

MUD

by Paweł Biesikirski

Czym jest MUD?

“**MUD** (*Multi-User Dungeon*) – akronim oznaczający komputerowe gry fabularne, które są rozgrywane przez Internet przy użyciu interfejsu tekstowego.” (from Wikipedia the Free Encyclopedia)

Telnet british-legends.com

Path.
You are standing on a path which leads off a road to the south of you. To the west and east are separate gardens.
Flower garden.
You are in a well-kept garden. There is an unexpectedly you notice lots of flowers. To the east across a path there
Cliff.
You are standing on the edge of a cliff surrounded by forest a river to the south. A chill wind blows up the unclimbable heights. At the base of the cliff you can just make out the
As you approach the edge of the cliff the rock starts to creak you retreat as you feel the ground begin to give way under
leap
You are splattered over a very large area, or at least most is. The rest of you remains here, even now, being eaten by (especially your eyes). If you'd have looked properly before night have decided not to jump!
Persona updated.
Would you like to play again?
:

Aardwolf - Mudlet 2.1

Connect Triggers Aliases Timers Buttons Scripts Keys Help Chat Map Manual Settings Noteepad Package Manager Replay Reconnect Multiview About

career options."
Wolfie pauses to wait for you.

[271/271hp 334/334mm 623/623mv 0qt 250tnl] >

quest request
You ask Wolfie for a quest.
Wolfie tells you 'Thank you, brave Kelwyn!'
Wolfie tells you 'Aardwolf's most heinous criminal, a local fisherman, has escaped from the dungeon!'
Wolfie tells you 'Since the escape, a local fisherman has murdered'
Wolfie tells you '10 civilians! The penalty for this crime is death, and'
Wolfie tells you 'you are to deliver the sentence!'
Wolfie tells you 'Seek a local fisherman out somewhere in the vicinity.'
Wolfie tells you 'of First Ave and Brightcliff which is in the general area'
Wolfie tells you 'of Brightsea and Glimmerdin.'

Wolfie tells you 'Good luck Kelwyn! Return safely!'
Wolfie tells you 'You have 55 minutes to complete your quest.'

[271/271hp 334/334mm 623/623mv 53qt 250tnl] >

Character autosaved at Mon Feb 3 20:13:26 2014.

1
Career Training (6)
This classroom reminds you of a military academy, with its precision and careful segregation. Desks are arranged in careful, precise rows according to the student's chosen profession, with no mixing or overlap. Each row is precisely labeled, and broken down even as far as subclass. Looking down the line, you identify your profession and subclass. The row is about half filled already with chattering students. The northern wall is completely taken over by a blackboard, while the eastern wall boasts an astounding view over the Academy gardens. You don't get a chance for more than a glimpse though, as you're sharply called to attention and ordered to your seat for the lesson.

[Exits: west]
The blackboard has a review of the career training lesson.
Wolfie the hunter prepares recruits for graduation.

[271/271hp 334/334mm 623/623mv 50qt 250tnl] >

You tell allison: "D
Auction: Galadryr is auctioning (>Lara Shai Quirins) (Level 41, Num 221). Current bid is 100.
[News] Power: How do I get into Kingshole, I need to kill a citizen for a quest
Auction: Unconcernably is auctioning a garbage can (Level 5, Num 222). Current bid is 105.
[News] (Twelper) Shaelynn: try checking out a map to locate where the room is for your quest
Auction: FaithFath is auctioning Elvish Boots (Level 200, Num 223). Current bid is 100.
Auction: a garbage can SOLD to Arami! for 15,000 gold.
Auction: FaithFath is auctioning the long, multi-pronged hook "Soul Ripper" (Level 190, Num 224). Current bid is 100.
[News] Power: I figured it out thank you.
Market: Out of 1 gold on Still ed with Labot t (Level 171, Num 3726)
Market: Less than 15 minutes remaining on this item.
[News] (Keebler) Vaedus: Welcome to aardwolf games

