

Tasks and Metrics

In this week's lab, you will be prioritizing features, writing task descriptions and defining metrics for a hypothetical usability test of Desire-To-Learn, the classroom learning system for students (<http://d2l.msu.edu/>).

You should assume that you've been asked by your supervisor to conduct a usability study that will be used to make usability recommendations for redesigning the D2L interface, and that the target audience for the product is undergraduates and graduate students at Michigan State University.

Keep an eye on the time as you are completing the lab. Class begins at 12:40pm, and ends at 2:30pm. If you spend an equal amount of time on all parts of the lab, that's about 36 minutes for each part. However, some parts might take longer than others, so please read through the entire lab before you begin working.

Part One: Choose Features to Test

Before you can write task descriptions and choose metrics, you must choose which features you will focus on in your usability study. A "feature" is a specific thing that the product does; not a task, but a kind of functionality, or action or behavior that the product supports. So, for example, "accessing session content" would be a task (something the user does), whereas "Content" would be a feature (an aspect of the product that enables the user to complete a task).

In a real world UX evaluation setting, you would choose which features to test based on things like the goals for the product, or your user research about what the product is designed to do. Other ways you might choose include which features are newest or used most often, considered to be a problem for users based on user feedback, for which errors are particularly serious or damaging, or features that are considered particularly important by users.

For this lab, you should select **TWO features that are related to each other** for which you will be writing task descriptions and defining metrics in Part Two and Part Three of the lab. To select the features, you should follow the instructions below to create a feature prioritization table:

- Make a list of the most important tasks that can be completed with the product.
- Make a list of the features that are needed to complete those tasks. You should have at least five or six.
- Make a table with four columns. Label the first column "Features" and enter your list of features in that column, each in its own row.
- Label the second column "Importance". Rate each feature on a scale from 1 to 5 where 5 means it is critical to the success of the product, and 1 means it's not important.
- Label the third column "Frequency". Rate how frequently you think users will use the feature on a scale from 1 to 5 where 5 means all the time and 1 means almost never.
- Label the fourth column "Score". Multiply the numbers in the Importance and Frequency columns for each row, and the **TWO features** with the highest scores are the ones you'll be designing tasks and metrics for.

Part Two: Task Description

Next, you should write a description of ONE task that you could give to a participant in a usability test, that involves (or "exercises") both of the two features with the highest scores from your feature prioritization table. Your task description should be written as though you will hand the participant a piece of paper with the task description written on it, during an actual usability study.

Recall from the lecture on Tuesday, February 19 (“Usability Testing Overview and Tasks and Measurement”) that tasks must be representative of typical user activities. They also must be reasonable, described in terms of users’ end goals, and phrased as something related to users’ lives. They also must have a clear end point, so that both you and the participant know when the task has been successfully completed. Finally, they should avoid expert jargon, and they should NOT include cues that give away how to successfully complete the task.

After you have written the task description, make a list of the steps the usability study participant would need to do in order to successfully complete the task.

Part Three: Usability Metrics

Finally, based on the task description and the list of steps to successfully complete the task, you should choose **TWO different usability metrics** for the task.

See the lecture slides from Tuesday, February 19 (“Usability Testing Overview and Tasks and Measurement”) or the PDF readings on D2L from “Measuring the User Experience” in the “Usability Testing Overview and Tasks and Measurement” module for information about different types of usability metrics.

You should then write a detailed description of each metric you have chosen. Your descriptions should include:

- The type of metric it is (e.g., performance or usability issue? Learnability or efficiency? Etc.)
- Criteria for how you will measure the two metrics you have chosen (e.g., what does “success” look like, and how will you know when you see it? How will you differentiate different types of errors/failures from each other? Etc.)
- What data you will need, and how you could collect it
- Why that metric makes sense for this task

What to turn in:

You should upload your work to the D2L dropbox titled, “SUBMIT Lab Choosing Tasks and Metrics.” You should submit a document that contains the following:

- Your list of tasks and feature prioritization table, from Part One
- Your task description, from Part Two
- Your list of steps to successfully complete the task, from Part Two
- Your description of the two usability metrics you have chosen, from Part Three
- Don’t forget to include your name at the top of the page of the document you turn in (you will not lose points if it is missing)

This lab is due by 11:59pm on Friday, February 22.