### AIDOaRt Internal Hackathon Questionnaire Survey Template

This questionnaire aims to collect valuable feedback on the AIDOaRt Internal Hackathons conducted within the project. All sensitive information will be made anonymous in any publications. Superscript star (\*) are open-ended questions.

# - Participant Role and Domain Areas -

This section aims to collect generic information about your experience outside the AIDOaRT project

1. Which partner(s) do you represent? \*

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- **2. Select your partner role:** (Choose one: *Solution provider (SP)* or *Use case provider (UCP)*)
- 3. Which of the following organization types describe your partner? (Tick all that apply: Small-medium enterprise (SME), Large company, University, Research institute)
- **4. Which is your domain?** (Tick all that apply: Automotive, Railway, Maritime, Construction, Digital Life, Manufacturing, Other)
- **5. Which is your research/business area?** (Tick all that apply: Model-driven Engineering, DevOps, AI/ML, Cloud Computing, Internet of Things, Microservice, Cyber-physical System, Testing, Other)
- 6. Please select your experience (in years) in the research/business area selected above: (Dropdown: 0-3, 3-5, 5-10, 10-15, 15-20, 20-30, 30+)
  - 7. Years of experience in DevOps: (Dropdown: 0-3, 3-5, 5-10, 10-15, 15-20, 20-30, 30+)
  - **8. Years of experience in MDE:** (Dropdown: 0-3, 3-5, 5-10, 10-15, 15-20, 20-30, 30+)
  - **9. Years of experience in AI:** (Dropdown: 0-3, 3-5, 5-10, 10-15, 15-20, 20-30, 30+)
  - **10. Summarize your experience with hackathons** (not limited to the AIDOaRt project), e.g., total participation, prizes won, etc. \*

# - Experience in the AIDOaRt Internal Hackathons -

This section aims to collect general information on participation in AIDOaRt Internal Hackathons. The questions that follow are generic, and not distinguished by the edition of the hackathon. However, please characterize the open responses as best you can, reporting your different experiences and participation details.

- 11. Which hackathon edition did you attend? (Dropdown: 1, 2, 3, 4, All)
- 12. How many AIDOaRt hackathons have you attended? \*
- 13. How were groups formed? (e.g., already formed outside/before hackathons, created specifically for hackathon challenges, with new partners or with partners you have collaborated with in the past, after group discussions or roundtables) \*
- 14. Was there interdisciplinarity within the team? (Yes, No)
- 2537 15. To what extent did the Use Case Provider (UCP) contribute to the challenge definition?\*
  - 16. To what extent did the Solution Provider (SP) contribute to the challenge definition?
  - 17. How did the synergy between the UCP and SP improve the development process? \*
- 2541 18. What was the step-by-step process that your team followed to design and develop applications/solutions 2542 in hackathons? \*
  - 19. Did you work with someone from a different domain? How did they influence the hackathon(s)? \*
- 20. Did you already have any idea about the challenge resolution before the hackathon? If yes, how was it generated? \*
  - 21. Did you get inspired by other challenges/teams? If yes, explain in what measure. \*

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#### Participation Process —

This section aims to collect detailed information on the process adopted during the hackathons. The questions that follow are generic, and not distinguished by the edition of the hackathon. However, please characterize the open responses as best you can, reporting your different experiences and participation details.

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#### Challenge definition —

Describing how the challenge was created and the adopted methodology.

- 22. Did you propose any challenges? If yes, how many did you propose? \*
- 23. Which technique(s) did you use in the challenge definition phase? (Select all that apply: Brainstorming,
  Brainwriting, Empathy map, Exploratory research, Persona, Scenarios, Other)
  - **24.** How satisfied are you with the challenge definition process? (Very Satisfied, Satisfied, Dissatisfied, Very Dissatisfied)
  - 25. Are you satisfied with the chosen challenge definition methodology? \*

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#### - Solution definition -

Describe how the solution was conceived or exploited..

