

Windows Command Prompt  
Woopsie Creations  
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P)ath \\_xliC|<

USER MANUAL

# Acknowledgments

**Thank you for downloading Path Quick!  
Your support is key!**

**And thanks a lot to the team behind the  
development of this project!  
Without them, the project wouldn't be like it is  
right now!**

**Best regards from Woopsie Creations**



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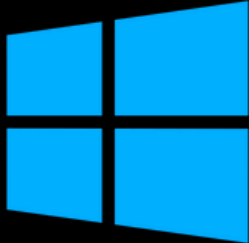

# **Introduction**

**Path Quick is an intuitive and efficient software designed to help you find the shortest path between two landmarks within a .csv file.**

**Whether you're analyzing data for urban planning, logistics, or academic research, Path Quick streamlines the process, saving you time and effort.**

**In this user manual, you'll find everything you need to get started, from installing the software to step-by-step instructions on how to input your data and interpret the results. Our goal is to make your experience seamless and productive.**

# Hardware Requirements

Category	Minimal Configuration	
Operating System		
System version	Windows 7	Monterey 12.3
Processor	Intel Pentium	M1
RAM	8GB	
Storage	40GB	

 Your computer needs Internet access in order to continue.

# How To Install

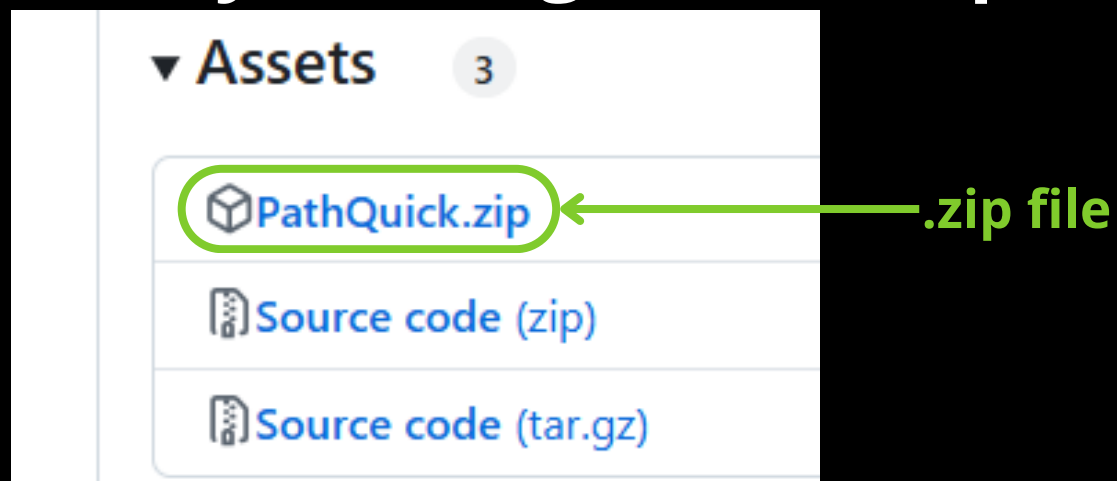
Access our repository:

<https://github.com/algosup/2024-2025-project-3-quickest-path-team-6>

Select the latest release



Download it by clicking on the .zip file



Finally, unpack the .zip file

**i** Ensure at least one .csv file is located in the project folder!

# Correct Data Structure

Before using Path Quick, you'll need a .csv using the following format:

```
1,2,18  
1,3,6  
1,5,15  
1,7,13  
1,9,19  
2,3,9  
2,4,7  
2,8,5  
3,4,17  
3,6,2  
3,8,11  
4,5,10
```

