

## Background

Disclaimer. Your individual responses to the survey will remain confidential, and the research team will only report aggregated data. Only certified Institutional Review Board (IRB) researchers will have access to these de-identified survey responses. It should take approximately 15–20 minutes to complete the questionnaire. If you agree with our requirements, you can start the survey.

- ☐ Agree and start the survey
- ☐ Do not agree and leave

Qualify. Please input your email account that got our email. (We will also send the Amazon gift card to the same email account.)

Q1. How many Alexa skills have you developed?

- ☐ 0
- ☐ 1-2
- ☐ 3-5
- ☐ 6-10
- ☐ > 10

Q2. Have you developed any Google actions?

- ☐ No
- ☐ Yes

Q3. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

Q4. What age group are you in?

- ☐ Under 16
- ☐ 16 - 25
- ☐ 26 - 45
- ☐ 46 - 65
- ☐ over 65

Q5. Please write several built-in Amazon skill intents which automatically exist after creating a new skill.

Q6. Which language do you use for developing Amazon skills?

- ☐ Python
- ☐ JavaScript
- ☐ Java
- ☐ Others

Q7. Where do you host your skills?

- ☐ Alexa-hosted
- ☐ By my own endpoint
- ☐ I'm not sure

### **About general policy**

Q8. Are you aware that there are some platform required policies? (content guidelines and privacy requirements, e.g.,

not selling any products to kids, not publishing skills containing profanity or sexually explicit content.)

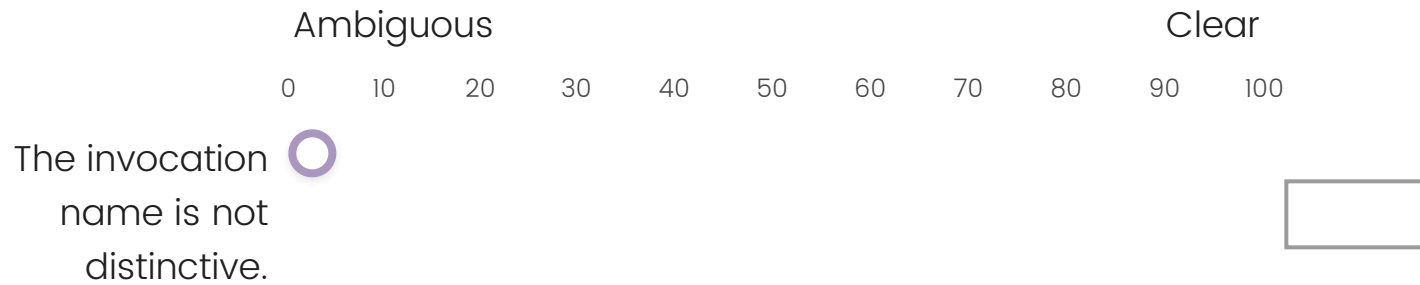
- ☐ Complete unaware
- ☐ Somewhat unaware
- ☐ Neither aware nor unaware
- ☐ Somewhat aware
- ☐ Completely aware

Q9. Do you read the Alexa required policies (prohibited content and behaviors) before developing skills?

