Welcome to our user study

In this study, we would like to collect data about your experiences with privacy protection mechanisms. All questions will focus on privacy-related aspects with a particular focus on smart devices (i.e., internet-connected and sensor-enhanced devices).

Please complete this 30-minutes survey.

Definition of Privacy in the Internet of Things (IoT)

Please read the following information on privacy carefully. As already mentioned, we would like to collect data about your privacy behavior. Therefore, all questions will focus on privacy and privacy-related issues.

Privacy is the right to prevent the disclosure of personal information to others. *

*Please note that this questionnaire focuses on **Privacy in the Internet of Things (IoT)**, which is the right to **prevent the disclosure of personal information specifically to nearby technical devices** that may include invasive sensors such as video cameras or microphones.*

*Hence, protecting one's **Privacy in IoT, does not refer to privacy invasions directly caused by persons** who, for example, can listen in on conversations or read private messages.*

*Reference: Westin, A., 1967. Privacy and Freedom. Atheneum, New York.

True False Quiz

To test your knowledge, read each statement carefully and decide if it is true or false.

Privacy in IoT is someone's right to keep their personal matters and relationships secret from nearby technical devices.

true	false

Snooping through a friend's diary is an example of invasion of Privacy in IoT.

true	false

Privacy in IoT means the protection of people against a possible attack or other crime.

true	false

Privacy in IoT is the right to prevent the disclosure of personal information to nearby sensor enhanced devices.

true	false

Privacy in IoT is the act of keeping someone or something safe from injury, damage, or loss.

true	false

Please indicate the degree to which you agree/disagree with the following statements.

The term "technical systems" refers to apps and other software applications, as well as entire digital devices (e.g., mobile phone, computer, TV, car navigation).

	completely disagree	largely disagree	slightly disagree	slightly agree	largely agree	completely agree
I like to occupy myself in greater detail with technical systems.	○	○	○	○	○	○
I like testing the functions of new technical systems.	○	○	○	○	○	○
I predominantly deal with technical systems because I have to.	○	○	○	○	○	○
When I have a new technical system in front of me, I try it out intensively.	○	○	○	○	○	○
I enjoy spending time becoming acquainted with a new technical system.	○	○	○	○	○	○
It is enough for me that a technical system works; I don't care how or why.	○	○	○	○	○	○
I try to understand how a technical system exactly works.	○	○	○	○	○	○
It is enough for me to know the basic functions of a technical system.	○	○	○	○	○	○
I try to make full use of the capabilities of a technical system.	○	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree						strongly agree
It usually bothers me when companies ask me for personal information.	○	○	○	○	○	○	○
All the personal information in computer databases should be double-checked for accuracy-no matter how much this costs.	○	○	○	○	○	○	○
Companies should not use personal information for any purpose unless it has been authorized by the individuals who provided the information.	○	○	○	○	○	○	○
Companies should devote more time and effort to preventing unauthorized access to personal information.	○	○	○	○	○	○	○
When companies ask me for personal information, I sometimes think twice before providing it.	○	○	○	○	○	○	○
Companies should take more steps to make sure that the personal information in their files is accurate.	○	○	○	○	○	○	○
When people give personal information to a company for some reason, the company should never use the information for any other reason.	○	○	○	○	○	○	○
Companies should have better procedures to correct errors in personal information.	○	○	○	○	○	○	○
Computer databases that contain personal information should be protected from unauthorized access-no matter how much it costs.	○	○	○	○	○	○	○
It bothers me to give personal information to so many companies.	○	○	○	○	○	○	○
Companies should never sell the personal information in their computer databases to other companies.	○	○	○	○	○	○	○
Companies should devote more time and effort to verifying the accuracy of the personal information in their databases.	○	○	○	○	○	○	○
Companies should never share personal information with other companies unless it has been authorized by the individuals who provided the information.	○	○	○	○	○	○	○
Companies should take more steps to make sure that unauthorized people cannot access personal information in their computers.	○	○	○	○	○	○	○
I'm concerned that companies are collecting too much personal information about me.	○	○	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree						strongly agree
Consumer online privacy is the consumers' right to exercise control and autonomy over decisions about how their information is collected, used, and shared.	○	○	○	○	○	○	○
Consumer control of personal information lies at the heart of consumer privacy.	○	○	○	○	○	○	○
I believe that online privacy is invaded when control is lost or unwillingly reduced as a result of a marketing transaction.	○	○	○	○	○	○	○
To show that you are paying attention, please select "strongly disagree" option as your answer.	○	○	○	○	○	○	○
Companies seeking information online should disclose the way the data are collected, processed, and used.	○	○	○	○	○	○	○
A good consumer online privacy policy should have a clear and conspicuous disclosure.	○	○	○	○	○	○	○
It is very important to me that I am aware and knowledgeable about how my personal information will be used.	○	○	○	○	○	○	○
It usually bothers me when online companies ask me for personal information.	○	○	○	○	○	○	○
When online companies ask me for personal information, I sometimes think twice before providing it.	○	○	○	○	○	○	○
It bothers me to give personal information to so many online companies.	○	○	○	○	○	○	○
I'm concerned that online companies are collecting too much personal information about me.	○	○	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
My typical approach is to trust new technologies until they prove to me that I shouldn't trust them.	○	○	○	○	○
I usually trust a technology until it gives me a reason not to trust it.	○	○	○	○	○
I generally give a technology the benefit of the doubt when I first use it.	○	○	○	○	○
I believe that most technologies are effective at what they are designed to do.	○	○	○	○	○
A large majority of technologies are excellent.	○	○	○	○	○
Most technologies have the features needed for their domain.	○	○	○	○	○
I think most technologies enable me to do what I need to do.	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