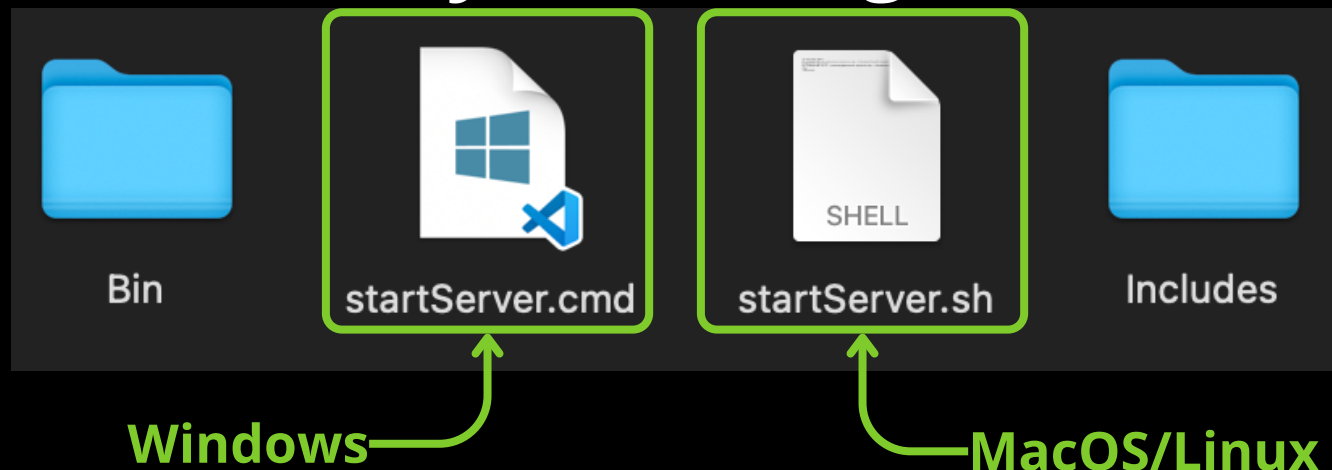
*Landmark A , Landmark B , Time*



Each line represents a road, with the time indicated in the unit of your choice.

# How To Launch Path Quick Server

Start the server by launching one of these files



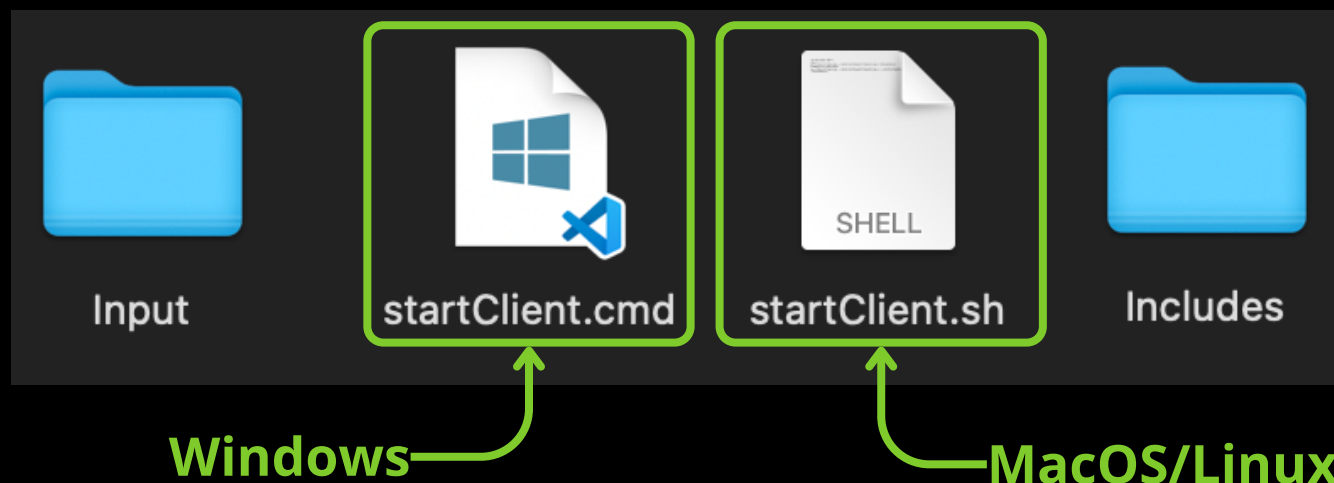
## Server interface

```
Opening ../../Src\USA-roads.csv
Dataset loaded!  ^.^
Loaded in 121 seconds!
Available landmarks from 1 to 23947347
Graph loaded successfully.
Server running on port 8080...
Press 'C' to verify the target .csv file.
Press 'SPACE' to shut down the server.
^(^owo^)
```



