

PyBullet Framework Guide

Lee Yongseok, Jung Hyunseo

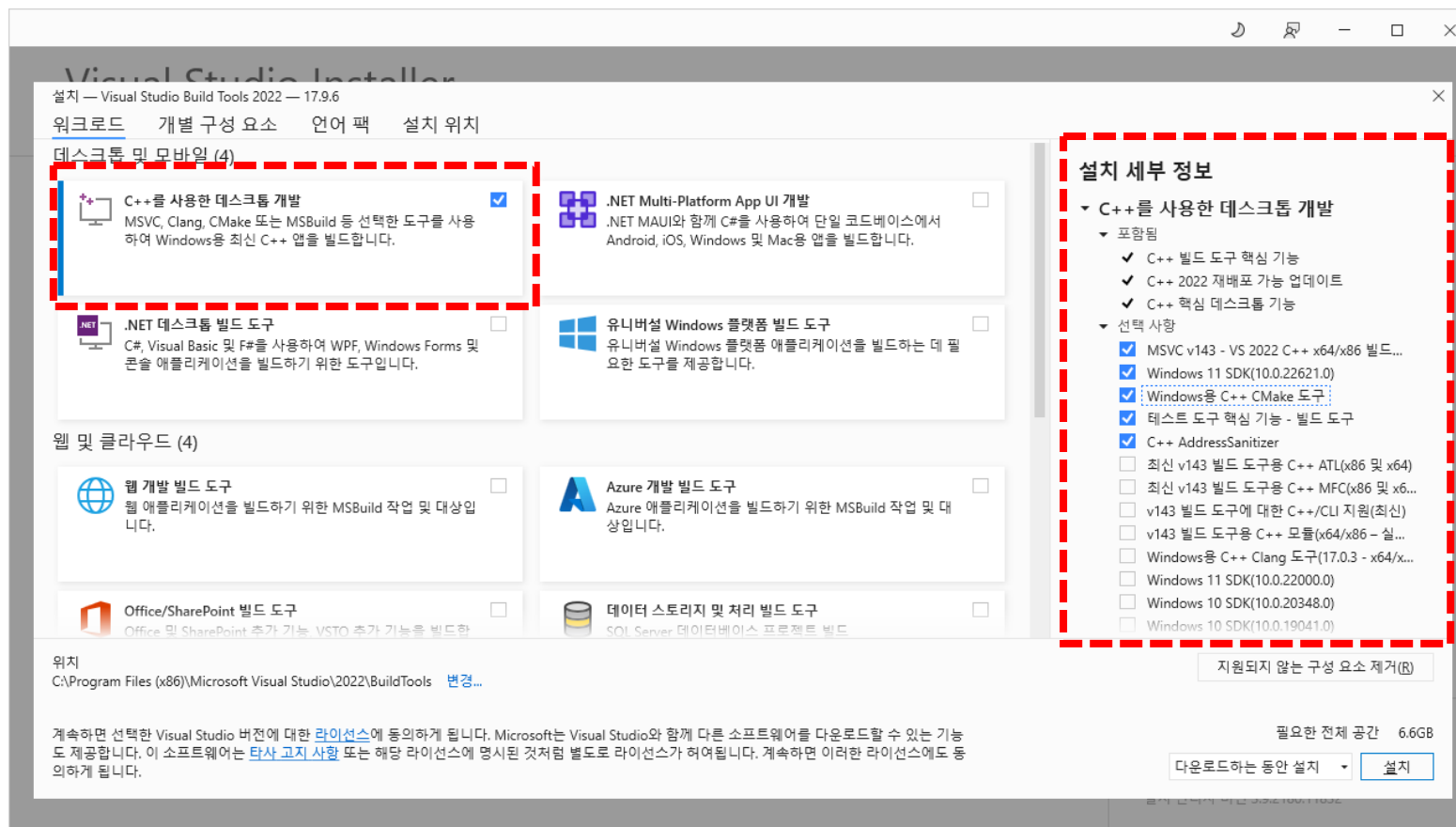
dldydtjr2000@postech.ac.kr

hsjung02@postech.ac.kr

1. Installation

1) Visual Studio C++ Build Tools

