P ___   Date / Time _____

Introduction (0-5m)

Thank you for coming.

Here in the Design Lab, we are interested in **how people work with data**, especially how they use notebooks, like Jupyter Notebook, to track and share their work.

Today we will **help you install a Jupyter Notebook extension** designed to help you clean and navigate your notebooks. We would like you to **use it for a week or two** during your everyday work and then we will **find a time to discuss** your experience with the tool.

We asked you to come to the lab so you **can try the extension** on one of our machines before installing it on your own. That way you can ask us questions about it's features and we can troubleshoot any bugs or installation problems. This should only take about 20-30 minutes.

        [What questions do you have before we begin?]

Before you start we would like you to **formally consent** to participating in a study. That helps us publish any interesting results from what you or others tell us about your experience with the tool. This **consent form is general**, so much of it won't apply to you today. The most relevant paragraphs are these two that say we will have you install and use a Jupyter Notebook extension, and will have you schedule an interview in a week to two to discuss your experience with the software. Go ahead and **review the form**, let us know if you have any questions, and sign it when you are ready to continue.

        [Give participants a minute to read and sign the form]

Great! One question before we start

1. What is your field? What project are you working on now?

Main Task (5-20m)

Over the last few months we have been developing a Jupyter Notebook extension to help analysts like yourself **clean and navigate notebooks**. Let me demonstrate what the extension can do. Janus has two main features. First, it **lets you hide cells**, or parts of cells that you may not want to see all the time. Second, it **keeps track of changes** in the notebook and let's you view these either on a cell-by-cell basis, or across the whole notebook.

[Demonstrate features]

[Do you have any questions about how these features work?]

For the next 20 minutes we would like you to **try the tool for yourself** before installing it on your own machine. Here is what we would like you to do. We have an **example notebook that compares housing and rental prices in five major cities** on the United States' west coast. We are going to give you about 5-10 minutes to "clean" the notebook using Janus.

[Any questions before we begin?]

Great! One last thing. I would like to **turn on screen recording** so we can see how you use the software. Would that be okay?

[Turn on Camtasia]

Cleaning for Colleague
Let us show you an example notebook…

[pull up and describe main sections of the notebook]

Imagine a **lab mate wants to do something similar** and asked if you could send them your notebook. **How might you clean the notebook before sending it to them**? Feel free to run code, add markdown headers, delete cells, or use any of Janus' features. Essentially anything you think would help make this notebook clearer. And please **talk aloud** as you go. We are interested both in what you think of Janus, and what you want to do that neither Jupyter not Janus currently supports.

[If the participant is silent, ask "What's going on here?"]

1. In what ways were you trying to clean the notebook? What was your goal?

2. In what ways did Janus help or hinder you?

3. What would you do differently if you were just cleaning it for yourself. Or for your PI?

Schedule Interview (30-40m)
Great! That's it for today.

Now let us help you install Janus on your own machine. To be clear, Janus is still in alpha, so you may encounter bugs. However our main goal is not to find bugs, but to have you help think about what a tool like Janus might help you do. What interesting things can you do with it now, and how might you improve it. We think it is easier to answer those questions after using it for a week or two, so **are you ready to install it?**

> [walk them through installing Janus]

If the software gives you any trouble, you can disable it using these two commands. We will **email them** to you, and they are available on the tools repository, too.

> jupyter nbextension disable --py janus
> jupyter serverextension disable --py janus

Also, feel free to **leave notes**. If you encounter a bug, or an interesting use of Janus, go ahead and leave a quick comment here, or email us. We may be able to fix it and send you updated code.

> [demonstrate experience sampling tool]

Great! Now one last thing. Can we **schedule a 30 minute interview** in a week or two to discuss your experience with this new tool?

> [Schedule Interview]

Date / Time _____

Exit Interview (0-30m)
Thanks for coming. We have just a couple final questions and then we can help you uninstall Janus, if you would like.

1. First, can you **open a notebook** where you used Janus this week? How did you use, or try to use, Janus in this notebook?

2. Thinking about this notebook or another time you used Janus this week… What did you do that was **different** from how you would normally organize, navigate, or analyze data in your notebook? Was Janus **helpful or a hindrance** in this case?

3. Did you encounter any bugs or interesting uses of Janus? [Look at their comments]

4. Were there specific moments where you wanted Janus to help you do something, that it could not?

5. If you used Janus, **when did you organize your notebooks** with it? During the analysis, or when you were done?

6. Who were you cleaning your notebooks for? Yourself, a colleague, or a PI? What would you have done differently if cleaning it for someone else?

7. Did you show a notebook organized with Janus to anyone this week? If so, what happened?

8. What other thoughts do you have about Janus? It could either be about your experience this week, features you would like Janus to have, or even an idea for a different extension altogether.

Great. And that's it. Thank you so much for participating. As one last step, **can we download anonymous usage data** to help us understand how you used Janus this week?

[Download anonymized database]

9. Would you like to uninstall Janus?

[If so, help them uninstall]