# How To Launch Path Quick Client

Start the client by launching one of these files

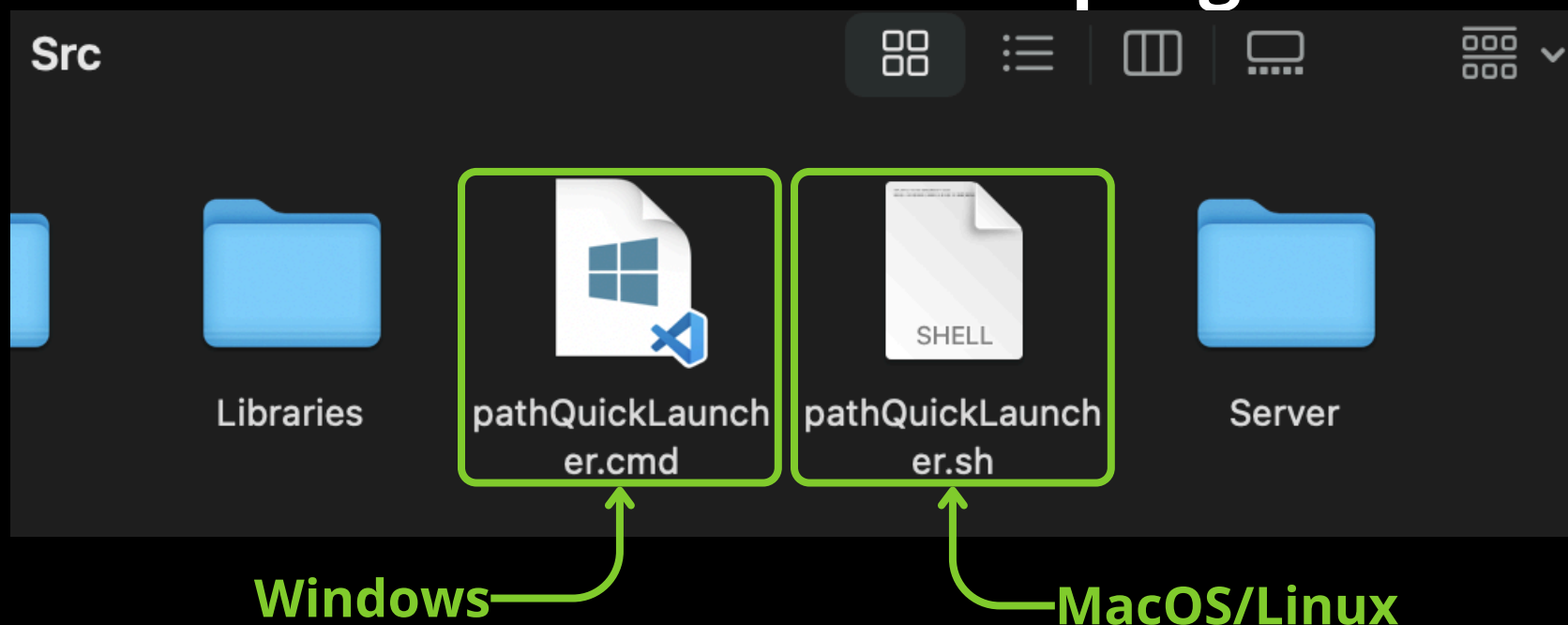


## Client interface

```
+-----+
| \_/_/ | C O n t a i n e r  P a t h  Q u i c k  |
| \_/_/ | C O n t a i n e r  P a t h  Q u i c k  |
+-----+
1| Find my way |                               | M |
-+-----+                               | ' |
2| Credits      |                               | _ |
-+-----+                               | / |
0| Exit         |                               | \ |
-+-----+                               | \ |
Your choice ->
```

# How To Launch Path Quick Launcher

You can also launch both programs:



It will open two dedicated terminal windows for both the server and the client

# How To Use Path Quick Server

Once the server is launched, you can choose which .csv file you want to load

```
Files found:
1. ../../Src/USA-roads.csv
2. ../../Src/UnitTesting/csv/incorrect.csv
3. ../../Src/UnitTesting/csv/correct.csv

Choose the .csv file: █
```

Then, you will have to wait a few moments for the server to load the dataset correctly

```

      /\_/\
dataset loaded!  / ^.^ \
loaded in 121 seconds!
available landmarks from 1 to 23947347

graph loaded successfully.
server running on port 8080...
press 'C' to verify the target .csv file.
press 'SPACE' to shut down the server.

request completed. Path converted into JSON response.


(^-w-^ )z
```

You can shut down the server by just pressing 'SPACE'

```
Server shutting down. See you later!
```

# How To Use Path Quick Server

The server is now online, and it is listening for queries  
You can send queries either by typing a certain URL...