① Install buildtools from https://aka.ms/vs/17/release/vs_BuildTools.exe



1. Installation

2) Anaconda

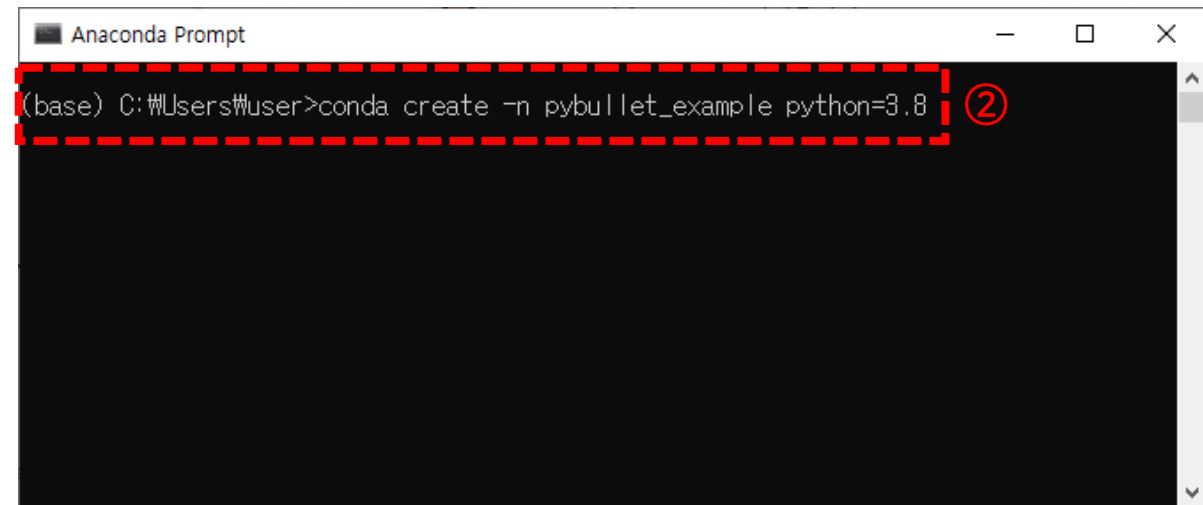
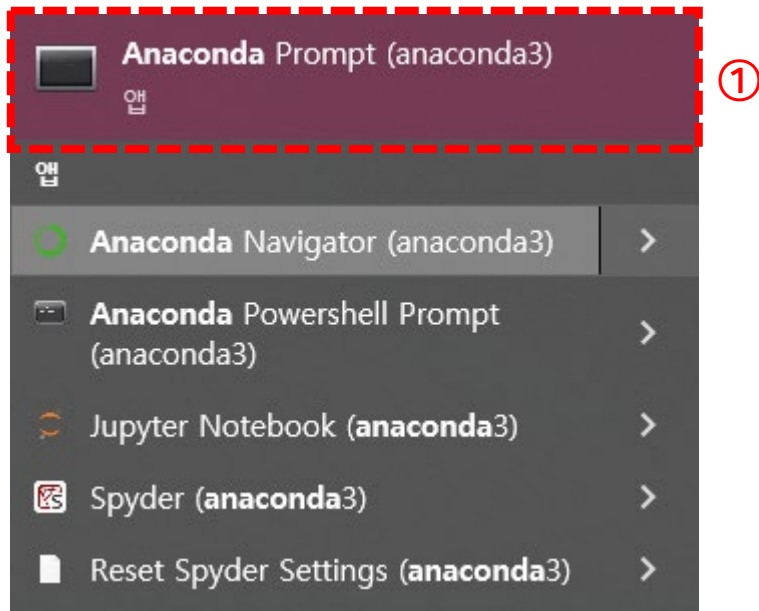
① Install anaconda from <https://www.anaconda.com/>



