Human Computer Interaction
Think Aloud Tutorial

In this tutorial you will be practicing the Think Aloud protocol. The Think Aloud methodology is one of the discount usability methodologies and is very commonly used in User Interface evaluation.

Today you will be forming teams of 2 or 3 people. One person will play the role of the *participant* and one will play the role of the *researcher*. The *participant* has an easy job, all they have to do is follow instructions and use the provided interface. The *researcher* will be following the script on the next page and teaching the *participant* how to think aloud and guidng them through the activity.

Your tutor is going to start by showing you how to "think aloud" and demonstrating how that part of the protocol works. You are then going to decide who will be the participant and who will be the researcher. The researcher will read aloud the script on the next page. When they get to the end they will give the participant the first two tasks on the last page of this handout. The participant will try and complete the tasks while the researcher watches.

As the researcher you should be taking notes and identifying issues with the website.

- What tasks and subtasks is the participant engaging in?

- Do they experience any critical incidents?

When the participant is done with the first two tasks the researcher should first answer any questions the participant has. Then they should ask the particpant about anything the participant did that was confusing or unclear.

The researcher and the participant should then swap rolls. If a nearby group is done at the same time as you, you should also swap team members. However, swaping team members is not necessary. The new researcher should then start over from the beginning by reading aloud the script and training their new participant on think aloud.

When both team members have completed the full protocol you should discuss your observations with each other. Did the interface support these tasks well? What might you change about how this site works to better support these tasks?

1 Script (read all of this aloud to the participant)

Hello my name is: [Your name]

Today we will be using the Virgin Trains East Coast website to do typical transportation tasks like finding a train route that matches a schedule or finding the cheapest route. You will not be entering any financial information and your participation today is purely voluntary, you may stop at any time.

The purpose of this exercise is identify issues with the Virgin Trains East Coast website. Please remember we are testing the website, we are not testing you.

1.1 Think aloud training

In this observation, we are interested in what you think about as you perform the tasks we are asking you to do. In order to do this, I am going to ask you to talk aloud as you work on the task. What I mean by "talk aloud" is that I want you to tell me everything you are thinking from the first time you see the statement of the task till you finish the task. I would like you to talk aloud constantly from the time I give you the task till you have completed it. I do not want you to try and plan out what you say or try to explain to me what you are saying. Just act as if you were alone, speaking to yourself. It is most important that you keep talking. If you are silent for a long period of time, I will ask you to talk. Do you understand what I want you to do?

Good. Now we will begin with some practice problems. First, I will demonstrate by talking aloud while I solve a simple problem: "How many windows are there in my mother's house?"

[Demonstrate talk aloud.]

Now it is your turn. Please talk aloud as you multiply 120 * 8.

[Let them finish]

Good. Now, those problems were solved all in our heads. However, when you are working on the computer you will also be looking for things, and seeing things that catch your attention. These things that you are searching for and things that you see are as important for our observation as thoughts you are thinking from memory. So please verbalize these too.

As you are doing the tasks, I won't be able to answer any questions. But if you do have questions, go ahead and ask them anyway so I can learn more about what kinds of questions the Virgin Trains website brings up. I will answer any questions after the session. Also, if you forget to talk aloud, I'll say, "please keep talking."

Do you have any questions about the talk aloud?

Now I have some tasks printed out for you. I am going to go over them with you and see if you have any questions before we start.

[Hand them the task.]

Here is the task you will be working on. Why don't you read it aloud just so you can get comfortable with speaking your thoughts?

Do you have any questions about the task?

You may begin.

Task 1

Find the Virgin Trains East Coast website and find a train to London tonight that leaves right after your last class. Go through the booking right up till it asks you to sign in and then stop.

For this task you will be pretending that you are going to go visit a friend in London who has asked you to come down. Please make any decisions around price and coach selection like you normally would.

Task 2

Figure out the difference between the "Scottish Executive Package" and a "First Class Ticket". Your friend has offered to pay for you to have one of those two types of tickets. Which one would you prefer?

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Please switch participants, and re-train for think aloud. This time use the prompt:
"How many doors do you have to go through between the inside of the ITO office and this tutorial room?"
....

Task 1

Find the Virgin Trains East Coast website and use it to find a train route to GCHQ's headquarters also known as "the donut". You are welcome to use other sites to help you accomplish this task. Go through the booking right up till it asks you to sign in and then stop.

Task 2

Pretend you had booked the prior ticket to GCHQ. Now something has come up and you need to leave an hour later. Find out if you can use the same ticket you booked, or if you need to purchase a different ticket.