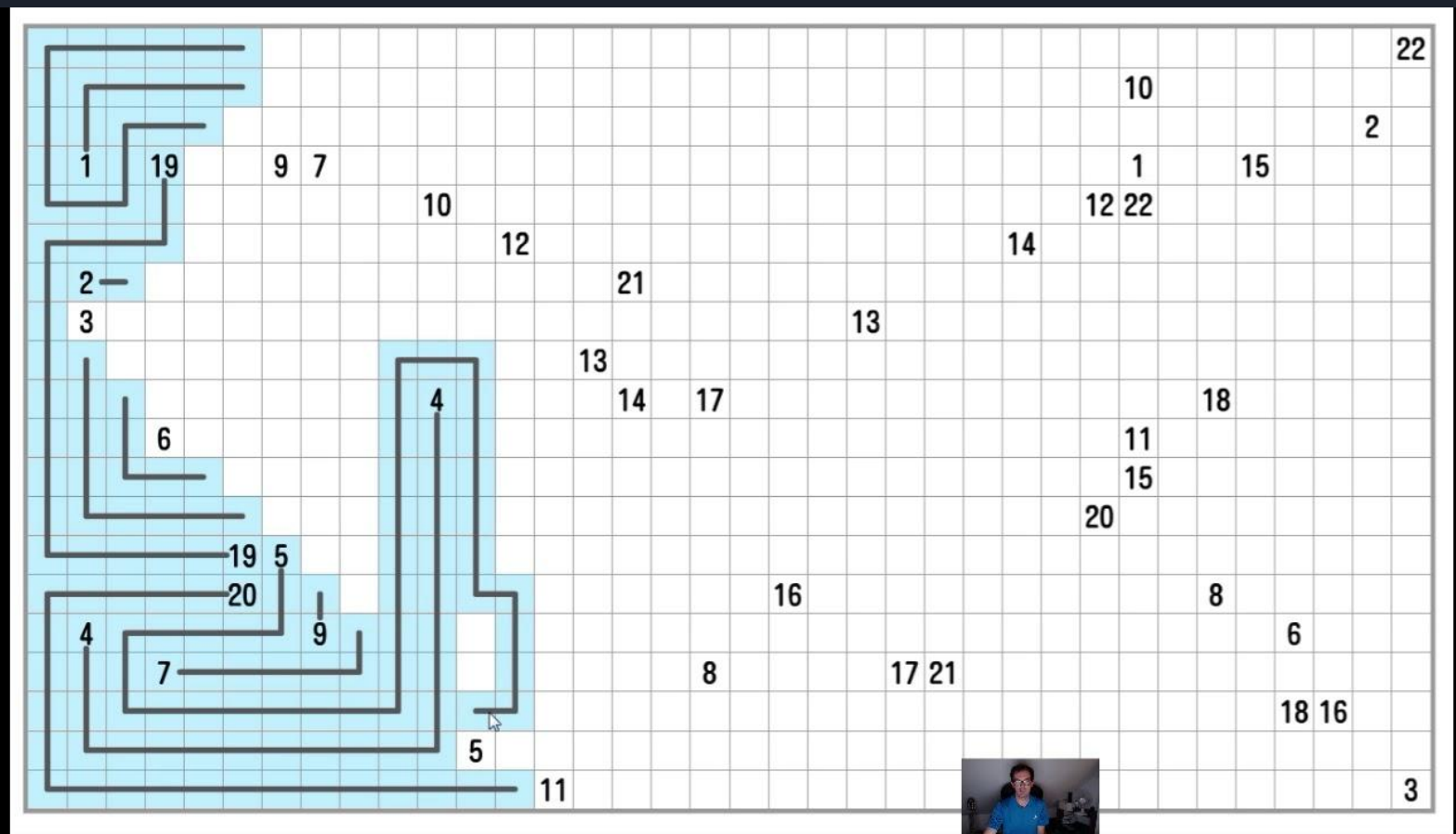


OPDRACHT



<> Code

Issues 0

Pull requests 0

Projects 0

Wiki

Insights

A program that uses wires to connect gates on a chip efficiently

79 commits

2 branches

2 releases

3 contributors

MIT

Branch: development

New pull request

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theetje Netlist(class) in helpers.py