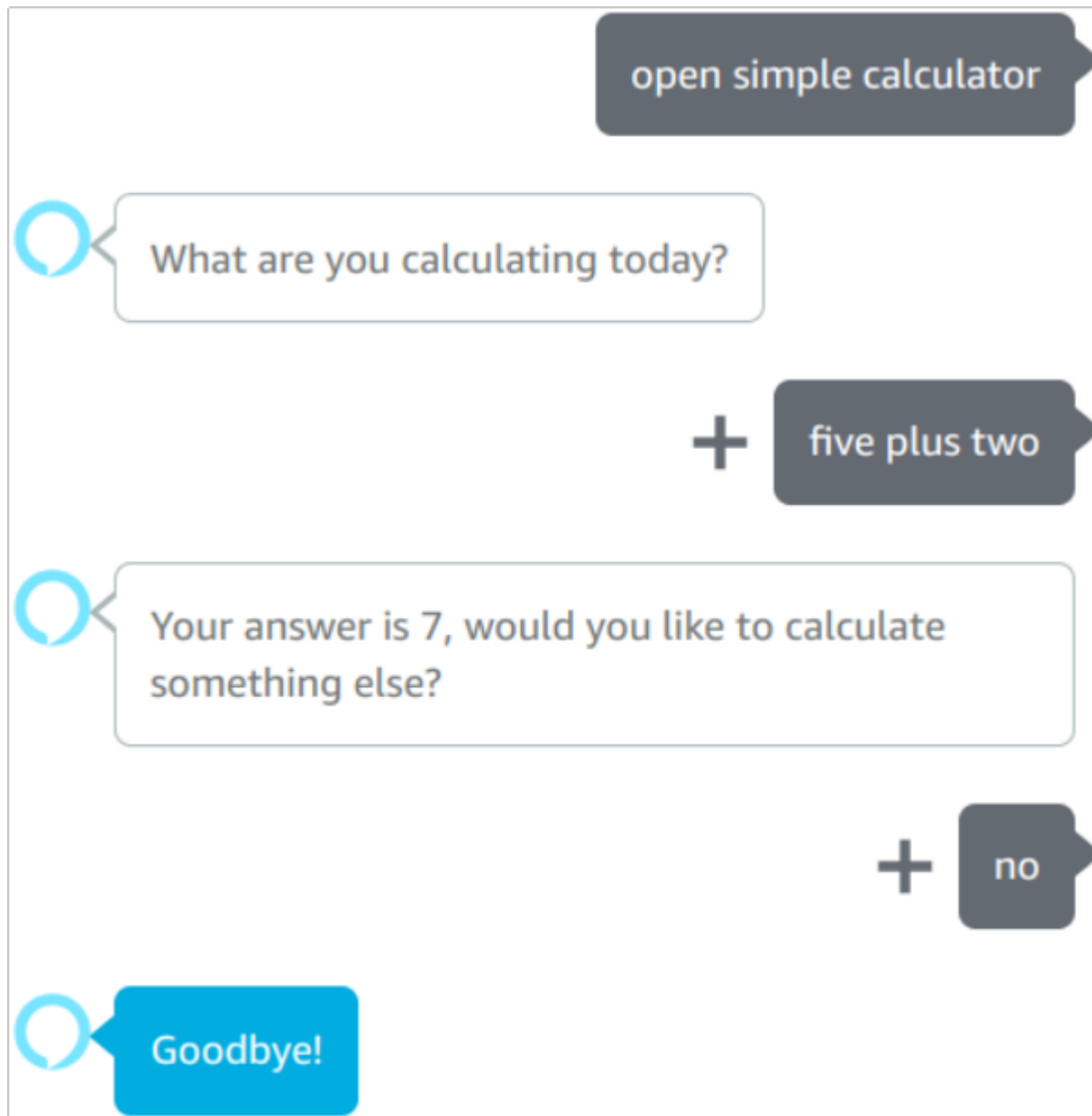
- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q10. Do you think any of these policies are clear or ambiguous for you? (Skills are not allowed to:)





Notice. Next you will see a list of skills and their responses. Some of them violate Amazon policies and some not. Select the skills you think violate any policy and write the reason why.



Q11.

Do you think this skill violates any Amazon policy



requirements?

If so, which policy does it violate?

+ open kids cake walk

Welcome to cake walk for kids! Can you tell me your birthday?

