



# B351: Intro to AI

## Tutorial on Auto-grader(HW3)

Yang Wang



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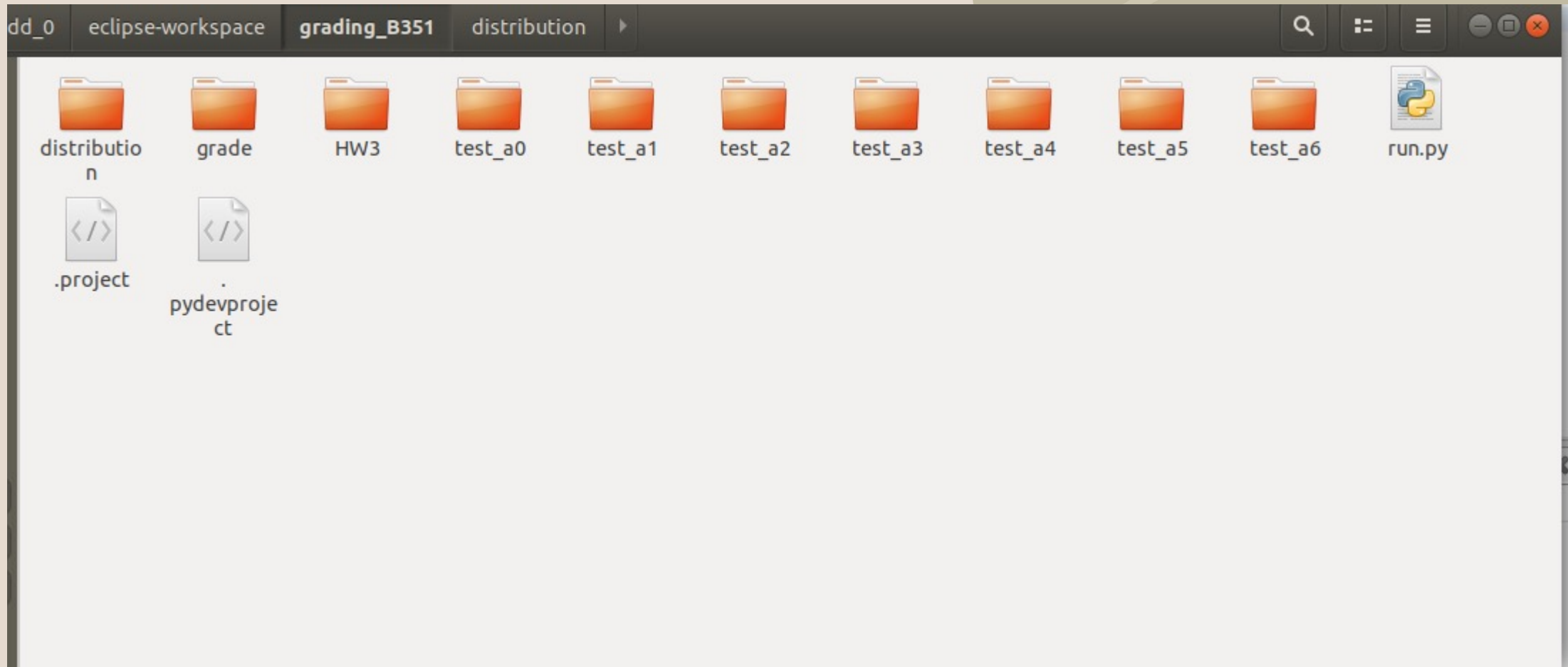
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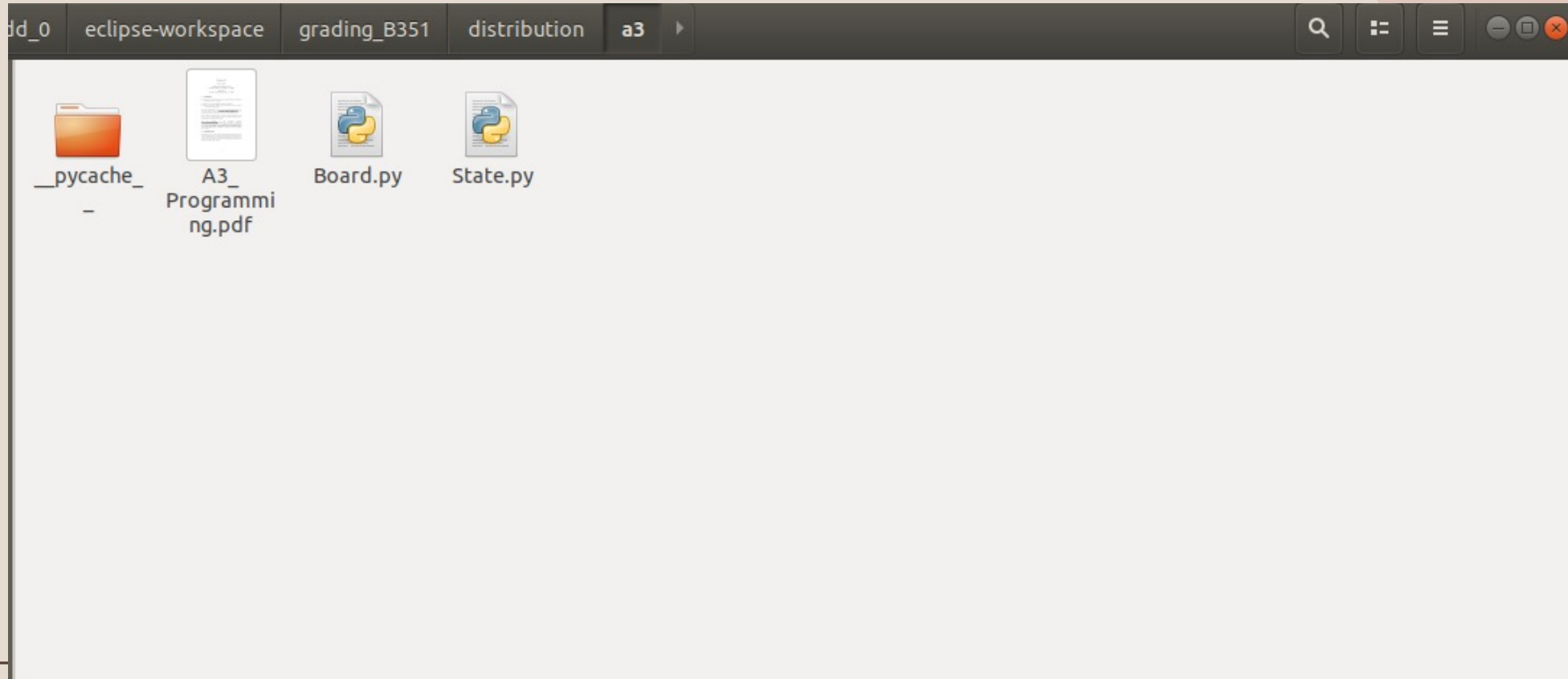
# Overview of the package