Career Training

Strength	23/20	Name	Kelwyn
Intelligence <td>17/16<td>Race<td>Human</td></td></td>	17/16 <td>Race<td>Human</td></td>	Race <td>Human</td>	Human
Wisdom <td>25/20<td>Class<td>Cleric</td></td></td>	25/20 <td>Class<td>Cleric</td></td>	Class <td>Cleric</td>	Cleric
Dexterity <td>18/17<td>Subclass<td>Martyr</td></td></td>	18/17 <td>Subclass<td>Martyr</td></td>	Subclass <td>Martyr</td>	Martyr
Constitution <td>19/15<td>Clan<td></td></td></td>	19/15 <td>Clan<td></td></td>	Clan <td></td>	
Luck <td>20/19<td>Title<td></td></td></td>	20/19 <td>Title<td></td></td>	Title <td></td>	

Hitpoints	271/271	Level	9
Mana <td>334/334<td>To Next<td>250</td></td></td>	334/334 <td>To Next<td>250</td></td>	To Next <td>250</td>	250
Moves <td>623/623<td>Practice<td>13</td></td></td>	623/623 <td>Practice<td>13</td></td>	Practice <td>13</td>	13
Trains <td><td><td>15</td></td></td>	<td><td>15</td></td>	<td>15</td>	15

Time Played : 01:53:25

Alignment	0
Hunger <td>73%</td>	73%
Thirst <td>73%</td>	73%

Gold	37444
Bank <td>430010</td>	430010
Quest Pts <td>10</td>	10

[Exits: W]

Global Quest: The Global quest has been won by Comanche - 370h win.
INFO: New quest #34203 in Forum Quest from Aardwolf Ruby: Lvl 131 to 145 - Global quest # 608723
Lasertag: A Lasertag game will start in approximately 3 minutes!
Lasertag: Plink has joined the Lasertag game.
Lasertag: The Lasertag game will close in 2 minutes.
Lasertag: Shadowaptor has joined the Lasertag game.
Lasertag: The Lasertag game will close in 1 minute.
Lasertag: The teams have now been assigned - game will start in 1 minute.
Lasertag: The Lasertag game has now started. May the best team win!
Global Quest: The Global quest has been won by Turtle - 773rd win.
Global Quest: The Global quest will go into extended time for 3 more minutes.
Lasertag: Plink has led the best team victory!
INFO: New quest #34204 in Forum Quest from Aardwolf Ruby: Lvl 93 to 104 - Global quest # 608724
INFO: 1 minute remaining of bonus experience.
INFO: Bonus experience has now expired.

Search

Info GA: 5:000

Czym jest mój MUD?

- Początkowe informacje o lokacjach, postaciach niezależnych, etc. pobierane są przez serwer z plików csv
- Gracze przesyłają do serwera polecenia dotyczące działań ich postaci
- Serwer w ustalonych odstępach czasu (obecnie testowo co 5 s.) wykonuje polecenia graczy (kolejność zależy od rodzaju komend)
- Następnie serwer rozsyła do graczy zaktualizowane informacje o świecie

MUD Mud v0.1

Name: Cleese

Welcome to MUD Mud v0.1. It's great to see you! Have fun.

Connecting to the server...

Done.

It's impossible!

It's impossible!

Cleese moves from sewers to narrow street

Idle moves from corner shop to narrow street

Idle shouts: 'HELLO?!' at narrow street

You say to Idle: 'I'm here...'

Idle moves from narrow street to main street

Cleese moves from narrow street to main street

Location: main street

Players: StrayDog5, Idle, Cleese,

Adjacent: narrow street, corner shop, town hall,

You are on the City's main street. Crowd is moving all around.



MUD Mud v0.1

Name: Idle

Welcome to MUD Mud v0.1. It's great to see you! Have fun.

Connecting to the server...

Done.

It's impossible!

Idle moves from corner shop to narrow street

It's impossible!

Idle shouts: 'HELLO?!' at narrow street

Cleese says to you: 'I'm here...'

It's impossible!

Idle moves from narrow street to main street

Cleese moves from narrow street to main street

Location: main street

Players: StrayDog5, Idle, Cleese,

Adjacent: narrow street, corner shop, town hall,

You are on the City's main street. Crowd is moving all around.

