DSC-WAV End of Fall 2020 Semester Project Survey

WAV Student Participant Survey

This research is being conducted to obtain information that will help us evaluate the NSF-funded project, The Data Science WAV: Experiential Learning with Local Community Organizations. This survey will ask about both your impressions and feedback about the DSC-WAV project this semester, and about your team's communication and workflow. We appreciate you taking the time to complete this. It will help us understand your experiences and also improve the project in the future. By continuing to the survey, you are consenting to participate in this research. Your responses, which will remain de-identified, will be recorded and saved in a log-in secured database. Only summaries of the data will be reported. A copy of the full consent form is available here.

 We expect that this survey will take you about 20 minutes to complete. Thank you!

1. Which of the following projects are you working on?
   Options removed for confidentiality

2. How well do you perceive the project went?

3. Did you feel like you had the resources and support you need from the faculty advisor and community organization?

4. About how much time (hours per week) did you spend on this project?
o   <5
o   5-10
o   11-15
o   16-20
o   >20

5. What skills or proficiencies did you gain from participating in this project?

6. Did your perspective on entering a data science career change as a result of this experience? Explain.

7. One of the approaches emphasized in the DSC project is the use of Agile, specifically the Scrum framework, to manage your project. This framework promotes the use of sprints to flexibly and iteratively set and meet project goals. In this section of the survey, you will be asked about your team's implementation of sprints.

8. Describe your team's process for sprint planning.

9. How did your team determine the scope of work included in each sprint?

10. This section will focus on your team's use and implementation of user stories to facilitate planning for your sprints.

11. Did your team write user stories to guide the sprint planning?
o   No
o   Yes

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12. Explain the process you team used to create the user stories (e.g., Was one person assigned to write these stories? Did all members of the group write these stories?) If you did not implement user stories, explain why not.

13. Throughout the project, how consistently did you and your team create user stories to guide writing the "to-do" items/tasks?

14. How useful did you find the user stories for each of the following:

Understanding the goals of the project (8)	▼ Extremely useful (1) ... Not at all useful (5)
Determining specific tasks you needed to accomplish (9)	▼ Extremely useful (1) ... Not at all useful (5)
Prioritizing the tasks to be completed (10)	▼ Extremely useful (1) ... Not at all useful (5)

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15. Explain why your team did not use user stories to guide the sprint planning.

This section will focus on the sprint review process with your team's community partner.

16. Did your team meet with the community partner and review progress after each sprint?

o No
o Yes

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17. Describe the process your team used to prepare for the sprint review with the community partner.

18. How did you present work to the community partner with the sprint review? (e.g., written report, slides)

19. Did your team communicate with and/or receive feedback from the community partner outside the formal sprint review meetings? If, so please describe those interactions.

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20. Explain why your team did not meet with the community partner and review progress after each sprint.

21. How often was work presented to the community partner and how were they presented (e.g., written report, slides)?

The next section will focus on the sprint retrospective, where your team met to discuss and reflect on your progress.

22. Did your team meet after each sprint review to self-evaluate and plan changes for the next sprint?
o No
o Yes

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    23. Describe a typical sprint retrospective for your team.

    24. Which components did the retrospective include? Please check all that apply.
- ▢ Evaluation of team progress
- ▢ Identification of challenges/issues
- ▢ Identification of backlogged tasks
- ▢ Reflection about team communication?
- ▢ Reflection about team workflow?
- ▢ Report from individual team members (e.g., status updates, backlog)

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    25. Explain why your team did not do a retrospective after each sprint.

    26. One tool for organizing project work in the Scrum framework is a Kanban board. In this section of the survey, you will be asked about your team's use of a Kanban board.

    27. Q24 Did your team use a kanban board to organize the project's work?
- o No
- o Yes

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    28. What tool did your team use to create the Kanban board?

29. Describe how the Kanban board was updated. (e.g., Who was responsible for updating the Kanban board? How often was the Kanban board updated? Did this work well?)

30. Describe how you interacted with the Kanban board while working on the project?

31. Did your team manually add/edit the Kanban board or was it all automated through issues?

32. How useful did you find the Kanban board for each of the following:

Communicating about the progress/issues with the faculty coordinator (1)	▼ Extremely useful (1) ... Not at all useful (5)
Communicating progress/issues with the community partner (2)	▼ Extremely useful (1) ... Not at all useful (5)

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33. Explain why your team did not use a Kanban board to organize the project's work.

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34. How did your team organize the project's work? What tools did you use?

One tool emphasized on the DSC-WAV projects this semester was to use GitHub. In this section of the survey, you will be asked about your team's (and your individual) interaction with GitHub.

35. Did you or your team use GitHub for the project?
o   No
o   Yes

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36. Describe how your team used GitHub to facilitate work on the project.

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37. Did the process for using GitHub change over the course of the project? Explain.

38. Did your team have more than one GitHub repo? If so, why? How did you decide when a new repo was warranted?

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39. Please explain why your team did not use GitHub?

40. Please explain how you document your project's work and materials?

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41. Consider your own individual use of GitHub on the project for the following questions.

42. Describe your personal workflow using GitHub. For example, did you integrate this with RStudio? Use the GitHub Desktop app? When/how often did you make commits? Open issues?

43. How has this project helped you learn about and use GitHub?

44. What aspects of using gitHub do you feel confident about after participating in this project?

45. What aspects of using gitHub do you not feel confident about after participating in this project, if any?

One process introduced in the onboarding workshop was code review. This helps ensure that your team's code works, is well-written, and reproducible. In this section of the survey, you will be asked about how your team engaged in code review.

46. Did your team engage in code review?
o   No
o   Yes

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47. What is the process your team uses to review code? Are there specific things you are looking for in the code (style, validation tests) or do you just check that it runs?

48. How do you decide who reviews the code?

49. Is the process of code review documented or does this primarily happen in an informal setting (e.g., in stammtisch)?

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50. Please explain why your team did not engage in code review.

51. How did you ensure the fidelity/validity of your team's code?

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52. Which communication tools did your team use to facilitate work on the project (e.g. Kanban board, Slack, email, text)?

53. If your team used multiple tools to communicate, how did you decide which tool to use for different functions? For example, did you use one tool to organize meetings and another to track progress?

54. How much team communication was informal and not documented on formal team tools (e.g., Slack or GitHub) For example, how often did our team use text messages to communicate with one another?

55. Do you have any other comments/concerns?