1. Installation

2) Anaconda

② Open anaconda prompt, and create new environment

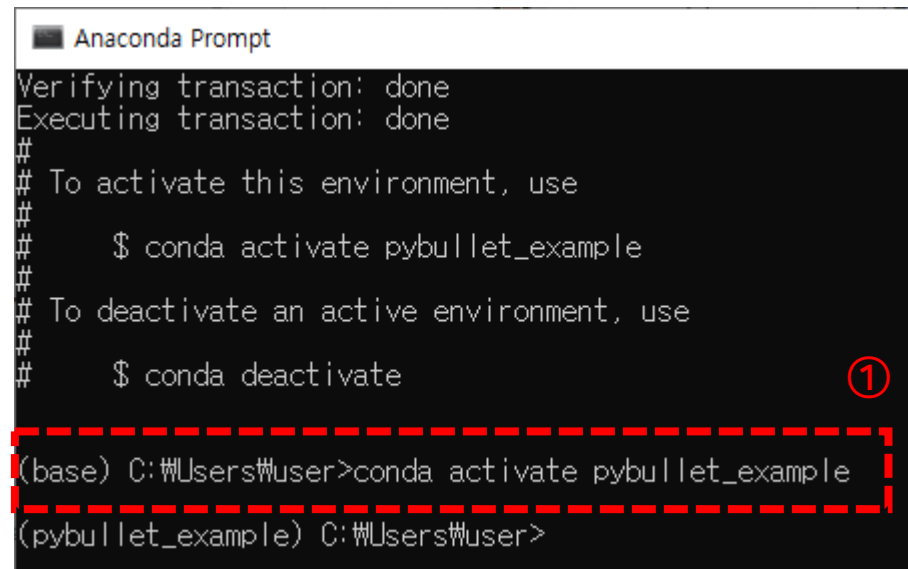


```
>conda create -n [env name] python=3.8
```

1. Installation

2) Anaconda

② Activate new environment



```
Anaconda Prompt
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#   $ conda activate pybullet_example
#
# To deactivate an active environment, use
#
#   $ conda deactivate
#
(base) C:\Users\User>conda activate pybullet_example
(pybullet_example) C:\Users\User>
```

>conda create activate [env name]

1. Installation

3) Source Code

① Download source code from https://github.com/OLYS0/mech439_pybullet_framework

*** Place the folder in a path without special characters (ex. Korean).**

The screenshot shows the GitHub repository page for `mech439_pybullet_framework`. The repository is public and has 2 branches and 0 tags. The file list includes:

File/Folder	Commit
docs	First commit
src	First commit
.gitignore	First commit
ExampleCode.ipynb	First commit
Manual.pdf	First commit
Manual.pptx	First commit
README.md	Initial commit
requirements.txt	First commit

The dropdown menu for the repository shows the following options:

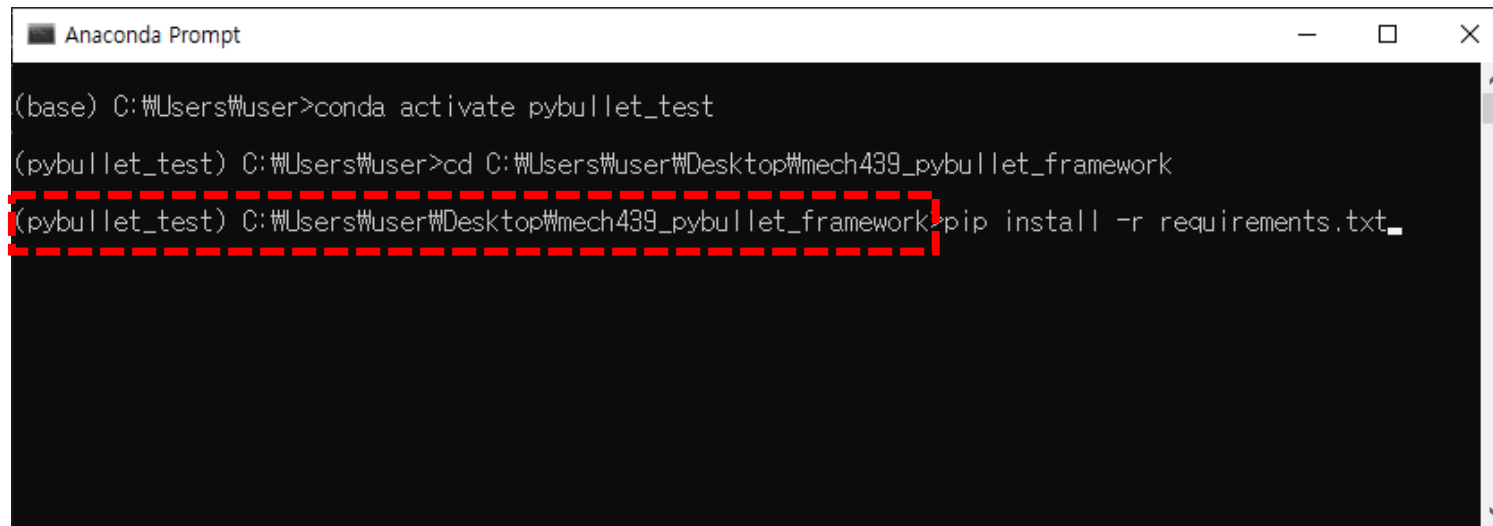
- Clone (with links for HTTPS, SSH, and GitHub CLI)
- Open with GitHub Desktop
- Download ZIP (highlighted with a red dashed box)

A red text annotation *** download ZIP or clone repository** points to the 'Download ZIP' option.

