PO2 Solution / Prototype: Assignment Guide & Rubric

Overview

PO2 counts for 20% of the final course grade, split into two rounds of 10% each: Round 1 at Demo Day and Round 2 on Dec. 11, after you integrate the feedback. It brings together all of your work this term. Each team delivers two solutions to the problem it studied: one that uses AI/tech and one that does not. Both should include features that effectively address the problem.

Who grades.-In Round 1, your team score is a weighted average of ratings from the instructor, community partners, and students, collected at Demo Day. The teaching team grades Round 2. Build and document your prototype so that someone who has not followed your project can understand and evaluate it.

Individual grades. A student who contributed to PO2 receives the team grade for the team portion. A student who did not contribute receives 0. The participation portion of Round 1 is an individual grade (see Grading rounds).

Final due date. Dec. 11 (Round 2). Round 1 is graded at Demo Day.

Grading rounds

Each round is worth 10% of the course grade.

Round	When	Weight	How it is scored
1. Demo Day	Demo Day	10%	Team prototype score (8%): the 12-point rubric, as a weighted average of instructor (50%), community partner (30%), and student (20%) ratings. Individual participation (2%): your online feedback forms.
2. Final	Dec. 11	10%	The instructor scores the revised prototype out of 15: the 12-point rubric plus Response to feedback (3 points).

Individual participation (Round 1)

At Demo Day, try other teams' prototypes and submit a rating and written feedback for each one through the online form. You are graded on attendance (a form for every assigned team) and on the quality of your feedback. Your ratings also make up the student share of each team's Round 1 score. This can be the same online form used for PO1 Part C, with a section for the prototype.

What to deliver

The two solutions should be independent alternatives that address the same problem for the same users. Each should be developed well enough for the grader to try its core features.

The AI/tech solution

- Use AI/tech where it adds real value, such as personalization, prediction, classification, generation, or recommendation, and not as decoration.
- Make clear what the AI/tech does, what it takes as input, and what it produces.
- Show how the solution handles AI limits: wrong or uncertain outputs, user override or correction, and privacy or bias concerns where relevant.
- The tech solution can be an actual AI that works, or a simulated AI.

The non-tech solution

- Design a non-tech solution. It could be a rule-based tool, a redesigned process, a physical artifact, intervention/program or a service.
- Make it a serious contender, not a deliberately weak baseline.

What makes features effective

- **Grounded:** each feature traces back to a need or insight from your contextual inquiry or testing.
- **Focused:** features address the core problem, not side issues. A few strong features are better than many shallow ones.
- **Usable:** target users can complete the main tasks without help.
- **Refined:** the design reflects your iterations and the feedback you received.

What to submit

- The working prototype or a link to it, such as an interactive mockup, an app, code, or a physical artifact with photos or video.
- A short guide covering:
    - the problem and target users
    - how to access and run each solution
    - the 2–3 key tasks to try
    - the main features, and the user need behind each one
- **Round 2 only: a feedback change log.** A table listing each piece of Demo Day feedback, who gave it and what you changed, or why you did not change it.

Rubric

Each criterion is scored from 4 (Exemplary) to 1 (Beginning), or 0 if it is missing, then converted to points: **points = weight × (level ÷ 4)**. The tech and non-tech solutions are scored separately, so a strong solution cannot hide a weak one. Every rater uses this rubric in Round 1, and the teaching team uses it in Round 2.

Criterion (pts)	4 – Exemplary	3 – Proficient	2 – Developing	1 – Beginning
Effectiveness at addressing the problem (3)	Both solutions directly and convincingly address the core problem for the target users;	Both address the problem well; one feature is	Address only part of the problem;	Little connection between the

Criterion (pts)	4 – Exemplary	3 – Proficient	2 – Developing	1 – Beginning
	every key feature serves that goal	loosely connected	several features are off-target	features and the problem
Tech solution (3)	AI used where it clearly adds value; its role, inputs, and outputs are clear; handles errors, uncertainty, and user correction; considers privacy and bias where relevant	AI adds value; minor gaps in explanation or error handling	AI feels bolted on, is poorly explained, or works inconsistently	AI missing, non-functional, or adds no value
Non-tech solution (3)	Complete, well-designed alternative that stands on its own as a credible option	Complete and workable with minor gaps	Partially developed; key flows missing or a deliberately weak baseline	Minimal or non-functional
Functionality & usability (2)	Core tasks work end to end in both solutions; intuitive and polished for the fidelity level; a new user needs no help	Core tasks work; a few usability issues	Several broken or confusing flows	Largely unusable
Grounding & documentation (1)	Each feature clearly traces to research or feedback; the Guide lets a grader access and test everything easily	Most features traceable; Guide mostly complete	Weak link to research; Guide incomplete or unclear	No visible link to research; no usable instructions
Response to feedback (3), Round 2 only	Every major piece of feedback is addressed, or a reason is given; change log complete; changes clearly improve the solution	Most feedback addressed; change log mostly complete	Some feedback addressed; change log thin or vague	Little evidence of changes; no change log

Individual participation rubric (Round 1, 4 points)

Criterion (pts)	4 – Exemplary	3 – Proficient	2 – Developing	1 – Beginning
Attendance (2)	Form submitted for every assigned team	Missed the form for one team	Missed forms for several teams	Submitted few or no forms
Quality of feedback (2)	Specific, constructive comments teams can act on; ratings match the comments	Useful but somewhat general	Generic praise or criticism;	Little or none

Criterion (pts)	4 – Exemplary	3 – Proficient	2 – Developing	1 – Beginning
			ratings with no comments	

Score sheet

Criterion	Weight	Level (0–4)	Points
Effectiveness at addressing the problem	3		
Tech solution	3		
Non-tech solution	3		
Functionality & usability	2		
Grounding & documentation	1		
Response to feedback (Round 2 only)	3		
Total	**(Round 1) / 15 (Round 2)**		

Course grade contribution. Round 1 = (team prototype score ÷ 12) × 8% + (participation ÷ 4) × 2%. Round 2 = (Round 2 score ÷ 15) × 10%. Example: 9/12 team score and 3/4 participation in Round 1 = 6% + 1.5% = 7.5%; 12/15 in Round 2 = 8%; PO2 total = 15.5% out of 20%.

Team checklist

- ☐ Visitors can interact with your tech solution’s core features from end to end
- ☐ Visitors can interact with your non-tech solution's core features
- ☐ Each feature is linked to a research insight or a piece of feedback
- ☐ Every member has submitted a feedback form for each assigned team at Demo Day
- ☐ Feedback change log completed for Round 2 (Dec. 11)