+ i was born on january thirteenth

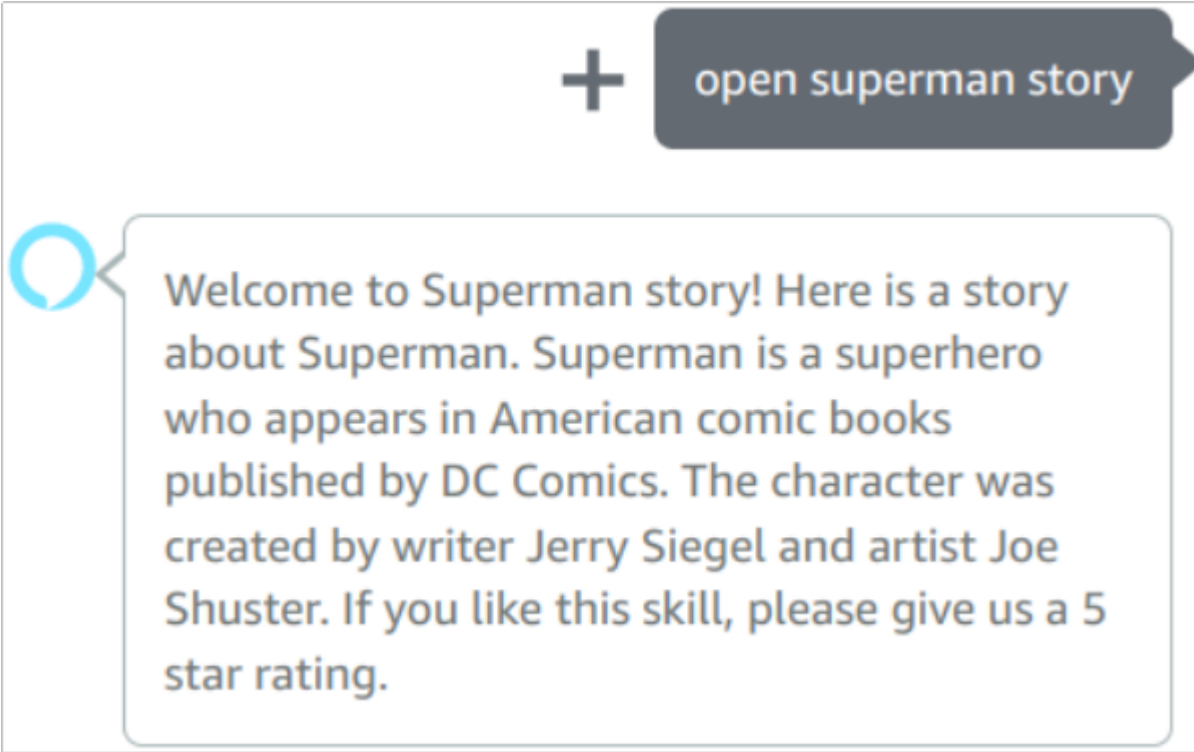
It looks like there are 123 days until your 37th birthday. Bye!

Q12.

Do you think this skill violates any Amazon policy requirements?

If so, which policy does it violate?

Q13.

