

Interaction with Voice Assistant

2. Did you ever use Google Home, Amazon Alexa or any other voice personal assistant? *

Mark only one oval.

- ☐ Yes
☐ No

3. Did you ever use voice assistant (such as- SIRI, Google Assistant, Cortana) in your mobile phone? *

Mark only one oval.

- ☐ Yes
☐ No

4. Approximately how long have you used Alexa or Google Home or other voice assistant? *

Mark only one oval.

- ☐ 0 - 3 months
☐ 3 - 12 months
☐ 1 - 2 years
☐ 2 - 3 years
☐ 3+ years

Classify Sensitive Voice Commands based on Functional Keyword

Sensitive voice commands are those if exploited they can do damage to the user by either accessing other's private information or hacking IoT devices. For example, "ask paypal to transfer \$50 to SAM". If people with bad intention, get access to the voice assistant, then they can make a transaction without letting the user known. Another example - "ask Smart Things to disarm my alarm with pin 1234", can be used for unauthorized access inside the home.

Now, you need to rank the voice command in most sensitive, sensitive, neutral, less sensitive, not sensitive. The representative keyword is highlighted inside the quote (" "). If you think the highlighted keyword is not representing the functionality then you can mention the other representative keyword in the "other" option.

5. Alexa, ask the Mailbox Assistant Do I have any "mail" today? *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

6. Alexa, ask find "link" where is the nearest kiosk by 11 Times Square New York. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

7. Get my vehicle's last known "location". *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

8. Alexa, ask Bree Long to check "state" (lock). *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

9. add pick up the kids tomorrow at four pm to my "todo" list. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

10. Alexa, ask Wedding Countdown to set my "zip" code to 11249. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

11. Alexa, ask Newton who just "mailed" me. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

12. Alexa, tell My Hood to "activate" automatic mode. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

13. **"remind" me later.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

14. **"lock" my door.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

15. **Alexa, ask stuff reminder that I am "leaving" for vacation.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

16. **Alexa, ask ring central to read "text" messages.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

17. **Select all sports you enjoy watching on television. Click on the 'Other' box and write "I'm paying attention". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

18. **turn on "bedroom" plug. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

19. **Alexa, ask the Mailbox Assistant to "check" my mailbox? ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

20. **Alexa, ask MyPlace for the status of my "devices". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

21. **Alexa, ask Coin Flipper to flip a "coin" 1000 times. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

22. **Alexa, ask clockwise software about team "size". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

23. **"increase" thermostat temperature. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

24. **Alexa, ask Agent NEO how much is the monthly electricity "bill". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

25. **Alexa tell create random "flip" a coin. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

26. **Alexa, ask The Biking Wizard if I should go for a "ride" in Portland, Oregon. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

27. **Alexa, tell Blue Link to start my "Sonata" and set the temperature to 72 degree. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

28. **how my "experiment" is performing. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

29. **Alexa, ask My Work Coach to jump to task "tracking". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

30. **Alexa, ask Swedish Health Connect to "schedule" an appointment today. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

31. **Alexa, ask Norton core to "enable" guest network for 7 days. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

32. **Alexa, ask Circle what is Tommy's "usage" for Social Media today? ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

33. Alexa, ask cue fit for my step "count". *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

34. Alexa, ask Linksys what is my WiFi "password". *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

35. Alexa, ask Maintenance Care what is the building "message". *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

36. Alexa, ask Smart Things to "disarm" my alarm with pin 1234. *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

37. **Alexa, ask Bitdefender to "locate" my child. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

38. **Alexa, ask NextSubway when is the next uptown R "subway" at Union Square? ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

39. **Alexa, "set" Front door to ten percent (alarm). ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

40. **Alexa, tell movie history to add Wonder Woman that I "watched" on June 21st. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

41. **Alexa, ask LeapFrog Sleepy Time to get me "ready" for bed.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

42. **Alexa, ask camera talk to stop "record" the channel 10.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

43. **turn off "babycam".** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

44. **Alexa, ask RingByName to "call" 8553457464.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

45. **Alexa, ask Entramatic Opener to open my "door". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

46. **Alexa, ask my organizer where are my "keys". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

47. **Alexa, ask Bitdefender how is my "network" activity. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

48. **Alexa, tell FordPass to unlock my car with "PIN" 1234. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

49. **Alexa, ask sticky notes to add note saying dinner is in "refrigerator". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

50. **Alexa, ask Social Buddy to "post" a tweet for me. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

51. **Alexa Launch My Feed Update And Post on "LinkedIn" This Network is Great. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

52. **Alexa, tell air duct cleaner to schedule duct cleaning for my "property". ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

53. **Alexa, ask macys orders to "track" my package.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

54. **Alexa, tell Safe Place that my passport is in the "safe".** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

55. **what are the "details" of my upcoming events?** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

56. **Alexa, ask azuga, what is the "position" of the vehicle Michael.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

57. **Alexa, ask Cloud Admin, what do I "spend" the most on? ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

58. **"lower" the bedroom shade to twenty. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

59. **Alexa, turn off the "kitchen" light. ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

60. **Alexa, tell Virtual Keypad to "arm" my system away ***

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

61. **"create" a pincode.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

62. **turn off the "thermostat".** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

63. **Alexa, ask mercury messenger to send an "email" to john.** *

Mark only one oval.

- ☐ Most Sensitive
- ☐ Sensitive
- ☐ Neutral
- ☐ Less Sensitive
- ☐ Not Sensitive
- ☐ Other: _____

Demographic Information

64. **1. What is your age?** *

Mark only one oval.

- ☐ 17 or younger
- ☐ 18 - 20
- ☐ 21 - 25
- ☐ 26 - 30
- ☐ 31 - 35
- ☐ 36 - 40
- ☐ 41 - 45
- ☐ 46 or older

65. What is your gender? *

Mark only one oval.

- ☐ Female
- ☐ Male
- ☐ Other
- ☐ Decline to answer

66. What is your highest education level that you have completed? *

Mark only one oval.

- ☐ No high school
- ☐ Some high school
- ☐ High school graduate
- ☐ Some college – No degree
- ☐ Associates / 2 year degree
- ☐ Bachelor / 4 year degree
- ☐ Graduate degree – Master, PhD, professional, medicine, etc

67. Which of the following best describes your primary occupation? *

Mark only one oval.

- ☐ Administrative support (e.g., secretary, assistant)
- ☐ Art, writing, or journalism (e.g., author, reporter, sculptor)
- ☐ Business, management, or financial (e.g., manager, accountant, banker)
- ☐ Computer engineer or IT professional (e.g., systems administrator, programmer, IT consultant)
- ☐ Education (e.g., teacher)
- ☐ Engineer in other fields (e.g., civil engineer, bio-engineer)
- ☐ Homemaker
- ☐ Legal (e.g., lawyer, law clerk)
- ☐ Medical (e.g., doctor, nurse, dentist)
- ☐ Retired
- ☐ Scientist (e.g., researcher, professor)
- ☐ Service (e.g., retail clerks, server)
- ☐ Skilled labor (e.g., electrician, plumber, carpenter)
- ☐ Student
- ☐ Unemployed
- ☐ Decline to answer
- ☐ Other

