**Outline**

Sign-up for GitHub and begin using this project management tool. Review terms of service, create projects in the cloud for the course, and initialize a synchronize local repositories for these projects.

**Objectives**

* Use standard backup procedures to back up user files.
* Use software tools (e.g., email, wikis, blogs, task lists, bulletin boards, spreadsheets, shared calendars) to plan and track activities during a software development project;
* Use project management tools (e.g., Gantt chart, PERT chart) and time management tools (e.g., organizer, calendar) to help develop a software project;

**Prerequisites**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Prerequisite Module(s)** | **Level** | **Student Initial** | **Teacher Initial** | **Date** |
| B.1: Arduino Blink | Level 2 |  |  |  |

**Materials**

* GitHub Desktop installed on local PC or laptop.

**Level 0: Terms of Service**

Suggested web resource: <https://github.com/>

1. Review the GitHub terms of service.
   1. Are you permitted to use this software for this class?
   2. What rights do you give up by using this software?
   3. What limitations do you have when using this software?
2. Review the GitHub privacy policy.
   1. What information does GitHub collect and track?
   2. How does GitHub share your information?
   3. How does GitHub communicate with you?

**Level 1: Sign-up for GitHub**

Suggested web resource: <https://github.com/>

1. Create an account on GitHub.com.
2. Locate user “Greg5519” (Mr. Nestor) and the course project repository called “ICS4C0”.
3. Update the “Classlist” file to add your GitHub account Id and email address.
4. Download the course module files to your student folder on the network drive.

**Level 2: Create Blink Project**

Suggested web resource: <https://help.github.com/>

1. Create a new project repository called “Arduino Blink” to hold your code from Module B.1.
2. Invite Mr. Nestor and other members from your group to access this repository.

Note: Completion of Module B.! is a prerequisite for the rest of this module.

**Level 3: GitHub Desktop**

Suggested web resource: <https://desktop.github.com/>

Note: Installation and activation of GitHub Desktop may be required

1. Access GitHub Desktop and create a local repository folder on your LASS network drive.
2. Clone your “Arduino Blink” project from GitHub on the web.
3. Add your first “Blink” program files to your local repository using Microsoft file explorer.
4. Synchronize your repository using GitHub Desktop.
5. Verify that GitHub on the web has recorded your update and that the program files have been synchronized.

**Level 4: Update Blink Repository**

Suggested web resource: <https://help.github.com/>

1. Continue to develop and enhance your “Arduino Blink” using the program files in your local repository.
2. Synchronize your repositories at the end of each period.
3. Verify that GitHub on the web is recorded your updates and that the program files have been synchronized.

**Achievement Record**

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| --- | --- | --- | --- |
| **Attainment Level** | **Student Initial** | **Teacher Initial** | **Date** |
| Level 0: Terms of Service |  |  |  |
| Level 1: Sign-up for GitHub |  |  |  |
| Level 2: Create Blink Project |  |  |  |
| Level 3: GitHub Desktop |  |  |  |
| Level 4: Update Blink Repository |  |  |  |