- **26. Did you participate in the solution definition?** If yes, in how many challenges? \*
- 27. Which technique(s) did you use in the solution definition phase? (Select all that apply: Affinity diagramming, Card sorting, Concept mapping, Mind mapping, Persona, Other)
  - **28.** How satisfied are you with the solution definition methodology? (Very satisfied, Satisfied, Dissatisfied, Very dissatisfied)

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#### Solution development —

Describe how the solution was developed.

- 29. Did you participate in the solution development? If yes, in how many challenges? \*
- **30.** Which technique(s) did you use in the solution development phase? (Select all that apply: Brainstorming, Competitive testing, Lo-fi & Hi-fi prototyping, Minimum Viable Product (MVP), SCAMPER, Storyboards, Wizard of Oz, Other)
- 31. How satisfied are you with the delivery phase? (Very dissatisfied, Dissatisfied, Satisfied, Very satisfied)

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#### Delivery phase —

How the solution is presented in the pitch and released.

- 32. How was the pitch made? (e.g., who was the presenter, how many presenters) \*
- 2589 33. Did you develop a prototype application/tool? If yes, could you validate it with users or experts? \*
- 34. Did you conduct any testing phase? Which ones? \*
  - **35. Did the challenge(s) lead to scientific publication(s)?** If yes, how many and in which venue have they been published? \*

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# - Overall Judgment of the Process -

- 2596 2597 36. In how many phases did you participate? \*
  - 37. Which phase did you find most challenging? \*
- 599 38. Which phase did you find least challenging? \*
- 2600 Manuscript submitted to ACM

- 2601 39. Are you satisfied with the overall process? (Very satisfied, Satisfied, Dissatisfied, Very dissatisfied)
- 40. Please indicate the benefits of the hackathons related to the project development (e.g., achieving project goals, benefits in writing deliverables, fostering new collaborations) \*
  - **41. Please indicate the limitations or issues faced in the hackathons** (e.g., lack of input data, difficulties in challenge definition, issues in forming a team) \*
  - 42. Please indicate additional suggestions to improve the hackathons (e.g., methodology) \*

#### - Hackathon Continuation -

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2648 2649 This section aims to collect information about the continuity of challenges and collaborations.

- 43. How do you participate in the hackathons? (Choose one: In presence, Remotely, Both)
- 44. What are the main benefits of in-presence hackathons compared to virtual ones?\*
- 45. Did you participate in one or more challenges that spanned across different hackathons? (Continuity) \*
  - **46. In which phase(s) did you experience challenge continuation?** (Select all that apply: Challenge definition, Solution definition, Solution development, Deliver phase, None, All)
- 47. Did you change the methodology during the different hackathons? If yes, specify in which phase, otherwise select "None of them". \*
  - 48. If you changed the methodology, why did you change the methodology/approach during the evolution of the challenge? \*
  - 49. Has the team changed? If yes, specify how (e.g., number of members, additional members) \*
  - **50.** In your opinion, what are the factors that contribute most to the challenge continuation? (Select all that apply: Team size, Number of used technologies, Skill diversity, Skill matching, Technical preparation of SPs, Leading role of UCPs, Changes in team components, Other)
  - 51. Please provide any additional information. (Open text)
  - **52.** In your opinion, what are the factors that contribute most to the challenge modification/interruption? (If you select "Other", please provide a brief description) \*

# Additional Feedback —

- 53. Please provide additional feedback (e.g., on the whole process, possible improvements) \*
- **54. Did your team include people from other countries?** If yes, what issues or benefits did you encounter? (e.g., communication efforts, cultural aspects) \*
- **55.** Did the composition of the team affect the work process positively or negatively? Explain how (e.g., member experience, work commitments) \*
- **56. Did you or your team communicate with other teams?** If yes, did this communication help in the work process? Describe how (e.g., hints, explanations, concrete help, psychological support) \*
- **57. Did you already know other teams/personnel before the hackathon?** If yes, how did it affect the team/challenge definition? If not, did the hackathon ease the integration with teams? \*
- 58. Have your solution(s) been reused in other challenges/use cases? If yes, specify them and how your solution contributed. \*
- 59. Will you collaborate in the future with the same team/personnel? \*

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