

IoT Greenhouse™ – User Documentation

Overview:

The IoT Greenhouse™ is a learning system developed to teach the fundamentals of Python programming and Internet of Things (IoT). Both system documentation and learning content are available via a Git Repository. A Git Repository is a version-control system enabling users to "pull" the most recent versions of lessons and documentation from the repository. Git documentation and downloads are available at https://git-scm.com

Prerequisites:

There are no prerequisites for this task.

Performance Outcomes:

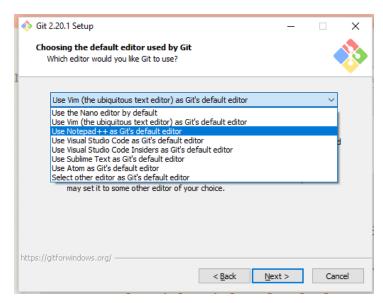
- 1. Download and install a Git client
- 2. Pull system documentation and lessons from Git repository

Resources:

- 1. https://git-scm.com
- 2. https://github.com/k2controls/iot_gh_docs_user

Step 1: Download Git Client

- Download and install the Git client from https://git-scm.com/downloads. A
 Windows installation is shown below.
- 2. Accept the default options during the installation process with the exception for the default editor screen shown below. Installing Notepad++ is recommended over the default Vim editor.





3. Use the link provided in the installation screen shown on the prior page to access and install the Notepad++ text editor.



- 4. Complete the installation of the Git client by accepting the default values.
- 5. Download the IoT Greenhouse™ documentation by opening a command or terminal window.
- Create a folder or directory as a container for the documentation. The screen capture below shows the iot_greenhouse_docs folder being created using the following Windows commands.

mkdir iot_greenhouse_docs cd iot_greenhouse_docs

7. Enter the following Git command to clone (copy) system documentation and lessons to the current directory. The screen capture below shows the result of a successful download.

git clone https://github.com/k2controls/iot_gh_docs_user

```
Microsoft Windows [Version 10.0.17134.471]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\K2>mkdir iot_greenhouse_docs

C:\Users\K2\iot_greenhouse_docs>git clone https://github.com/k2controls/iot_gh_docs_user cloning into 'iot_gh_docs_user'...
remote: Enumerating objects: 136, done.
remote: Counting objects: 100% (136/136), done.
remote: Compressing objects: 100% (80/80), done.
Rremote: Total 136 (delta 55), reused 132 (delta 55), pack-reused 0
Receiving objects: 100% (55/55), done.
Resolving deltas: 100% (55/55), done.
Checking out files: 100% (134/134), done.

C:\Users\K2\iot_greenhouse_docs>__
```



8. Once you've created the local Git repository, updates can be downloaded by completing a "pull" request. Navigate to the local Git repository on your computer and enter the following Git command. The screen capture below shows the user accessing the repository from a Windows command screen and executing the pull request. Note that a single file (this document) has been updated.

git pull https://github.com/k2controls/iot_gh_docs_user

9.

```
Command Prompt
                                                                                               X
       \Users\K2\iot_greenhouse_docs>dir
     Volume in drive C has no label.
     Volume Serial Number is E860-66F9
     Directory of C:\Users\K2\iot_greenhouse_docs
    12/19/2018 07:17 AM
                            <DIR>
    12/19/2018
                07:17 AM
                            <DIR>
    12/19/2018 07:17 AM
                            <DIR>
                                           iot_gh_docs_user
                   0 File(s)
                                          0 bytes
                   3 Dir(s) 351,489,220,608 bytes free
     C:\Users\K2\iot_greenhouse_docs>cd iot_gh_docs_user
     C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user>dir
     Volume in drive C has no label.
     Volume Serial Number is E860-66F9
     Directory of C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user
    12/19/2018 07:17 AM
                            <DIR>
    12/19/2018
                07:17 AM
                            <DIR>
    12/19/2018
                07:17 AM
                            <DIR>
                                           api
    12/19/2018
                                    51,761 IoTGreenhouse.UserDocumentation.pdf
                07:17 AM
    12/19/2018
                07:17 AM
                                     1,088 LICENSE
    12/19/2018 07:17 AM
                                        55 README.md
                   3 File(s)
                                     52,904 bytes
                   3 Dir(s) 351,548,682,240 bytes free
    C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user>_
10.
```

11.



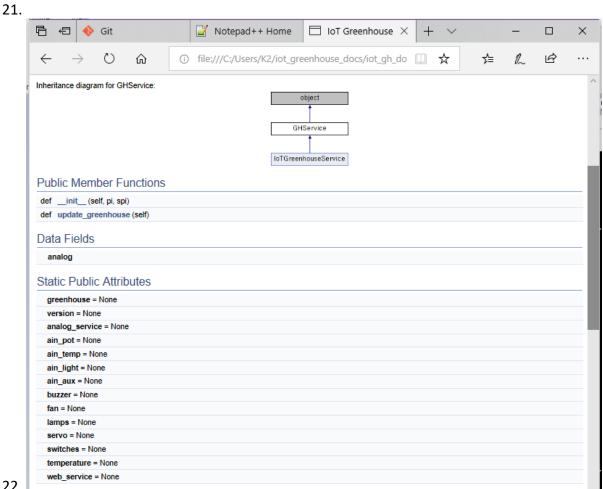
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```
Command Prompt
                                                                                           ×
     Directory of C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user
    12/19/2018 07:17 AM
                            <DIR>
    12/19/2018
               07:17 AM
                            <DIR>
                                            api
    12/19/2018 07:17 AM
                            <DIR>
    12/19/2018
12/19/2018
               07:17 AM
                                     51,761 IoTGreenhouse.UserDocumentation.pdf
               07:17 AM
                                     1,088 LICENSE
    12/19/2018
               07:17 AM
                                         55 README.md
                   3 File(s)
                                      52,904 bytes
                   3 Dir(s) 351,548,682,240 bytes free
     C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user>cd api
     :\Users\K2\iot_greenhouse_docs\iot_gh_docs_user\api>dir
     Volume in drive C has no label.
     Volume Serial Number is E860-66F9
     Directory of C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user\api
    12/19/2018 07:17 AM
                            <DIR>
    12/19/2018
12/19/2018
               07:17 AM
                            <DIR>
               07:17 AM
                                            html
                            <DIR>
    12/19/2018
               07:17 AM
                                        840 IoTGreenhouse_API.html
                   1 File(s)
                                        840 bytes
                   3 Dir(s) 351,384,104,960 bytes free
    C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user\api>IoTGreenhouse_API.html
     C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user\api>_
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