Please note that the answer scale here is different from the previous questions.

	Never	Rarely	Sometimes	Often	Always
When I'm prompted about a software update, I install it right away.	○	○	○	○	○
I try to make sure that the programs I use are up-to-date.	○	○	○	○	○
I manually lock my computer screen when I step away from it.	○	○	○	○	○
I set my computer screen to automatically lock if I don't use it for a prolonged period of time.	○	○	○	○	○
I use a PIN or passcode to unlock my mobile phone.	○	○	○	○	○
I use a password/passcode to unlock my laptop or tablet.	○	○	○	○	○
If I discover a security problem, I continue what I was doing because I assume someone else will fix it.	○	○	○	○	○
When someone sends me a link, I open it without first verifying where it goes.	○	○	○	○	○
I verify that my anti-virus software has been regularly updating itself.	○	○	○	○	○

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
When browsing websites, I mouseover links to see where they go, before clicking them.	○	○	○	○	○
I know what website I'm visiting based on its look and feel, rather than by looking at the URL bar.	○	○	○	○	○
I do not change my passwords, unless I have to.	○	○	○	○	○
I use different passwords for different accounts that I have.	○	○	○	○	○
I do not include special characters in my password if it's not required.	○	○	○	○	○
When I create a new online account, I try to use a password that goes beyond the site's minimum requirements.	○	○	○	○	○
I submit information to websites without first verifying that it will be sent securely (e.g., SSL, "https://", a lock icon).	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
Generally, I diligently follow a routine about security practices.	○	○	○	○	○
I always pay attention to experts' advice about the steps I need to take to keep my online data and accounts safe.	○	○	○	○	○
I am extremely knowledgeable about all the steps needed to keep my online data and accounts safe.	○	○	○	○	○
I am extremely motivated to take all the steps needed to keep my online data and accounts safe.	○	○	○	○	○
I often am interested in articles about security threats.	○	○	○	○	○
I seek out opportunities to learn about security measures that are relevant to me.	○	○	○	○	○

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
When walking through stores, I can't help touching all kinds of products.	○	○	○	○	○	○	○
Touching products can be fun.	○	○	○	○	○	○	○
I place more trust in products that can be touched before purchase.	○	○	○	○	○	○	○
I feel more comfortable purchasing a product after physically examining it.	○	○	○	○	○	○	○
When browsing in stores, it is important for me to handle all kinds of products.	○	○	○	○	○	○	○
If I can't touch a product in the store, I am reluctant to purchase the product.	○	○	○	○	○	○	○
I like to touch products even if I have no intention of buying them.	○	○	○	○	○	○	○
I feel more confident making a purchase after touching a product.	○	○	○	○	○	○	○
When browsing in stores, I like to touch lots of products.	○	○	○	○	○	○	○
The only way to make sure a product is worth buying is to actually touch it.	○	○	○	○	○	○	○
There are many products that I would only buy if I could handle them before purchase.	○	○	○	○	○	○	○
I find myself touching all kinds of products in stores.	○	○	○	○	○	○	○

To make sure that you are paying attention, please select "slightly agree" option as your answer.	○	○	○	○	○	○	○
I can't help touching all kinds of objects.	○	○	○	○	○	○	○
Touching objects can be fun.	○	○	○	○	○	○	○
I place more trust in objects that can be touched before using them.	○	○	○	○	○	○	○
I feel more confident using an object after touching it.	○	○	○	○	○	○	○
I find myself touching or physically manipulating all kinds of objects.	○	○	○	○	○	○	○

In the next section, you will see a few examples of objects, that protect your privacy against other devices such as cameras or microphones (aka. privacy mechanisms).

