0 - Directions

Thursday, August 8, 2019 1:08 PM

Every time you start learning a new language or start a new project you will be expected to create a new Project Description Page.

How to setup a Project Description:

1. Add a new page and start it with the next available page number followed by a hyphen and a description of the what you are working on.
2. On the top left of the sheet list your period, team members and what languages you will be learning / using.
3. Write a well worded description of what you plan to learn or build.
4. If you are building a game or program.
    a. List out everything your program will be able to accomplish
    b. How input will be handled
    c. How does your program store data?
    d. If you have a game
        i. How does every object in your game behave?
        ii. What does the player do?
        iii. How are levels played / beat and stored?
        iv. Anything that would allow you to fully describe how your game plays
5. Sketches of GUI plans, level layouts or other visual elements.
6. Anything else you need to fully what you are working on.

Rover-X

Thursday, August 8, 2019 1:04 PM

Period: 6
Team Members: ME
Languages Used: Arduino (C++), java for android

I will be using the Sunfounder's Super Kit v2.0 in order to learn Arduino/C++, available here:
https://www.sunfounder.com/learn/category/Super-Kit-V2-0-for-Arduino.html

Directions

Thursday, August 8, 2019 1:21 PM

On the last day of every week you will update your task list and create a new task list.

Note: I will add to your adjust your list if it is too light or too ambitious.

Updating a Task List:

- New tasks need to be added to the task as they are assigned to members and a target complete date set.
  - **You are never allowed to adjust the target completion Dates!**
- Color all tasks based on the target completion date and status
  - Completed Tasks
    - highlighted in Green
  - Incomplete Tasks
    - No highlight if the target completion date has not elapsed
    - Yellow as soon as the target completion date is missed
    - Orange the task is 1 week behind schedule
    - Red the task is 2 or more weeks behind schedule

Creating a Task List for a new week:

- Start a new task list and with the created on date as the Thursday/Friday you filling it out on.
- Move all ongoing or behind tasks to the new list
  - **Do not modify the target complete dates!**
  - **Wait to color task until the end of the week.**
- Add new tasks that your team will be working on

Create on __/__/____

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on

1st Six Weeks

Thursday, August 8, 2019 12:59 PM

Create on __8/16/19_

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on
Varun Kumar	8/16	8/23	Complete the first three tasks of the Sunfounder Arduino kit, available here: https://www.sunfounder.com/learn/category/Super-Kit-V2-0-for-Arduino.html	8/21

Create on _8/26/____

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on
Varun Kumar	8/26	8/30	Finish Morse Code and Learn to Control Motors	Kinda on 8/30

Create on _8/30/19__

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on
Varun Kumar	8/30	9/6	Learn to control motors and learn about motor drivers	

Create on __/__/____

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on

Create on __/__/____

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on

Create on __/__/____

Assigned Team Members	Assigned On	Target Completion Date	Description of the task	Completed on

Directions

Thursday, August 8, 2019 1:47 PM

When learning anything new you will be required to keep digital notes here or upload your paper notes here.

The notes should be broken into meaningful sections. You will need to write down things than Java and new terminology. With that said I expect you to have notes…

UML Class Diagram Notes

Thursday, August 8, 2019 1:00 PM

Create Notes on UML Class Diagrams:

You may go out and find information on your own or use the below link:
https://www.visual-paradigm.com/guide/uml-unified-modeling-language/what-is-class-diagram/

UML Activity Diagram

Friday, August 9, 2019 12:02 PM

Create Notes on UML Activity Diagrams:

You may go out and find information on your own or use the below link:
https://www.lucidchart.com/pages/uml-activity-diagram

Directions

Thursday, August 8, 2019 1:02 PM

Every time you start learning a new project you will be expected to create a planning page. Planning a large project should take you 1 to 3 weeks.

For every project you will need to complete the below plan exercises:

- UML Class Diagram
- UML Activity Diagram
- GUI Layout sketches (For GUI based programs)

0 - Project Plan

Thursday, August 8, 2019 1:52 PM

Directions

Thursday, August 8, 2019 1:03 PM

Every week you will need to create a page with the title being the first date of the week. **Even if there is nothing to upload!**

During learning weeks you likely will not have much to upload here, other than simple programs you create while learning.

8/16

Friday, August 16, 2019 1:22 PM

IL COMMENCE!!

Project one: Blinking Light- check Vid underneath

Blinking_LED

Button Light- check Vid underneath

20190821_131407

Morse Code!!!

20190828_132355

Command Learning:

pinMode(#,OUTPUT);- This command is for outputting power to the pin on the Arduino.

The number is written on the Arduino board itself. It is next to its corresponding pin #.

digitalWrite(#,HIGH);- This is the way the LED turns on.

The Arduino powers the slot, and the light that's connected to that slot turns on.
In order to turn the light back off, change the setting to LOW

In order to output to the console/user interface, use the Serial command

Serial.print("");
Serial.println("");

In order to read the user's input, use the Serial.read(). The problem arises when you have to read a String. In order to do this, a char array must be constructed, to collect all the characters of the String. I still haven't figured this out, but I will soon!

BEFORE YOU DO ANY OF THIS, YOU MUST MAKE THE SERIAL AVAILABLE. In your setup() method, you have to "activate" the Serial by using:

Serial.begin(9600);

The 9600 is the speed the Serial Monitor (the User Interface) collects the data. As a default, it is set automatically at 9600 baud.

To access the Serial output, use the Serial.available() command. Using this checks the bytes of data gained in the Serial monitor. If Serial.available() is greater than 0, new data has arrived.

The delay(#) command is much like the Thread.sleep() command in Java. This stops the program from doing anything for the amount of milliseconds specified.