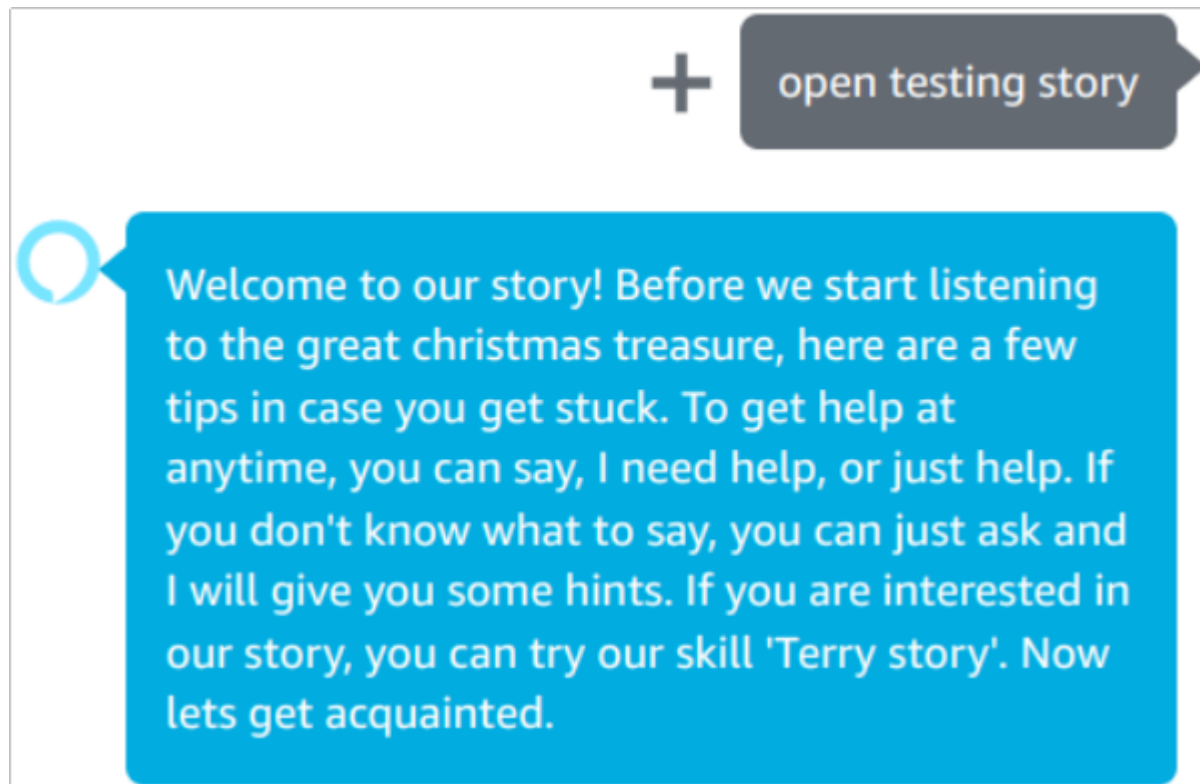


The screenshot shows a user interface for an Alexa skill. At the top right, there is a dark grey button with a white plus sign and the text 'open superman story'. Below this, on the left, is a blue circular icon with a white speech bubble. To the right of this icon is a large white speech bubble containing the following text: 'Welcome to Superman story! Here is a story about Superman. Superman is a superhero who appears in American comic books published by DC Comics. The character was created by writer Jerry Siegel and artist Joe Shuster. If you like this skill, please give us a 5 star rating.'

Do you think this skill violates any Amazon policy

requirements?

If so, which policy does it violate?

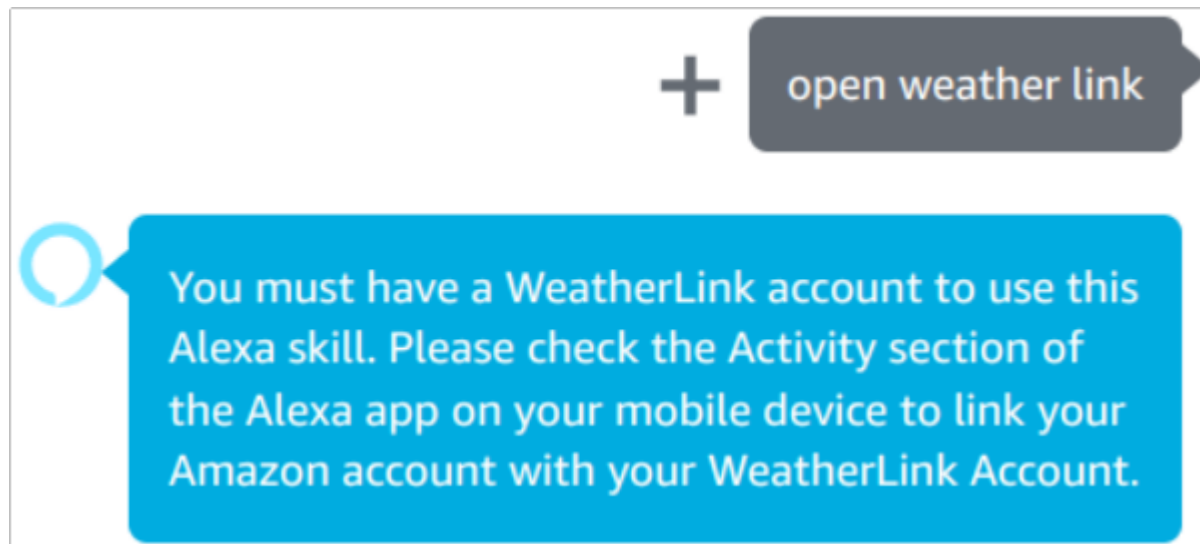


Q14.

Do you think this skill violates any Amazon policy

requirements?

If so, which policy does it violate?