Please focus only on how these mechanisms protect your privacy from technical devices, rather than other persons. Please read the description of each mechanism carefully, click on the example to see how it works and finally answer the questions.

```
PHP code
question('TP10');
$pages = valueList('TP10', NULL, 'label');
setPageOrder($pages, 'PMQ');
```

```
question('TP10')
```

Voting booth

A voting booth is a room or cabin in a polling station that protects the secrecy of the ballot. No camera can therefore record your vote.
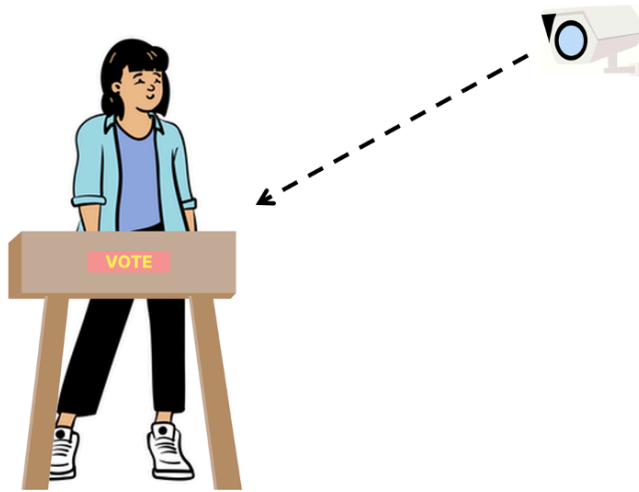
```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="vobooth1.png" id="myImage" width="500"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom: 30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("vobooth1")) {
        image.src = "vobooth2.png";
    }else {
        image.src = "vobooth1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

Distance markings

Distance markings are markings placed at certain intervals on the floor to keep people a distance apart from each other. Such markings prevent eavesdropping: from a certain distance a microphone is not able to record your conversation (e.g. with a pharmacist).
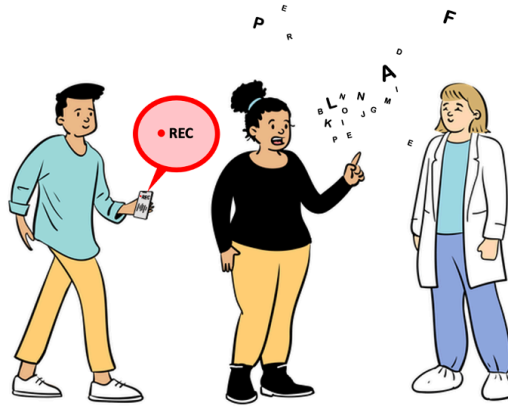
HTML code

```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="distancemarking1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom:30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("distancemarking1")) {
        image.src = "distancemarking2.png";
    }else {
        image.src = "distancemarking1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

[   ]

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

[   ]

Dressing room curtain

Dressing room curtains are a piece of material which creates a barrier between you changing clothing and nearby cameras.
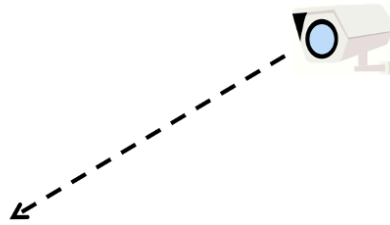
```
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="curtain1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom:30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("curtain1")) {
        image.src = "curtain2.png";
    }else {
        image.src = "curtain1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

_____

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

1. Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

_____

Privacy shield on PIN pad

A privacy shield is a cover placed around a keypad. It prevents cameras from recording your PIN.

```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="privacyshield1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom:30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("privacyshield1")) {
        image.src = "privacyshield2.png";
    }else {
        image.src = "privacyshield1.png";
    }
  }
</script>
</center>
```
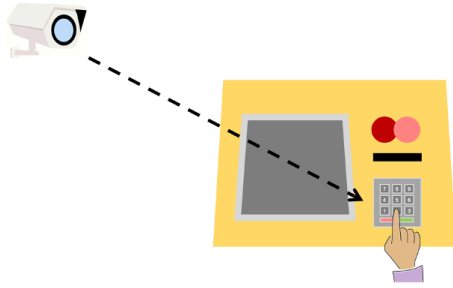
Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

[   ]

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

[   ]

Remote control

A remote control allows you to manipulate the volume of a device, such as a TV or speakers. You can increase the volume of your device to make sure that a nearby microphone is not able to record your conversation.
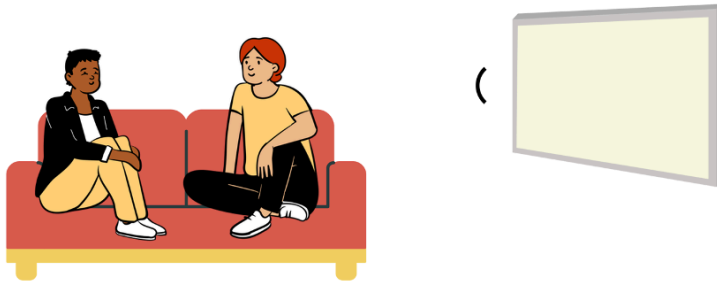
```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="remotectrl1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top:20px; margin-bottom:30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("remotectrl1")) {
        image.src = "remotectrl2.png";
    }else {
        image.src = "remotectrl1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

