

## 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:

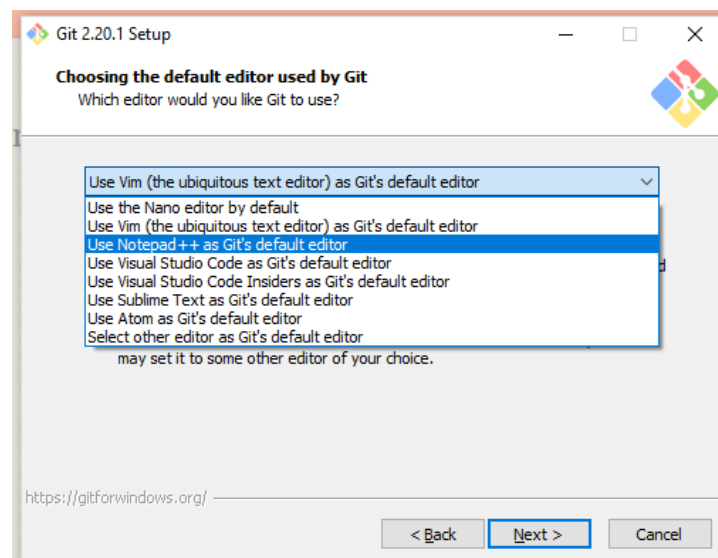
1. Download and install a Git client
2. Pull system documentation and lessons from Git repository

### Resources:

1. <https://git-scm.com>
2. [https://github.com/k2controls/iot\\_gh\\_docs\\_user](https://github.com/k2controls/iot_gh_docs_user)

### Step 1: Download Git Client

1. 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 except 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.
6. 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 results of a successful download.

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

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

C:\Users\K2>cd 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% (136/136), 325.17 KiB | 1.99 MiB/s, 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.

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

9. The screen capture below shows the user accessing the repository from a Windows command window and executing the pull request. Note that a single file (this document) has been updated.

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

C:\Users\K2>cd iot_greenhouse_docs

C:\Users\K2\iot_greenhouse_docs>cd iot_gh_docs_user

C:\Users\K2\iot_greenhouse_docs\iot_gh_docs_user>git pull https://github.com/k2controls/iot_gh_docs_user
remote: Enumerating objects: 5, done.
remote: Counting objects: 100% (5/5), done.
remote: Compressing objects: 100% (1/1), done.
remote: Total 3 (delta 2), reused 3 (delta 2), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/k2controls/iot_gh_docs_user
* branch      HEAD      -> FETCH_HEAD
Updating 9b372c3..874ed90
Fast-forward
 IoTGreenhouse.UserDocumentation.pdf | Bin 304189 -> 327326 bytes
 1 file changed, 0 insertions(+), 0 deletions(-)

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

10. The IoT Greenhouse™ Python service documentation is provided in the **api** folder. Lesson content is available in the **modules** folder.
11. The screen capture on the following page shows the user navigating to the API folder to access the home page for the API documentation (IoTGreenhouse\_API.html). The browser is launched, and the home page is loaded.



```
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>          ..
12/19/2018  07:17 AM    <DIR>          api
12/19/2018  07:17 AM                51,761 IoTGreenhouse.UserDocumentation.pdf
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>cd api

C:\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  07:17 AM    <DIR>          ..
12/19/2018  07:17 AM    <DIR>          html
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>
```

12. The home page for the IoT Greenhouse API is loaded into the browser. Use the IoT Greenhouse API link in the center of the page to access contents.