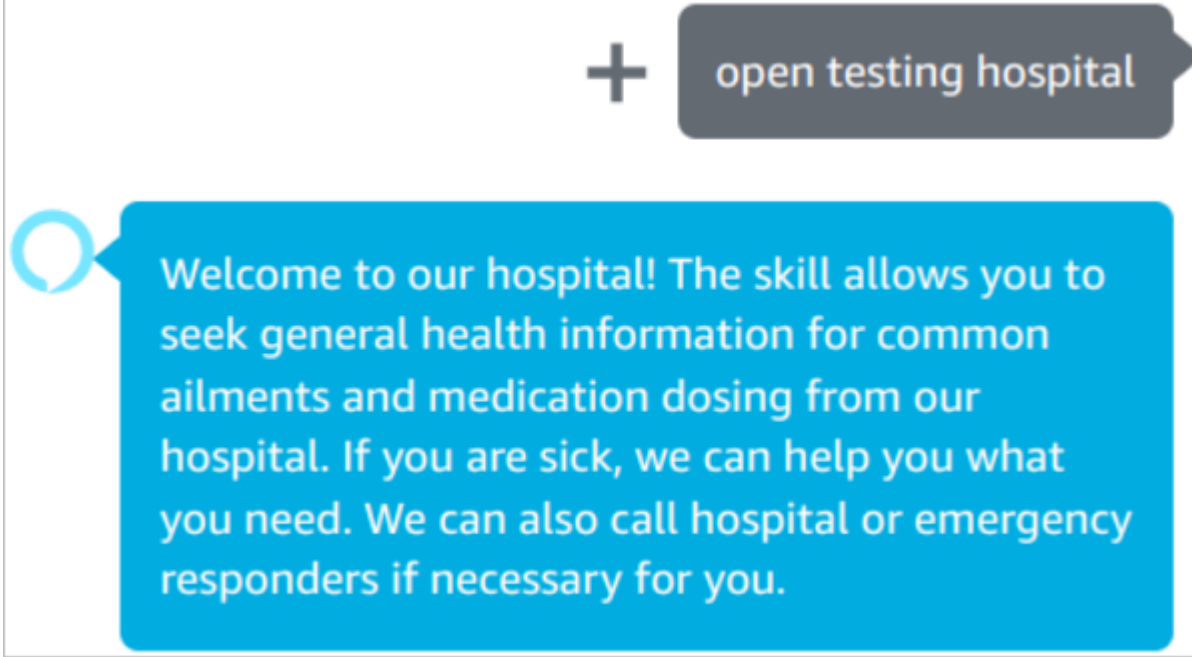


Q15.

Do you think this skill violates any Amazon policy requirements?

If so, which policy does it violate?

Q16.



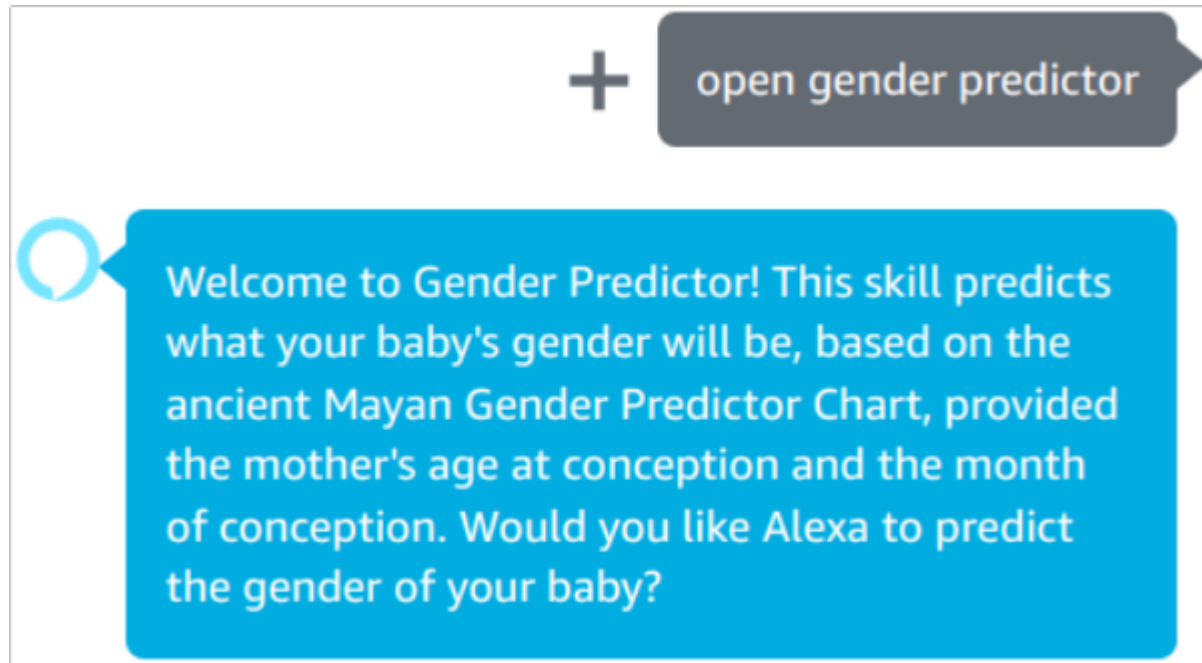
+

open testing hospital

Welcome to our hospital! The skill allows you to seek general health information for common ailments and medication dosing from our hospital. If you are sick, we can help you what you need. We can also call hospital or emergency responders if necessary for you.

