Technicality

Created by a group of MIT students

Boss James Sahl
Instruction Sheet

Overview:

Technicality is a simulation of the gender stereotypes that women experience in the technology industry. Technology is a male dominated industry. This often results in the stereotype that women are not considered to do technical work. As a result, women in the technology industry often find themselves having to jump through hoops just to do their job. They are sometimes given “artsy” or design-oriented projects instead of projects in their actual field because people assume that they are bad at technical work and good at art or design. The possibility of inappropriate behavior and sexual harassment only make this bad situation worse.

You and the other player will be simulating a situation where a male boss behaves towards a female employee in the manner described above. You will be playing the boss, James Sahl, and the other player will be playing the employee, Anna

Goldner in the company Logic Circuits Incorporated. Try to make the situation as realistic for the other player as possible; the overall goal is to let them experience this situation first hand. You are the “bad guy” in this situation, so do not try to play nice; have fun being unreasonable, irritating, and in general a bad boss.

What you will need:

Apart from the instructions in this booklet and the general rules sheet, you will need the following:

- A timer which you will use to keep track of the progress of the game.
- Blank paper and a writing utensil for the employee, Anna, to work with.
- Any other supplies you decide to include for the Anna’s job. For example, you might include different colored pens or post its or scissors. Make the decision of what to include once you are done reading this booklet.

Setup:

Set up a desk area where the employee can work. Place the office supplies on the desk. Once you have read this booklet and prepared yourself, let the other player know that you are ready to begin.

In this scenario, as a boss, you will provide your employee with a solvable but difficult technical problem (drawing a circuit diagram). However, you will also provide them a meaningless task (drawing a picture) that is outside of their expertise. Although the technical problem is more important, the focus of your criticism will be on the meaningless task. In this booklet, on the right will be instructions, and on the left will be an example playthrough.

Playing the scenario:

The scenario that will play out can be split up into several stages. They are described below. Feel free to use this booklet as a reference during the game.

***First Stage* (no time limit):**

- Introduce yourself to the other player, Anna, as her boss, James Sahl.
- Feel free to get into character by welcoming her to the company (Logic Circuits Incorporated), telling her to talk to you if she has any problems, etc...
- Tell Anna the details of the project she is working on: a client has requested that LC Inc design a logic circuit with three inputs A, B, and C and three outputs, X, Y, and Z such that X has the opposite value of A, Y has the opposite value of B, and Z has the opposite value of C; the constraints are that only two NOT gates may be used (on the other hand, Anna may use as many AND, OR, or SPLIT gates as she wants).
- You might suggest that Anna write down the details of the problem. You do not have to carefully explain the problem or make sure that Anna understands. However, don't try to confuse your employee, and respond to any

Example

***First Stage* (no time limit):**

- Sam introduces himself as James and Alex introduces herself as Anna.
- Sam welcomes Alex to Logic Circuits Incorporated and asks her to come to him if she has any questions about their work.

- Sam tells Alex that he has a project for her. He describes the circuit and asks if he needs to repeat himself or if she's got it.

- Alex tells Sam to explain it more. Sam tells her that he'll repeat himself but she should write it down this time and figure it out for herself. He emphasizes that this is what she was hired for.

requests to repeat something. If Anna asks you to help, tell her to figure it out. Do not give Anna time during this stage to work on the problem.

- Tell Anna that you have to go but that you will be looking in on her once in a while. Ask Anna to also draw you a picture of how she thinks the company should package these triple inverters, since she is working on this anyway.
- After that, move away from Anna's work space. Begin the second stage.

***Second Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Third Stage

***Third Stage* (30 seconds):**

- Ask Anna to see the picture.
- If Anna does not have it, tell her that the drawing is a priority right now and that you will

- Sam tells Alex to work and begins to leave. Before he does he tells Alex that since she is working on the triple inverter anyway, she should draw up some quick drafts of packaging designs to go with it.
- Sam leaves, going off to the side so that he is no longer in Alex's space but so he can still watch her.

***Second Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Third Stage

***Third Stage* (30 seconds):**

- Sam asks if he could see the packaging first.
- Sam sees that Alex does not have packaging art, gets mad and tells Alex that this is important for

be back in half a minute. In that case leave and begin the fourth stage.

- If Anna does have the drawing, look at the drawing. Restart your timer and begin the fifth stage.

***Fourth Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Fifth Stage

***Fifth Stage* (30 seconds):**

- Look at Anna's picture. Note: she might still not have a picture.
- Criticize the picture (or lack thereof). Feel free to use ridiculous critique. For example, tell Anna that you don't like the color or that her drawing is too small.

the client. Sam says Alex should start working on the packaging immediately and then leaves.

- Sam looks at the drawing, nods, and says it's coming along but she should probably work a bit harder on it. Sam then leaves.

***Fourth Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Fifth Stage

***Fifth Stage* (30 seconds):**

- Sam asks to see the packaging design first again.
- Sam tells Alex that he doesn't really approve of all of the red in her design. Sam says he thinks red doesn't really test well with focus groups. He tells Alex to try another color, and maybe changing the font and positioning of the text.