Latest commit 5cb7370 10 hours ago

docs

Added version 0.0

18 hours ago

sample

Netlist(class) in helpers.py

10 hours ago

tests

Merge branch 'Restructure' into development

18 hours ago

.gitignore

added netlist.pyc to ignore list

5 days ago

LICENSE

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Makefile

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18 hours ago

README.md

Updated to Python 3

18 hours ago

requirements.txt

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setup.py

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18 hours ago

- ✓ v0.0 Set up architecture for the files, codes and folder
- ✓ v0.1 Write a program to print a two-dimensional grid
 - ✓ v0.1.1 Update labels to start at 0
 - ✓ v0.1.2 Align vertical labels to the left.
- ✓ v0.2 Calculate the most efficient route between point A and B on a grid.
- v0.3 Create a data structure for gates on the grid (with simple data)
 - ✓ v0.3.1 Load the ID of a tuple in set_gate()
 - ✓ v0.3.2 Don't load the header of the CSV files
 - ✓ v0.3.3 Refer to Westly White in the comments of the board-class
 - ✓ v0.3.4 Call calculatePath in pathfinder.py
 - v0.3.5 Read gates.csv and save the data in an accessible dict (creating a class that reads gates.csv)
- v0.4 Load netlists from a .txt file to a data structure (instead of hard coded data in the helpers file)
- v0.5 Calculate a route between point A and B on a grid (based on a simple netlist and gateslist)
- v0.6 Evade obstacles on a grid while calculating a route
- v0.7 Remember the walked path in a data structure
- v0.8 Calculate 2 routes, which evade obstacles and each other.
- v0.9 Make the program modular and installable (by using setup.py)

PLAN VAN AANPAK

- gates2.csv
- netlists1.txt
- netlists2.txt
- /* _init_.py
- /* core.py
- /* helpers.py
- tests
- .gitignore
- LICENSE
- ...

```

55         board.set_gate(gateLabel, gateX, gateY)
56
57     # Test path calculation
58     helpers.calculatePath(board, (1,1), (7,9))
59
60     # Print the board
61     board.show_board()
62
63     if __name__ == '__main__':
64         main()
65

```

```

right right right right right right down down down down down down down down - Steps made: 14
  0  1  2  3  4  5  6  7  8  9
0  .  .  .  .  .  .  .  .  .  .
1  .  1  #  #  #  #  #  #  .  .
2  .  .  .  .  .  .  .  #  .  .
3  .  .  .  .  .  .  .  #  .  .
4  .  .  .  .  .  .  .  #  .  .
5  .  .  .  .  .  .  .  #  .  .
6  .  .  .  .  .  .  .  #  .  .
7  .  .  .  .  .  .  .  #  .  .
8  .  .  .  .  .  .  .  #  .  .
9  .  .  .  .  .  .  .  #  .  .
[Finished in 0.1s]

```

PREVIEW

```
>>> a[0,3:5]  
array([3,4])
```

```
>>> a[4:,4:]  
array([[44, 45],  
       [54, 55]])
```

```
>>> a[:,2]  
array([2,12,22,32,42,52])
```

```
>>> a[2::2,::2]  
array([[20,22,24]  
       [40,42,44]])
```

0	1	2	3	4	5
10	11	12	13	14	15
20	21	22	23	24	25
30	31	32	33	34	35
40	41	42	43	44	45
50	51	52	53	54	55

1. Bekend met Numpy? Andere suggesties voor een 3D-board?
2. Waar zit volgens jou de moeilijkheid van deze opdracht?