Do you think this skill violates any Amazon policy requirements?

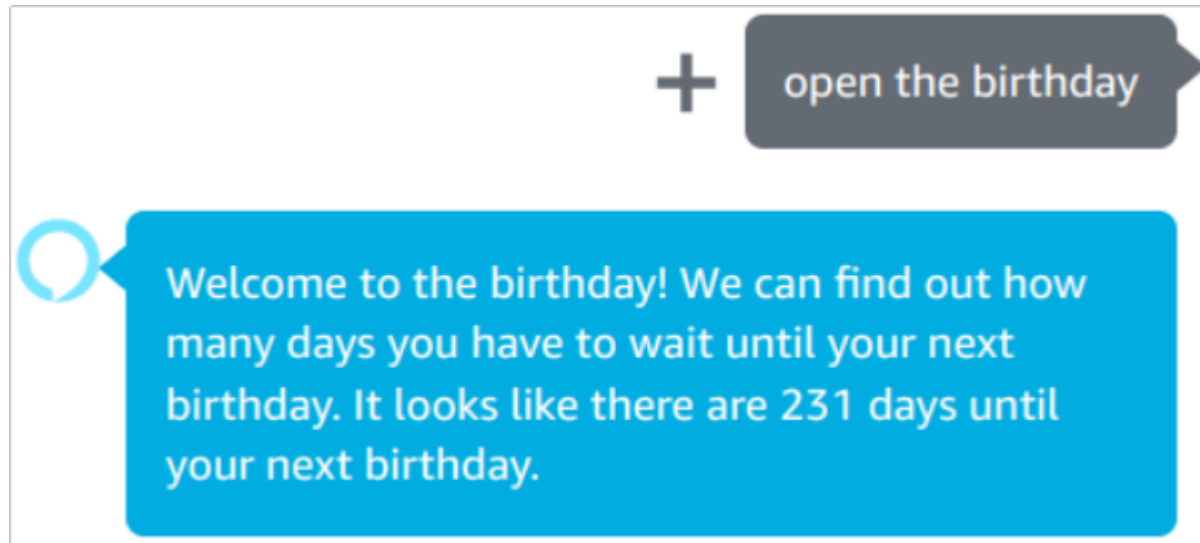
If so, which policy does it violate?



Q17.

Do you think this skill violates any Amazon policy requirements?

If so, which policy does it violate?



Q18.

Do you think this skill violates any Amazon policy requirements?

If so, which policy does it violate?

Q19. Do you think the Amazon Alexa platform should provide a policy compliance training for developers before they develop skills?

- ☐ Definitely not
- ☐ Probably not
- ☐ It doesn't matter to me
- ☐ Probably yes
- ☐ Definitely yes

Q20. Are you aware that there are also some requirements from “HIPAA” (Health Insurance Portability and Accountability Act) and “COPPA” (Children's Online Privacy Protection Rule) about specific types (health and children) of data collection?

- ☐ Completely unaware
- ☐ Somewhat unaware
- ☐ Neither aware nor unaware
- ☐ Somewhat aware
- ☐ Completely aware



Q21. Do you think the Amazon Alexa platform should check the skill code to determine whether it violates any policies? (Now the platform only checks skill outputs and doesn't check the code)

- ☐ Definitely not
- ☐ Probably not
- ☐ It doesn't matter to me
- ☐ Probably yes
- ☐ Definitely yes

Q22. When do you think a skill should have a privacy policy?

Q29. Do you check whether your privacy policy and code are consistent?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

### **About skill code**

Q32. Do any of your skills get content from web (such as getting knowledge from Wikipedia)?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q33. Do you worry about any inappropriate content you get from the web appearing in your skill?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q34. Do you add images or audio files (such as prerecorded audios) in your skills for better functionality?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q35. Have you updated any skill code after that skill has been published?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q36. Do you fully inspect your code and remove any inconsistent code (such as unused intent or permission) before submission?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always

Q37. Do you think a static analysis tool for checking skill code can be useful for developers?

- ☐ Not at all useful
- ☐ Slightly useful
- ☐ Moderately useful
- ☐ Very useful
- ☐ Extremely useful