 <http://localhost:8080/route?source=1&destination=2&format=json>

```
localhost:8080/route?source=1&destination=2&format=json
{
  "path": [
    1,
    2
  ],
  "time": 5062
}
```

By typing a curl command on your terminal...

```
curl "http://localhost:8080/route?source=1&destination=2&format=json"
{
  "path": [
    1,
    2
  ],
  "time": 5062
}
```



If the desired format is not handled, it will still output correctly but in plain text.

# How To Use Path Quick Server

**You can verify the integrity of the current .csv file on the server side by pressing 'C'**

```
Verifying ../../Src/USA-roads.csv  
  
The file is free of loops.  
The graph is fully connected. Every node can reach every other node.  
No duplicate connections found.
```

**If any problem is detected by this feature, means the dataset is not correctly formatted and thus might causes issues while calculating a path**

# How To Use Path Quick Client

## You can also use Path Quick's client for more simplicity

```

+-----+
| \ \ / ( _ | ( _ ) | _ | ( _ - | ( _ | ( _ | \ x | _ | | ( _ | < |
| \ \ / ( _ | ( _ ) | _ | ( _ - | ( _ | ( _ | \ x | _ | | ( _ | < |
+-----+
1| Find my way |                                     | M |
+-----+                                     | \ _ ' / |
2| Credits      |                                     | / \ |
+-----+
0| Exit         |
+-----+

Your choice -> █

```

## Access the “Find my Way” tab by entering ‘1’

```
+-----+
|               | o .   | M VV (  | V      | / \ |
| | \ / |       | | | | (  | Y      | /      |
+-----+
Available points between 1 and 23947347

Choose a departure ->
```



**If the server is not online, you won't have access to the "Find my way" tab.**

```
Server not connected. Wait until it is connected.
```

# How To Use Path Quick Client

## Select your departure

```
+-----+
|                                     | M \V\ C\ V      | / \ |
|   \| / |       | | | | C\ Y        /          |
+-----+
Available points between 1 and 23947347

Choose a departure ->
```

## Select your destination

```
+-----+
|                                     | M VV C V      | / \ |
|   \| / |                         | Y          /    |
+-----+
Available points between 1 and 23947347

+-----+
| Departure: 1                      |
+-----+

Choose a destination ->
```



**You can see how many IDs are available right on top.**

# How To Use Path Quick Client

Select the file format and confirm

```

  \ / |  o . | M \ / | \ / |  \ / |
  | | | | | Y /      | \ / |
-----
Available points between 1 and 23947347
-----
Departure: 1
      \ /
Destination: 2
-----
Output file format: JSON
-----
1| Everything is correct |
-----
2| Change file format   |
-----
3| Redefine my path     |
-----
0| Go back to main menu |
-----
Your choice ->
```

If needed, you can redefine the path

The client handles only  
JSON and XML formats.

