

## Team Programming Assignment - PA2

T4 > PA2

Tic-tac-toe Game V1

Running the code requires running of main.java in the cen4010.pa2 package

In this iteration of the tic-tac-toe game, a 3x3 grid is presented to the player and the user must click start to begin the game.

Per classic Tic-tac-toe rules, the player with the starting move is X and the second player is O.

Currently the only option is to play with a friend side by side and have them share the mouse to make their moves.

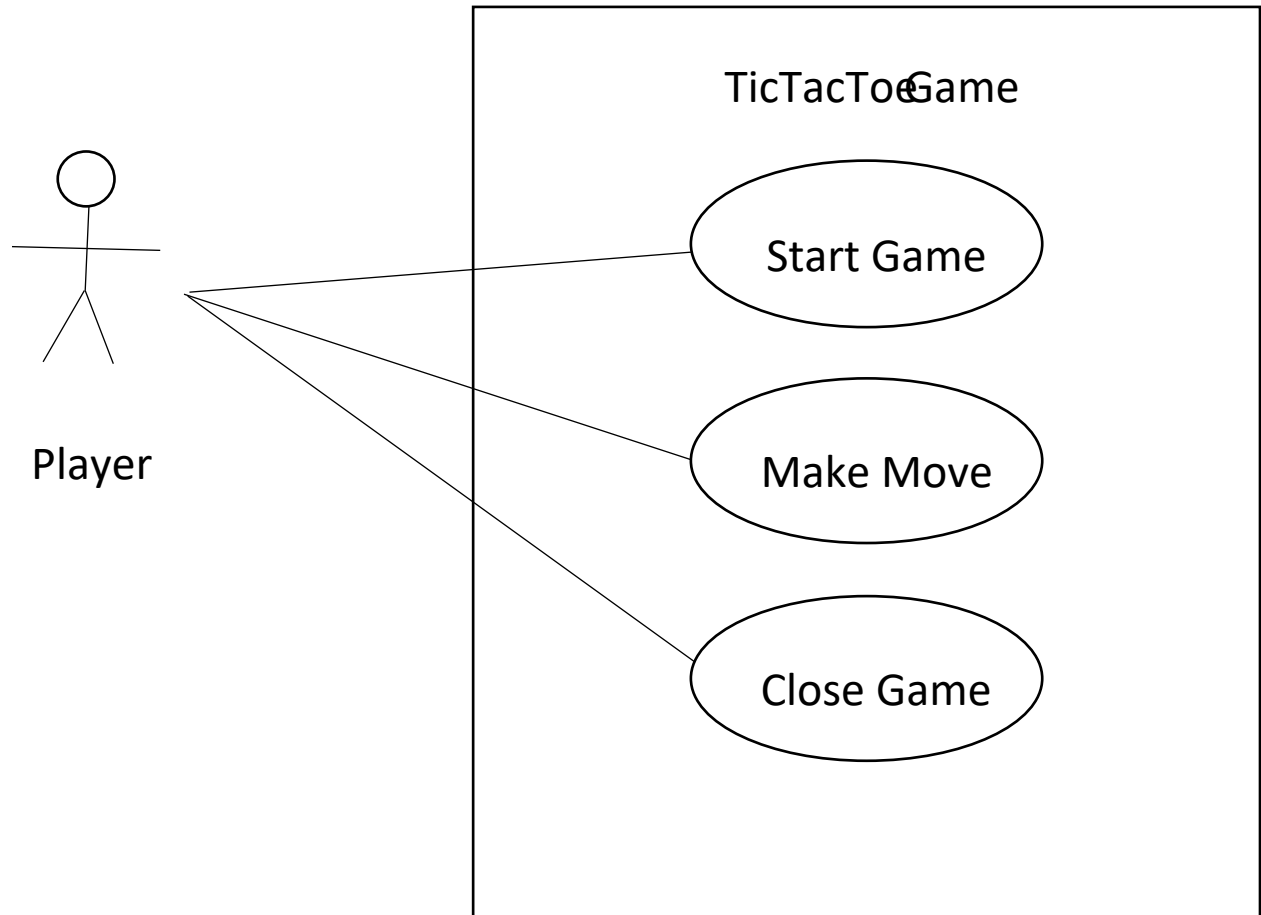
Depending on whose turn it is the player must click an empty square on the grid to place their mark on the board, when 3 in a row or diagonally are placed on the board that player is declared the victor.

To encourage faster play, there are two timers that count down from 30 seconds once the first move is made; if either player runs their timer out then attempts to make a move, they lose.

To play again the players must close the game using their system's close button and re-launch.

In the current iteration there is a drop down for selecting the type of player you match with. Currently only a human player is available.