[   ]

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

[   ]

Webcam cover

A webcam cover is a small sliding mechanism that is attached to your webcam. It allows you to cover the webcam and avoid being recorded by it.
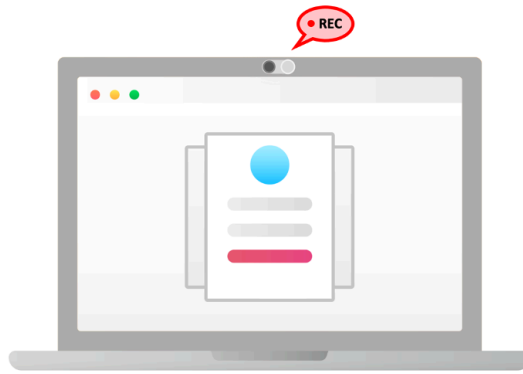
```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="wcover1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom:30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("wcover1")) {
        image.src = "wcover2.png";
    }else {
        image.src = "wcover1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

[   ]

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

[   ]

Headphones

Headphones are small speakers which you wear over your ears. With headphones, you can listen to private voice messages and no nearby microphone can record them.

```html
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="headphones1.png" id="myImage" width="400"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom: 30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("headphones1")) {
        image.src = "headphones2.png";
    }else {
        image.src = "headphones1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○
Please specify the alternatives you would resort to:							

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

Sunglasses

Sunglasses are glasses with tinted lenses. By wearing sunglasses, you can prevent your face from being recognized by nearby cameras.
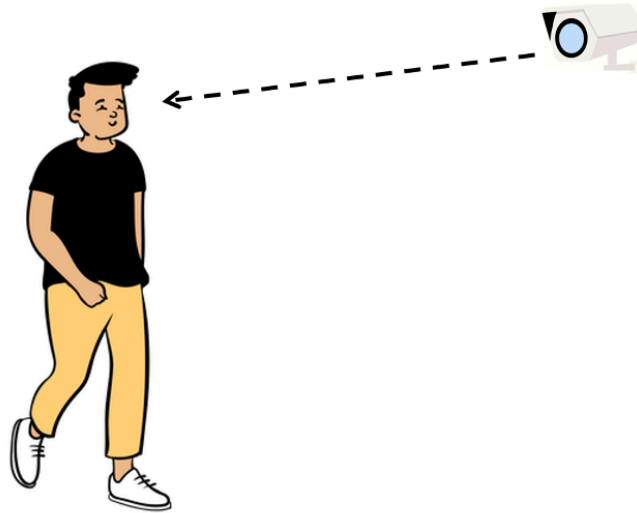
```
HTML code
<style>
.button {
  align-items: center;
  background-color: #FFFFFF;
  border: 1px solid rgba(0, 0, 0, 0.1);
  border-radius: .25rem;
  box-shadow: rgba(0, 0, 0, 0.02) 0 1px 3px 0;
  box-sizing: border-box;
  color: rgba(0, 0, 0, 0.85);
  cursor: pointer;
  display: inline-flex;
  font-family: Arial;
  font-size: 15px;
  font-weight: 600;
  justify-content: center;
  line-height: 1.25;
  margin: 0;
  min-height: 3rem;
  position: relative;
  text-decoration: none;
  transition: all 250ms;
  touch-action: manipulation;
  vertical-align: baseline;
  width: auto;
}

.button:hover,
.button:focus {
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.1) 0 4px 12px;
  color: rgba(0, 0, 0, 0.65);
}

.button:hover {
  transform: translateY(-1px);
}

.button:active {
  background-color: #F0F0F1;
  border-color: rgba(0, 0, 0, 0.15);
  box-shadow: rgba(0, 0, 0, 0.06) 0 2px 4px;
  color: rgba(0, 0, 0, 0.65);
  transform: translateY(0);
}
</style>

<center>
<img src="sunglasses1.png" id="myImage" width="550"> <br>
<input type="button" class=button style="margin-top: 20px; margin-bottom: 30px" onclick="changeImage()" value="Click here!"/>
<script>
  function changeImage() {
    var image = document.getElementById('myImage');
    if (image.src.match("sunglasses1")) {
        image.src = "sunglasses2.png";
    }else {
        image.src = "sunglasses1.png";
    }
  }
</script>
</center>
```

Click here!

