Devices and Software

Milestone 10 – CSCI 435 – Spring 2025

*Please be sure that you complete all pages of this worksheet. Some sections may begin on new pages, so you may need to scroll past any blank space.*

*As you read the background material, fill in the answers to the following questions inside the provided boxes (1x1 tables). You do* ***not*** *need to write complete sentences for questions that ask for a short answer. Paragraph or bullet form is acceptable for questions that require an explanation or description.*

1. True or False? It is possible to have privacy if you use the version of Windows 11 that comes on a new computer from the store.

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2. What are 3 kinds of information that Microsoft calls “required” diagnostic data in Windows 11?

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3. What are 3 kinds of information that Microsoft deceptively calls “optional diagnostic data” in Windows 11?

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4. True or False? A brand new Windows computer from a mainstream computer company includes a clean copy of Windows 11 with no other software preinstalled.

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5. True or False? Some PC vendors have been found in the past to be shipping preinstalled malware on new computers.

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6. True or False? When performing a clean installation of Windows 11, Microsoft makes it easy to set up a local account that doesn’t require connecting to a cloud service.

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7. Can Microsoft tie a Windows 11 installation to an individual?

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8. What two-word “feature,” which was pushed into Windows 11 via the 24H2 update, takes a screenshot of your desktop every few seconds and then uses AI to figure out exactly what you’re doing?

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9. True or False? An Apple Mac system is tied to an individual’s Apple ID.

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10. What service runs on macOS and enforces a default restriction that only allows the user to run programs acquired through the App Store?

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11. A Google Chromebook will effectively combine the privacy risks of which **two** other Google products? (HINT: One is a browser, and the other is an operating system.)

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12. True or False? It is easy to replace ChromeOS on a Chromebook with a different Linux distribution.

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13. Which operating system can be installed on most AMD and Intel laptops and desktops to provide significantly better privacy while still offering good hardware support?

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14. True or False? Privacy issues are impossible with Linux and BSD systems.

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15. Which graphics chip manufacturer has not historically worked well with open-source developers (to the point where Linus Torvalds gave them the middle finger)?

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16. What kind of computer is it more practical for an ordinary person to build: a desktop or a laptop?

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17. What two-word term describes the situation on a mobile device in which software can only be installed through the device’s respective app store?

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18. True or False? Both the Google Play Store and Apple App Store charge commissions on purchases made through the stores.

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19. True or False? Both the Google Play Store and Apple App Store charge commissions on revenue app developers earn through data collection and advertising.

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20. Why are effective system-wide ad blocker apps missing from the Google Play Store?

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21. Outside the European Union, which browser engine does Apple require app developers to use?

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22. True or False? Google and Apple can effectively control what users can and cannot do with their phones by requiring use of their respective stores.

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23. True or False? Information is always secure when a phone uploads it automatically to a cloud service provided by Google or Apple.

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24. What is the name of Google’s database that contains historical location data for the majority of Android device users?

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25. True or False? Google gives permissions to Play Services and Android Auto that it doesn’t give to apps written by third-party developers.

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26. True or False? Apple allegedly downplays the privacy risks of its own apps even though it displays privacy warnings for some third-party apps that have the same functionality.

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27. Which kind of lock is applied to phones that are purchased from carriers and cannot usually be removed until the device is paid in full?

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28. Is it better from a privacy perspective to purchase an unlocked Google Pixel phone from Best Buy or purchase the same phone from AT&T?

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29. Privacy issues with phones arise both from the company that makes the phone and from the company that \_\_\_\_ the phone.

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30. How can an iPhone user mitigate the privacy risks created by Apple?

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31. How can user privacy be regained on an (unlocked) Android phone?

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32. What component is typically locked on carrier-provided phones, which prevents the installation of alternate Android distributions (ROMs)?

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33. Which API does Google provide to app developers, which allows apps to detect when they’re running on a phone that has been modified to improve user privacy?

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34. Give one example of a phone (make and model) that is both commercially available in 2025 and designed to run a non-Android Linux system.

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35. What 3 word term (or acronym) refers to the collection of network-connected “smart” devices that can include thermostats, appliances, and light bulbs?

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36. Which government agency regulates the “smart” features in a “smart” oven or dishwasher? (HINT: Trick question.)

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37. True or False? A “smart” thermostat can be safely assumed to share data only with the company that made it.

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38. What will happen to the “rinse only” cycle on a Bosch 500 Series dishwasher if the Internet is out?

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39. Suppose you are considering two models of LG washing machine. One model costs $500 but only has basic cycles and no app connectivity. The other model costs $1,000 and has many more cycles available, especially once you connect the machine to WiFi and download the cycles onto the machine’s memory. Which one should you buy if you care about your privacy?

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40. Before buying an appliance (or just about any other product these days), what document should you find and read online first?

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41. According to survey data, what are people often unwilling to sacrifice in order to gain or maintain privacy?

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42. At the end of the *Hitchhiker’s Guide to the Galaxy*, where is the restaurant located?

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43. What two-word term describes the attitude that privacy is dead and that we shouldn’t care since nobody has it anymore anyway?

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44. True or False? Freedom and individual liberty depend on personal privacy.

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45. What two-word Orwellian term is created when companies can use the private data of individuals to shape broader public opinion?

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46. Regaining and maintaining your privacy requires that you change your \_\_\_\_\_\_\_.

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47. After reading a privacy policy, should you always go on to click “I Agree”?

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48. Should you install an app on your phone just because your friend uses it and says it’s really cool?

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49. What ulterior motive does a company likely have if they’ll give you a discount “just for signing up” for something?

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50. True or False? Meaningful federal privacy laws are likely to be adopted by Congress in the near future.

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*Please continue to the next page to answer another 50 questions.*

# JUST KIDDING!

You made it! This is the end of the final milestone worksheet for CSCI 435. All that now remains is to complete any revisions and proceed into the Reflection Phase after the Discovery Phase ends.

# Submission

*When you have completed this worksheet, export it to PDF format. Upload the PDF file as your Moodle submission for this milestone.*