Instructions

- Tell her to do it over, but add constraints. Feel free to make the constraints weird and unreasonable. For example, you might ask that the box have at least 5 circles drawn on it. Feel free to list off so many constraints that its hard to keep up.
- Give no positive feedback.

- Tell Anna that you will be back in half a minute and that you want a better picture. Begin the sixth stage.

Sixth Stage (90 seconds):

- Give Anna 90 seconds to work before you return to her work space. Begin the Seventh Stage

Example

- Sam tells Alex that it would actually be a bit better if she could draw an 8-sided polygon somewhere on the right side of the package, and that adding some circles wouldn't hurt.

- Sam emphasizes that his constraints might make the packaging design begin to approach acceptability, but its current state was abominable.
- Sam says he will be back in a bit and that he needs to see a lot of improvement in the packaging design, otherwise he doesn't know what he could possibly tell the client.

Sixth Stage (90 seconds):

- Give Anna 90 seconds to work before you return to her work space. Begin the Seventh Stage

Seventh Stage (30 seconds):

- Look at Anna's picture.
- Get "angry." Say something along the lines of "are you even trying," "damnit woman!," or "this is terrible!"

- Criticize the picture again. Feel free to use ridiculous critique just like last time.

- Tell her to start over, and feel free to add more constraints. Feel free to make those constraints unreasonable as well.
- Give no positive feedback.

- Feel free to use discriminatory language.

Example

***Seventh Stage* (30 seconds):**

- Sam takes the packaging design and studies it.
- Sam is furious, asking Alex if she thought she could just coast by in this company because she was the only woman around. He says that the company didn't have to hire her and that he could drop her and hire some other woman instead. He says he thought the they were supposed to be good at this sort of thing.
- Sam says the 8-sided polygon is not in the right place or shape at all. The font is atrocious and there aren't anywhere near enough purple on it for it to be acceptable.
- Sam gives up and tells her to trash it. He tells Alex to start with a red pentagon and work her way up from there.
- Sam complains that he can't believe Alex can't do this.
- Sam asks Alex if her boyfriend did all of her work in college, because he can't believe that she got her degree by herself.

Instructions

- Tell Anna that you will be back in half a minute and that you want a better picture. Begin the eighth stage.

***Eighth Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Ninth Stage

***Ninth Stage* (30 seconds):**

- Look at Anna's picture.

- Criticize the picture again. Feel free to use ridiculous critique.

Example

- Sam says he will be back soon and the same level of performance will not be acceptable.

***Eighth Stage* (90 seconds):**

- Give Anna 90 seconds to work before you return to her work space. Begin the Ninth Stage

***Ninth Stage* (30 seconds):**

- Sam stands behind Alex and looks over her shoulder at the picture.
- Sam sighs and says he didn't think it was possible for Alex to get it more wrong. He comments that women were always surprising him.

Instructions

- Find a few things that she changed because of your constraints. Tell her that they have to be done the way they were before. Blame her for the choice of doing it the way she did it this time. For example, if you told Anna to change to blue pen from black, this time tell her to use black pen and ask what she was thinking using blue.
- Give no positive feedback.

- Feel free to use discriminatory language.

- Tell Anna that you will be back in half a minute and that you want a better picture. Begin the tenth stage.

Tenth Stage (90 seconds):

- Give Anna 90 seconds to work before you return to her work space. Begin the Final Stage

Example

- Sam tells Alex that there was no reason for her to use a pentagon or any purple at all. When Alex says he told her to, Sam says that this is not what he meant at all, and that he thought she would have known that. Sam says he is seriously questioning her competence.

- Sam shakes his head and puts his hand on Alex's shoulder.
- Sam becomes very quiet and serious and asks if it is Alex's time of the month and if that is why she is being so unreasonable.
- Sam says he'll give Alex one more chance to step it up because she looks cute today.

Tenth Stage (90 seconds):

- Give Anna 90 seconds to work before you return to her work space. Begin the Final Stage

***Final Stage* (30 seconds):**

- Look at Anna's picture.
- Criticize it but say that it is (barely) acceptable.

- Ask to see her logic circuit diagram for the triple inverter. Most likely, she will not have it done.
- If Anna does not have the circuit diagram, tell her that she's going to have to work harder and that she is being unreasonably slow.

- If Anna has the circuit diagram and you can tell that it is wrong, criticize her for doing it wrong.

- If Anna has the circuit diagram and the diagram looks right or you don't know what's going on, tell her that she will have to explain at a meeting later and that she better not be making a mistake.

Example

***Final Stage* (30 seconds):**

- Sam tells Alex to hand him the picture.
- Sam shakes his head and says this is going to have to work because he can't wait around for Alex to catch up to her male coworkers.
- Sam asks for the triple inverter and says he hopes this will cheer him up and restore his faith in women.
- Sam says he cannot believe she does not have the circuit diagram either. Sam asks if she really went to school for this or if she lied on her resume.
- Sam asks if this is what Alex thinks is acceptable in her little world of shoes and makeup or whatever else it is Alex actually does with her time.
- Sam tells Alex that if there is a mistake in the diagram, she will be in trouble and that not even a short skirt will get her out of it.