- Unzip the file, you will find it looks like the figure below (and make sure they are all there):



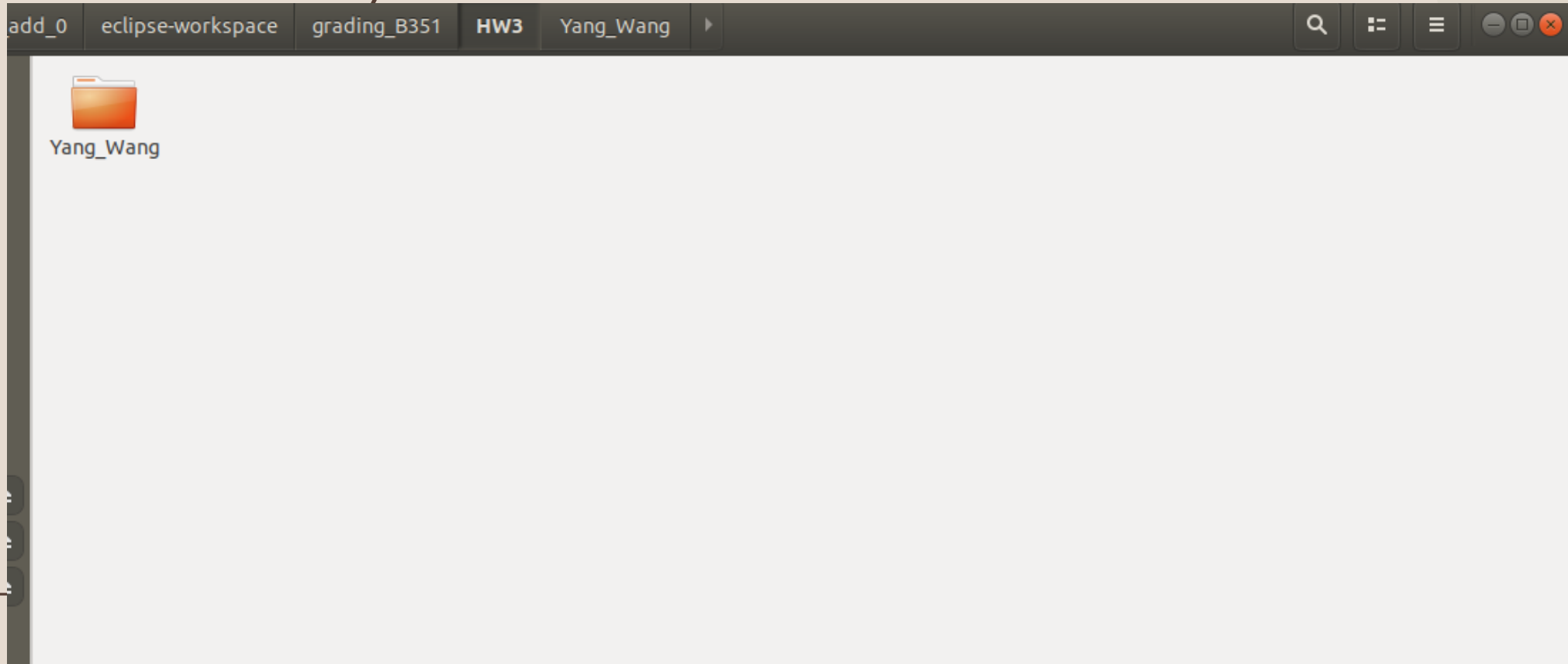
# Where are the Support files:

- Here is the folder (grading\_B351/distribution/a3/) I already put all the support files there, e.g. **Board.py** and **State.py**.
- It is all good for run so please don't remove any of them, also please don't put your a3.py file under this folder.



# Where to put your a3.py

- Follow the path “grading\_B351/HW3/”, you will need to create a new folder with your name:



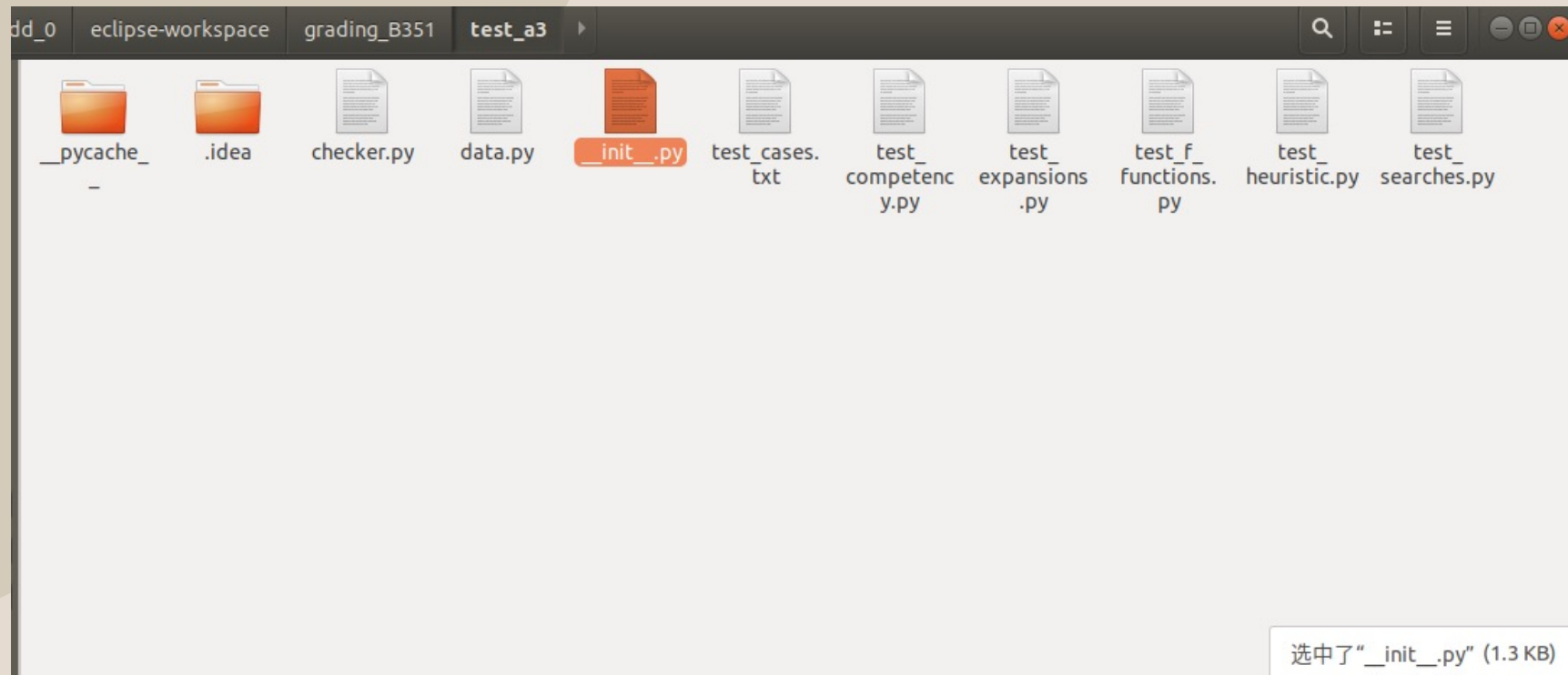
# Where to put your a3.py

- Go into the folder you just created, and put your “a3.py” inside the folder, Note: change your file name to “a3.py”, otherwise the grader won't recognize it:



# How to run the grader

- Following the path “grading\_B351/test\_a3/”, you can find the “\_\_init\_\_.py” file and please open it:



# How to run the grader

- After you open it, we need to focus on **two lines** there:
  - (1) `sys.path.append( )`, this is the path for all those support files we mentioned above, and please change the file path according to your local machine. (currently the path inside `sys.path.append()` is for my environment, so you need to change it to yours!)

```
#!/usr/bin/python3

from test_expansions import FringeExpansionTester, InformedExpansionTester
from test_f_functions import UCSFFunctionTester, AStarFFunctionFactoryTester
from test_searches import BFSTester, InformedSearchTester
from test_heuristic import HeuristicTester
from test_competency import CompetencyTester

testSuite = [FringeExpansionTester, BFSTester, UCSFFunctionTester,
             AStarFFunctionFactoryTester, HeuristicTester, InformedExpansionTester, CompetencyTester] #Yang: Here will be all the test functions, so just keep all of them there.
title = 'A3: A* Search' #Yang: Title of your generated HTML file, not important

if __name__ == '__main__':
    import sys
    from grade import generate_html
    sys.path.append('/mnt/0c5d37c7-7aa6-4175-a9b1-261568ed4227/eclipse-workspace/grading_B351/distribution/a3') #Yang: your directory of the State.py and Board.py
    root_folder = '../HW3' #Yang: your directory of the a3.py file, which is the homework file you want to upload.
    folders = [root_folder]

    import os

    for i in sorted(os.listdir(root_folder)):
        folder = os.path.join(root_folder, i)
        if os.path.isdir(folder): folders.append(folder)
    generate_html.batchGrade(folders, testSuite, title)

#Yang: Threading block is not useful
```



# How to run the grader

- After you open it, we need to focus on **two** lines there:
  - (2) “root\_folder”: It is the path for your a3.py, we mentioned above.

```
#!/usr/bin/python3
from test_expansions import FringeExpansionTester, InformedExpansionTester
from test_f_functions import UCSFFunctionTester, AStarFFunctionFactoryTester
from test_searches import BFSTester, InformedSearchTester
from test_heuristic import HeuristicTester
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testSuite = [FringeExpansionTester, BFSTester, UCSFFunctionTester,
             AStarFFunctionFactoryTester, HeuristicTester, InformedExpansionTester, InformedSearchTester, CompetencyTester] #Yang:Here will be all the test functions, so just keep all of them there.
title = 'A3: A* Search' #Yang:Title of your generated HTML file, not important

if __name__ == '__main__':
    import sys
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    sys.path.append('/mnt/0c5d37c7-7aa6-4175-a9b1-261568ed4227/eclipse-workspace/grading_B351/distribution/a3') #Yang: your directory of the State.py and Board.py
    root_folder = '../HW3' #Yang: your directory of the a3.py file, which is the homework file you want to upload.
    folders = [root_folder]

    import os

    for i in sorted(os.listdir(root_folder)):
        folder = os.path.join(root_folder, i)
        if os.path.isdir(folder): folders.append(folder)
    generate_html.batchGrade(folders, testSuite, title)
```

#Yang: The code block is not useful

# How to run the grader

- After the above two lines are all set, then you can simply run “\_\_init\_\_.py” either from your IDE or command line, and no other input parameters are needed.

# MISC and BUGS:

- Update Rubric for “my\_heuristic”: if you make any try that make sense(tried to create your own heuristic function, and also properly implemented), but sadly haven’t pass any test steps. Though the auto-grader may give you a 0, **we can add back 3 points at most.**
- Dispute grade: Please refer to your own grader(email or office-hours), since they know better the situation. And it is also not proper if I frequently regrade/change other graders’ work. Thank you for your understanding! : )
- “Import package” bugs. If you encounter any this kind of bugs, please try the backup.zip. If it still doesn’t work, let me know. : )

The background features a light gray base with large, organic, overlapping shapes in muted red and olive green. A thin white line outlines a shape on the right. In the top left, there is a faint, stylized illustration of a leafy branch.

# Thank you

Yang Wang