Please focus on how the object described above protects your privacy from technical devices, rather than other persons.

	Yes	No	I don't know
I have used the object described above in the past.	○	○	○
I have used the object described above in the past to protect my privacy from other technical devices.	○	○	○

To what extent do you agree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
If I were to use the object described above, it would be to protect my privacy from other technical devices.	○	○	○	○	○	○	○
It is important to me that I own the object described above.	○	○	○	○	○	○	○
I am convinced that the object described above protects my privacy from other technical devices.	○	○	○	○	○	○	○
If the object described above is not installed by default, I would try install it myself or resort to a similar alternative to protect my privacy from other technical devices.	○	○	○	○	○	○	○

Please specify the alternatives you would resort to:

[   ]

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
I would prefer using a purely digital alternative to the object described above to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○

Why would you prefer the object described above or a digital alternative?

Please indicate your reasons briefly.

[   ]

The following questions all **refer to the eight privacy mechanisms we presented to you in this questionnaire** (voting booth, distance markings, dressing room curtains, PIN-pad privacy shield, remote control, webcam cover, headphones and sunglasses).

Please indicate the degree to which you agree/disagree with the following statements.

	strongly disagree	disagree	slightly disagree	neither agree nor disagree	slightly agree	agree	strongly agree
Touching privacy mechanisms can be fun.	○	○	○	○	○	○	○
I place more trust in privacy mechanisms that can be touched.	○	○	○	○	○	○	○
I feel more confident using a privacy mechanism after touching it.	○	○	○	○	○	○	○
Having the object described above nearby makes me aware that my privacy could be invaded.	○	○	○	○	○	○	○
Having the object described above nearby makes me consider to use it to protect my privacy.	○	○	○	○	○	○	○
It is easy to understand how the presented privacy mechanisms protect my privacy from other technical devices.	○	○	○	○	○	○	○
I can easily verify by myself if the presented privacy mechanisms protect my privacy from other technical devices.	○	○	○	○	○	○	○
I would prefer using a purely digital alternative instead of the presented privacy mechanisms to protect my privacy from other technical devices (e.g. automatically blurring my body/data on camera images, jamming of microphones).	○	○	○	○	○	○	○
I think that the presented privacy mechanisms protect my privacy better from other technical devices than purely digital alternatives.	○	○	○	○	○	○	○
I place more trust in the presented privacy mechanisms compared to purely digital alternatives.	○	○	○	○	○	○	○

Demographics

Finally, a few questions about yourself.

2. With which gender do you identify most?

○ female

○ male

○ other

○ prefer not to say

3. How old are you?

I am ⬚ years old.

4. What is the highest degree or level of education you have completed?

○ No schooling completed

○ Some High School, no diploma

○ High School

○ University Entrance Qualification

○ Professional Education

○ Bachelor's Degree

○ Master's Degree

○ Ph.D. or higher

○ Other:

---

5. In which country do you live?

Country: [   ]

---

6. Which smart devices do you use regularly?

Select all the devices you use on a regular basis.

☐ smartphone

☐ smart headphones (i.e., internet-connected or voice controlled)

☐ smart watch (e.g., Apple Watch, Samsung Galaxy Watch)

☐ tablet

☐ fitness tracker (e.g., FitBit, Koretrak, Garmin)

☐ smart digital camera (i.e., internet-connected or voice controlled)

☐ smart speaker

☐ smart TV (i.e., internet-connected or voice controlled)

☐ current generation gaming console (i.e., internet-connected or voice controlled)

☐ smart hub with screen (e.g., Amazon Echo Show, Facebook Portal)

☐ smart video doorbell (i.e., internet-connected or voice controlled)

☐ smart indoor/outdoor security cameras (i.e., internet-connected or voice controlled)

☐ laptop/desktop PC

☐ smart printer (i.e., internet-connected or voice controlled)

☐ smart garage door opener (i.e., internet-connected or voice controlled)

☐ smart thermostat (i.e., internet-connected or voice controlled)

Page 23
End

Thank you for completing this questionnaire!

Click '**Next**' and you will be redirected back to the Prolific app.

Last Page