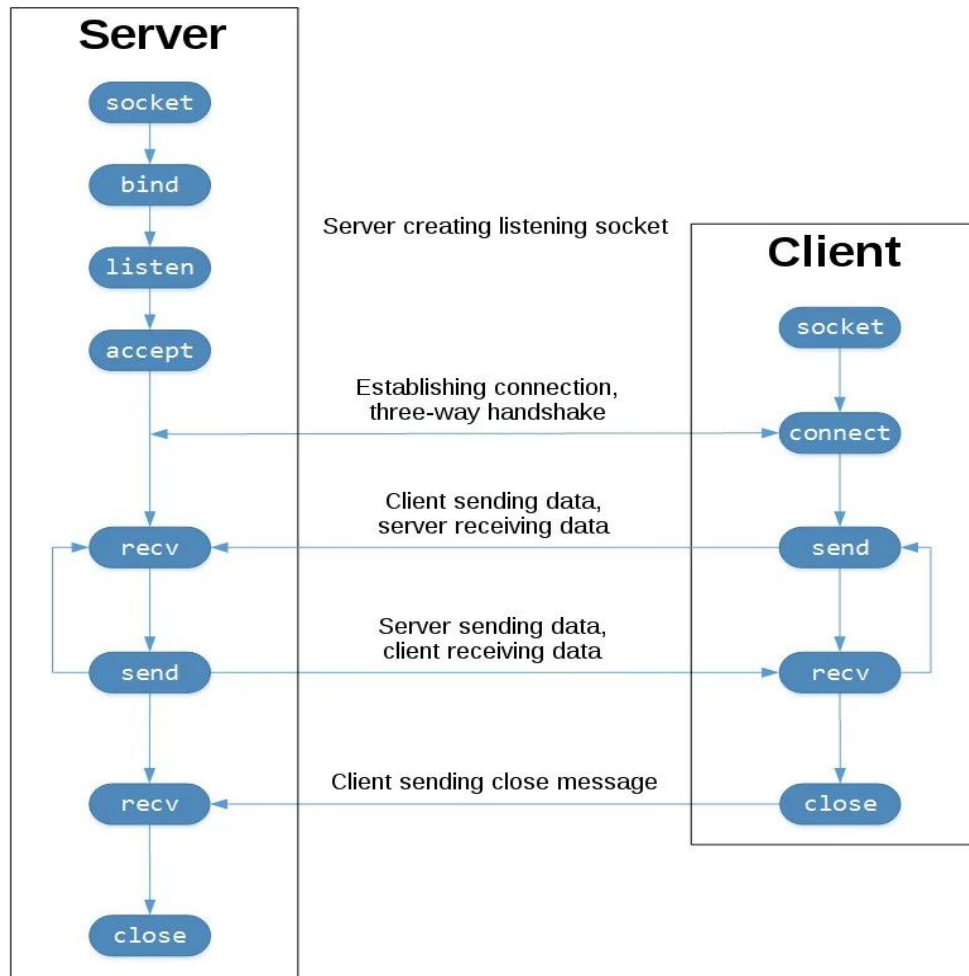


Istotne elementy aplikacji

- Komunikacja sieciowa (sockets)
- TUI (npyscreen)

Komunikacja sieciowa

Co to jest socket?