1. Installation

4) Install python packages (dependencies)

① Install the required dependencies via “pip install” and “conda install”.



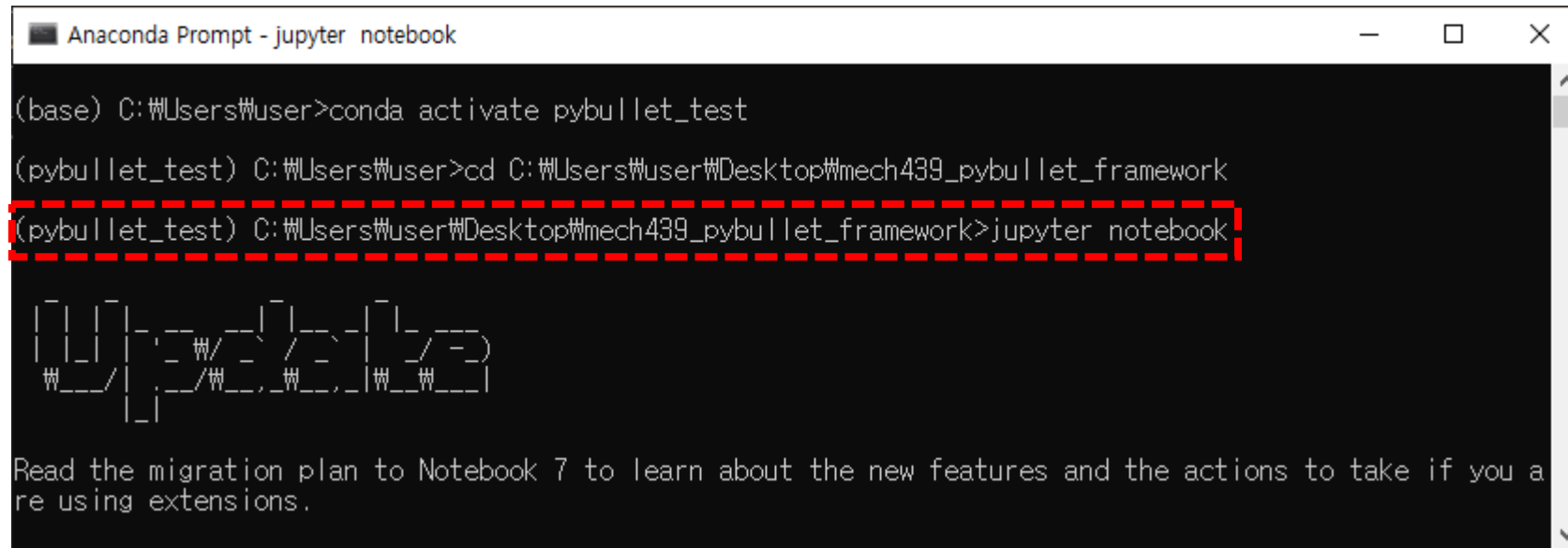
```
Anaconda Prompt
(base) C:\Users\User>conda activate pybullet_test
(pybullet_test) C:\Users\User>cd C:\Users\User\Desktop\mech439_pybullet_framework
(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework>pip install -r requirements.txt_
```

```
> cd [YOUR PATH]
> pip install -r requirements.txt
> conda install Pinocchio -c conda-forge
```

