**Name: _____ Section: 1 2 3 4 5**

Use this quiz to help make sure you understand the videos/reading. ***Answer all questions.*** Make additional notes as desired. ***Not sure of an answer?*** Ask your instructor to explain in class and revise as needed then.

Throughout, where you are asked to "circle your choice", you can circle or underline it (whichever you prefer).

**Video**: ***Simple Scrum*** [7:16 minutes]

1. In your project, you will use a simple version of the Agile development process called: _____. [Hint: Begins with an ***S*** and rhymes with ***Thumb***.]
2. In the context of the *Pig-and-Chicken-Open-A-Restaurant* joke, there are no chickens in Scrum, just pigs, because chickens are not _____ to producing a high-quality product.
3. For each of the following, indicate whether it is a ***feature*** of a software product or a ***task*** that might occur in implementing the product:

   **The robot can follow a black curvy line.** ***Task*** ***Feature*** (circle your choice)

   **Implement the *LineFollowing* class.** ***Task*** ***Feature*** (circle your choice)

4. Each Sprint begins with a Sprint ***Planning*** Meeting. What does that meeting determine?

5. How often does the Development Team hold a ***Scrum Meeting***? (circle your choice)
   a. Once an hour.
   b. Once a workday.
   c. Once a week.
   d. Once a month.
   e. Once in a blue moon.
6. At the end of each Sprint, the team produces which of the following? (circle your choice)
   a. Code that implements the functions and classes that were planned for the Sprint.
   b. Code that implements the features that were planned for the Sprint.
7. In your Capstone Project for CSSE 120:
   a. How many Sprints will your team run? _____
   b. Each Sprint will take roughly how many days? _____

**Video**: ***Tkinter, Part 1*** [7:16 minutes]

```
def main():
    window = tkinter.Tk()
    window.mainloop()
```

8. Consider the code snippet shown to the right. When *main* runs:

   a. About how much time will the program take to complete the execution of the ***first*** of the two lines inside *main*, that is, the statement
   **`window = tkinter.Tk()`** ? (circle your choice)

   - Less than 5 seconds
   - More than 5 seconds but less than a minute
   - More than a minute but less than an hour
   - More than an hour
   - As long as it takes the user to interact as desired with the window that appears and then close that window.

   b. About how much time will the program take to complete the execution of the ***second*** of the two lines inside *main*, that is, the statement
   **`window.mainloop()`** ? (circle your choice)

   - Less than 5 seconds
   - More than 5 seconds but less than a minute
   - More than a minute but less than an hour
   - More than an hour
   - As long as it takes the user to interact as desired with the window that appears and then close that window.

9. Consider the code snippet to the right. If we commented out the two lines that invoke the ***grid*** method, what would be different when we run the revised code?

```
def main():
    window = tkinter.Tk()

    frame = ttk.Frame(window)
    frame.grid()

    button = ttk.Button(frame, text='Hello')
    button.grid()

    window.mainloop()
```

**10.** Implement the following function, per its specification. **Just a rough attempt is good enough!**

```
def show_ok_button_on_frame(window):
    """
    Displays a ttk.Frame on the given window (tkinter.Tk object).
    On that frame, displays a ttk.Button that has 'OK' on it.
    Precondition: The argument is a tkinter.Tk object.
    """
```

**11.** Implement the following function, per its specification, assuming that the robot has a ***stop*** method . **Just a rough attempt is good enough!**

```
def stop_robot_when_button_pressed(button, robot):
    """
    Ensures that whenever the user presses the given ttk.Button,
    the program makes the given robot stop.
    Preconditions:  The first argument is a ttk.Button
         and the second argument is a robot.
    """
```