Manage your time.** Aim for 7 to 8 minutes of presentation with 2 minutes of the prototype demo. 5 minutes of Q&A. Rehearse out loud.
- **Show, don't tell.** Demo the actual user experience rather than describing it.

FAQ

Q: Do I need a working prototype for Round 1?
A: No. Round 1 focuses on problem validation and strategy. Build your prototype only if you advance to Round 2.

Q: What counts as a working prototype for Round 2?

A: A high-fidelity, interactive design that demonstrates key user flows. This can be a clickable Figma prototype, a coded web or mobile app, an AI-built prototype (lovable.dev), or a video demo for physical products.

Q: Can I use AI tools to build my prototype?

A: Yes. Tools like lovable.dev, bolt.new, ChatGPT, and Claude are all permitted. You must disclose AI tool usage in your presentation.

Q: Can I update my deck between Round 1 and Round 2?

A: Yes. Refine based on judge feedback. Your core problem and solution should stay consistent.

Q: What happens if my prototype breaks during the demo?

A: Have a backup video walkthrough ready. Technical issues happen. Preparation and poise matter.

Q: Who can participate?

A: Open to all university students, including non-Northeastern students. Teams of 3 to 5 members. Mixed-institution teams are allowed.

Contact and Communication

Primary communication happens via email and the APMC WhatsApp community. For quick questions, reach us on Instagram.

Channel	Details
Email (Protothon team)	walunj.v@northeastern.edu | mookherjee.a@northeastern.edu
Instagram	@apmc_neu
LinkedIn	linkedin.com/company/apmcneu

Good luck. May the best team win!