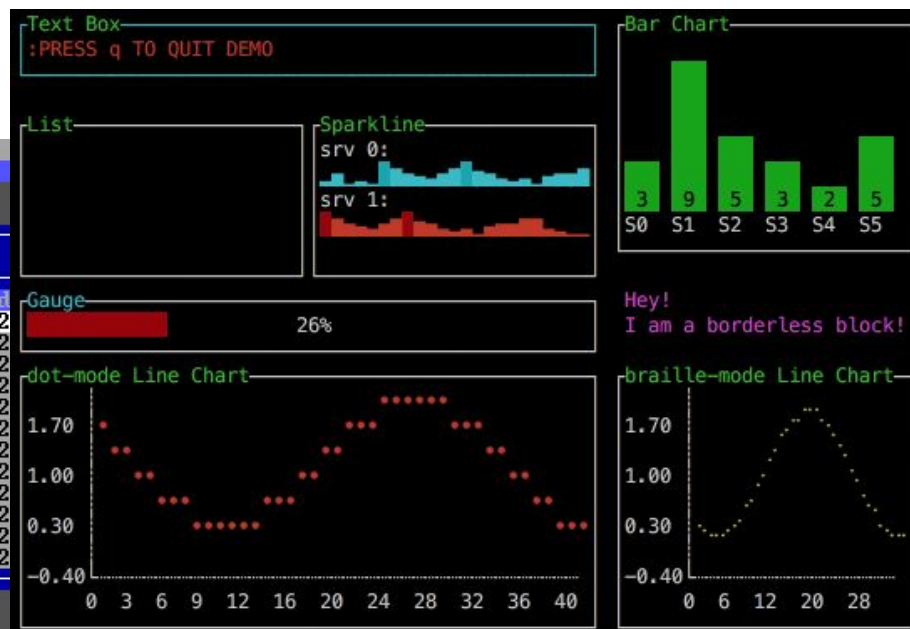
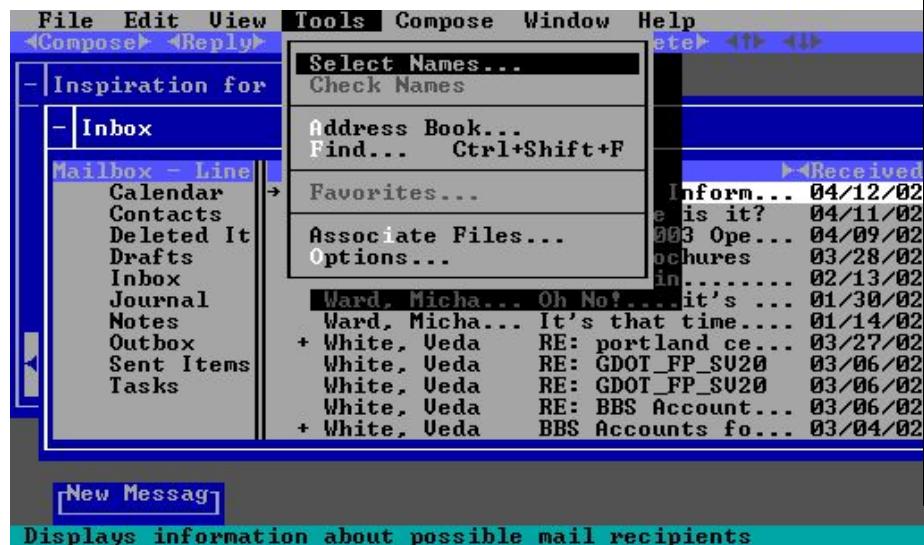


Komunikacja sieciowa w moim MUDzie

- Moduł socket (biblioteka standardowa Pythona)
- Komunikacja klient - serwer
- Na każdego klienta przypadają dwa połączenia - jedno obsługuje przesyłanie poleceń do serwera (w dowolnej chwili); drugie odpowiada za cykliczne rozsyłanie informacji o świecie do klientów
- Obsługa wielu klientów wymaga korzystania z wielowątkowości (innym rozwiązaniem może być asynchroniczne I/O lub użycie selektorów)

TUI (text-based user interface)

- Ciekawa alternatywa dla GUI
- Wbrew pozorom duży wybór widgetów
- Biblioteka npyscreen



npyscreen

- “python widget library and application framework for programming terminal or console applications”
- Oparty na ncurses który jest częścią biblioteki standardowej Pythona
- Prosta obsługa, dysponuje dość dużą ilością widgetów

npyscreen

Trzy podstawowe typy obiektów w aplikacji:

- Form - zwykle zajmuje cały terminal - w nim będziemy umieszczać widgety, pozwala też zarządzać niektórymi zdarzeniami
- Widget - pola tekstowe, slidery, etc.
- Application - zarządza ogólnym działaniem aplikacji

Źródła

- <https://docs.python.org/3.7/library/threading.html>
- <https://docs.python.org/3/library/socket.html>
- <https://realpython.com/intro-to-python-threading/#working-with-many-threads>
- <https://realpython.com/python-sockets/#handling-multiple-connections>
- <https://www.techbeamers.com/python-tutorial-write-multithreaded-python-server/>
- <https://npyscreen.readthedocs.io/index.html>