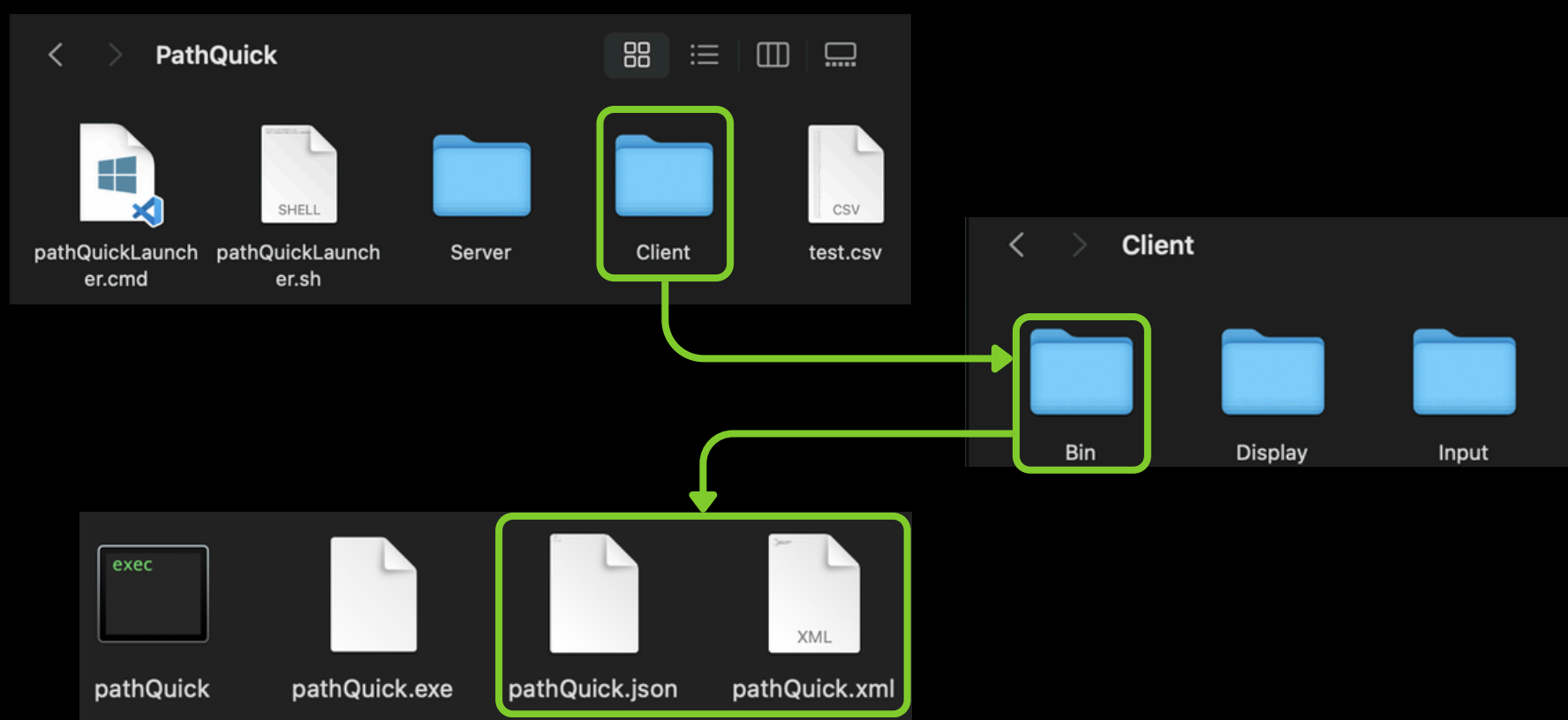




# How To Use Path Quick Client

```
+-----+
|  I \ / |      |  I  o  .  I  M  V \ V  C  I  V      |  I \ / |
|-----|      |-----|
|  Departure: 1  |
|      \ /      |
|  Destination: 2|
|-----|
|
| Calculating shortest path...
|
| Response written to Bin/pathQuick.json
| Path calculated in 219 milliseconds.
|
| 0| Go to main menu? ->
```

In order to see the result of the path, you need to go into "Client/Bin/pathQuick(.json or .xml).



# Troubleshooting

## Curl: (7) Failed to connect to localhost port 8080

Condition	What to do
The server is up	Restart the server
The server is still loading	Wait for the server initialization to complete
There is no terminal open with the server	Restart "startServer"

## curl: (52) Empty reply from server

Solution: verify the correctness of your parameters

## Curl: (56) Recv failure: connection was reset

This error suggests that the server connection was interrupted while processing the request.

To resolve this issue, restart the server.

# Troubleshooting

**In the possibility you have encountered another type of error, follow these instructions:**

**- Go to this website: -**

**<https://github.com/algosup/2024-2025-project-3-quickest-path-team-6/issues>**

**- Select “New issue” on the top right -**

**- Select “Bug report” -**

**- Describe your situation -**



**Please, restrict the title to a maximum of 50 characters.**