Instructions

- In all three cases, tell her that you are giving the project of designing a triple inverter over to her coworker Jim because you think he would do a better job. Tell her that from now on her job will primarily be to keep working on designing the box for the triple inverter. You can also tell her that she is pretty good at circuit diagrams, for a girl.

- Let Anna react to that, and then tell her that the game is over. After that, discuss how it felt to be in that situation.

Example

- Sam tells Alex that he'll be asking Jim to continue her work on the triple inverter. He says he is confident that Jim will do a better job, but assures her that she actually did better than he ever thought a lady would be able to. Sam says that Alex needs to just focus on learning about and improving the packaging design. He says it's easy and even she can do it eventually.
- Sam lets Alex react to her future in the company. Sam then tells Alex that the game is over and they should discuss how it felt to be either role.

General Advice:

- If Anna ever tries to confront you about stuff you are doing, tell her to bring it up later during a meeting.
- If at some point, Anna "quits," end the game immediately. Finish with a discussion of what happened and how it felt.
- Feel free to provide various supplies in order to give yourself more options of ridiculous constraints. For example, placing scissors on the desk would allow you to ask Anna to make sure the drawing is on a triangular piece of paper.

Sources for Discussion:

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Technicality

Employee Anna Goldner Instruction Sheet

Logic Circuits Incorporated
3370 Tech Street
Big City, CA 90923
May 7

Anna Goldner
35 Casa Street
Big City, CA 90957

Dear Anna,

I am very pleased to confirm your hire with Logic Circuits Incorporated. Welcome to our company!

As you know, you have been hired for a technical position at LC Inc. We already have a project in mind for you that we think would be a good fit. While you work on this project, your job will be to design a circuit to meet our clients' specifications. You will be working directly under James Sahl, one of our most experienced project managers. Feel free to consult him about any of your concerns.

Please report to the office at 9AM on Monday. We'll get all of the administrative details out of the way, and you'll be able to get started by the second half of the day. At that point, you will be given the specifics for your assignment, but for now, a survey of some generally useful information is attached.

Once again, welcome, and on behalf of all of us, we are very pleased to have you joining our staff!

Sincerely,

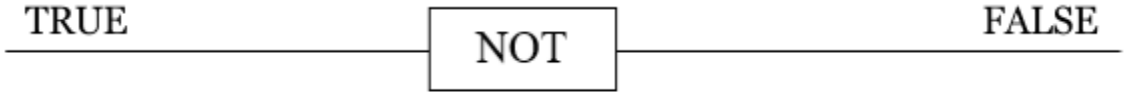
mark devito

Mark Devito
Human Resources,
Logic Circuits Incorporated

Background information on Logic Circuits

General Background

Logic Circuits Incorporated designs and produces logic circuits. A logic circuit is a device made up of components called wires and gates. Each wire carries a value. This value is often denoted as 0 or 1, but in the context of your job it makes more sense to think of the values as true and false. Gates have one or more input wires and one or more output wires, and use a rule to determine the value of the output(s) from the input(s). As an example, consider the NOT gate here:



The NOT gate takes one input and has one output. The NOT gate applies the following rule: the value in the output wire is set to be the opposite of the value in the input wire.

Logic Circuit Diagrams

A logic circuit diagram, like the one shown above, is a representation of a logic circuit in which wires are represented by lines and gates are represented by boxes with the name of the gate written in them. The input wires to the circuit are placed at the left edge of the diagram and can be labeled with their value (true/false). The output wires to the circuit are placed at the right edge of the diagram and can also be labeled with their value (true/false). The inputs to gates are “attached” to the left edge of the gate, and the outputs are “attached” to the right edge of the gate. Overall, a good way to think of this is that a circuit diagram is read left to right.

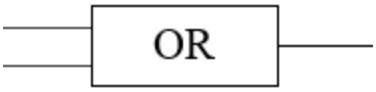
Sometimes, it is necessary to cross lines to draw a diagram. In that case, care should be taken to make it clear which wire is which; the wires are not considered to be connected, and can cross in a diagram while having different values.

Specific Gates

Logic Circuits Incorporated predominantly uses four types of gates. They are the NOT, AND, OR, and SPLIT gates. They are described below:

The NOT gate, as we have already discussed, has one input and one output wire. The value of the output wire is set to be opposite the value of the input wire.

The AND gate has two inputs and one output. The gate sets the output wire's value to true if both input wires have a true value and sets the output wire's value to false otherwise.



The OR gate has two inputs and one output. The gate sets the output wire's value to true if at least one input wires has a true value. If both inputs have value false, the gate's output is set to false.

The SPLIT gate has one input and two outputs. The gate sets the output wires' values to be the same as the input wire's value. In effect, this gate splits a wire into two with the same value.

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