2. Run example code

Jupyter notebook

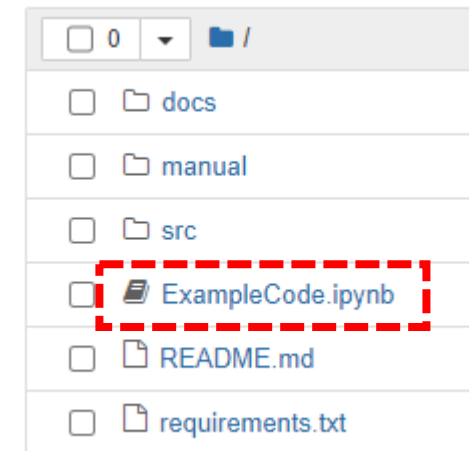
① Open jupyter notebook in project directory, and open *ExampleCode.ipynb*



```
Anaconda Prompt - jupyter notebook

(base) C:\Users\User>conda activate pybullet_test
(pybullet_test) C:\Users\User>cd C:\Users\User\Desktop\mech439_pybullet_framework
(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework>jupyter notebook

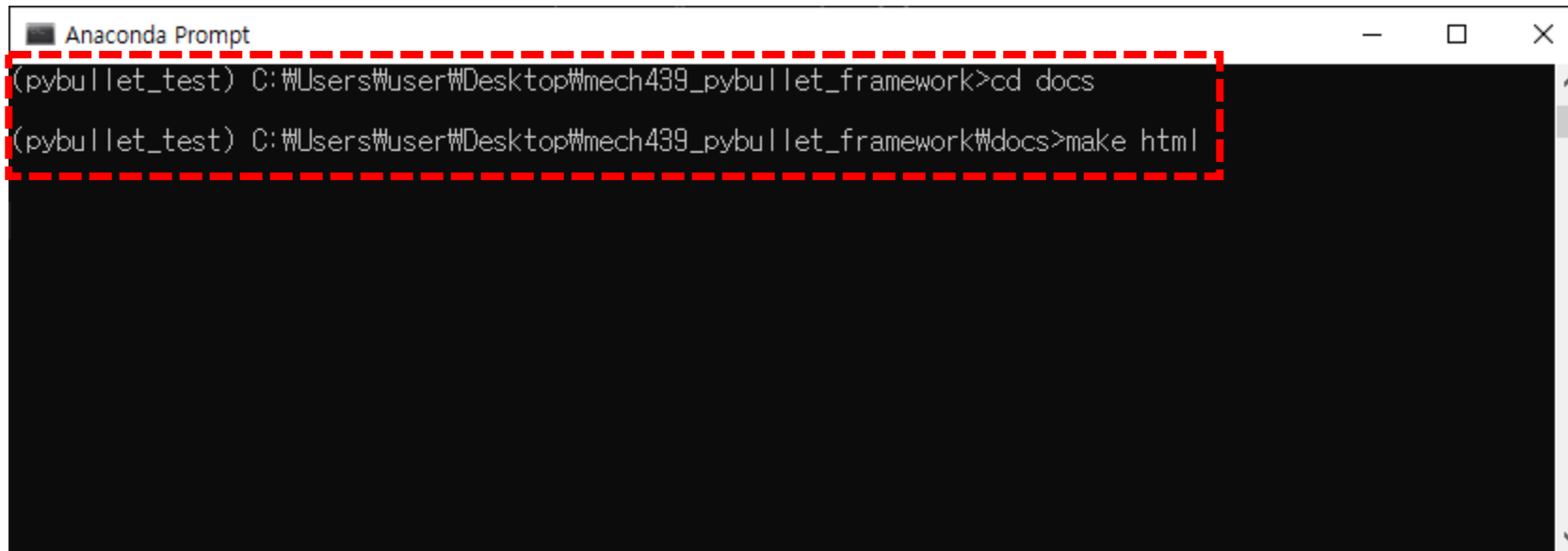
Read the migration plan to Notebook 7 to learn about the new features and the actions to take if you are using extensions.
```



3. Source Code Manual

Build docs (.html) file via sphinx

① Open jupyter notebook in project directory, and open *ExampleCode.ipynb*

A screenshot of an Anaconda Prompt terminal window. The window title is "Anaconda Prompt". The terminal shows two commands being executed: first, `(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework>cd docs`, and second, `(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework\docs>make html`. The second command and its output area are highlighted with a red dashed rectangle.

```
(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework>cd docs
(pybullet_test) C:\Users\User\Desktop\mech439_pybullet_framework\docs>make html
```

```
> cd docs
> make html
```

3. Source Code Manual

Build docs (.html) file via sphinx

② Then, you can open the source code manual in “docs/build/html/index.html”