## Use Case Diagrams



Actor Action	System Response
1. Player clicks 'Start Game' button.	
	2. Player1 timer begins running from 50 secs. 3. P1 assigned 'x' and system waits for input.
4. Player clicks open space on 3x3 grid to place 'x'.	
	5.     Pause P1 timer and start Player2 timer. 6.     Check if P1 move is made with time left on timer. 7.     Check if P1 move satisfies win condition. 8.     Check if P1 move satisfies draw condition. 9.     P2 is assigned 'o' and system waits for input.
10. Player clicks open space on 3x3 grid to place 'o'.	
	11.    Pause P2 timer and continue P1 timer. 12.    Check if P2 move is made with time left on timer. 13.    Check if P2 move satisfies win condition. 14.    Check if P2 move satisfies draw condition. 15.    P1 can move, system waits for input.
16. Repeat process until win, time out, or draw condition is met.	
	17.    Pop-up window appears to display game result: P1 win, P2 win, P1 out of time, P2 out of time, or game draw. 18.    Grid and buttons set to disabled.
18. Player clicks 'X' on frame to close out window and game is finished.	

Git log

commit 57688c017096858dffa11d24d76ce8df046c67e2

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 17:13:20 2021 -0400

Finally

commit d1b170acd2f0cc9fc0a7f18903a7c0af9b26b0c2

Merge: 79eb51f 50290e3

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 16:59:35 2021 -0400

Merge remote-tracking branch 'origin/main' into main

commit 79eb51f4809ed8ed8c25caf44d83514751f0f7ab

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 16:59:12 2021 -0400

github arrrggg

commit 3e55e8c1bd0a2b770780a57670a9ad222290b09f

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 16:55:28 2021 -0400

final settings changed

commit 50290e38286a9880c461e476ca4882d433a32959

Merge: 5a94d1f 36b934e

Author: Alejandrokatz <alejandro.katz@outlook.com>

Date: Sun Oct 24 16:47:27 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4>.git into main

commit 5a94d1ffff755ac78db082f4b16ee310e1b08ae4

Author: Alejandrokatz <alejandro.katz@outlook.com>

Date: Sun Oct 24 16:47:15 2021 -0400

Learned how to use arrays after 3.5 years in university

commit 36b934e9aaf8df695cd647333f6bee2f646ec2b8

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 16:44:42 2021 -0400

uhhh

commit bc1d3664f39e0016dcde2f3f9fbbb2bd5ec50b46

Author: Alejandrokatz <alejandro.katz@outlook.com>

Date: Sun Oct 24 16:33:43 2021 -0400

Board drawing

commit 9eb8c431bbc77590dd80ada44dd95ece2bbddc52

Author: Alejandrokatz <alejandro.katz@outlook.com>

Date: Sun Oct 24 16:30:59 2021 -0400

testPlayerWind

commit 9ba539d30d1ec613b05e6929e25320368187c9c3

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 24 16:29:31 2021 -0400

Commented out functions that are not used.

commit b46b382c81a8532a4c6b37b49df54602c7645b9e

Author: Alejandrokatz <alejandro.katz@outlook.com>

Date: Sun Oct 24 16:17:16 2021 -0400

testSetBoard

commit 2872aa9955bb5dcfa2b22dc3b3f0767f310d24eb

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sun Oct 24 01:14:54 2021 -0400

Added 'else if' to conditional if win and draw occur simultaneously

commit a5cecdb14c4908e91108a4dc08399d73b01ae46d

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sat Oct 23 18:51:26 2021 -0400

Fixed a typo

commit bf0a054db7a21cd1388ac724c1abc29a7c6bbc67

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sat Oct 23 18:34:54 2021 -0400

Changed timer back to 50 seconds. Cleaned up board class

commit 7a3df03884e6e9f28a567ad2ee13909f13e71513

Author: Thecodebilly <N01401127@unf.edu>

Date: Sat Oct 23 14:33:57 2021 -0400

Oops, forgot timeout functionality. NOW it is done.

commit 2729832db15c2d40ec8cc10c602e747bd56847f3

Author: Thecodebilly <N01401127@unf.edu>

Date: Sat Oct 23 14:10:50 2021 -0400

Completed PA2... (for real this time)

commit 35962f235ca6cc2390a06e772499de5cfba60415

Author: Thecodebilly <N01401127@unf.edu>

Date: Sat Oct 23 13:54:19 2021 -0400

Semi-final version

commit afbd939b3fb8e2b2afea5e494ba3ff9ec335876e

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sat Oct 23 13:36:17 2021 -0400

Updated board

commit 49c1345ef939dc090cbe348a45213dea71c6000a

Merge: ea3bcfc 47e7d32

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sat Oct 23 13:34:40 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4> into main

Conflicts:

PA2/src/cen4010/pa2/Board.java

commit ea3bcfc22232672e5810948b2b150eee5eb0e160

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sat Oct 23 13:07:48 2021 -0400

Updated diagonals in board class

commit 47e7d324af381dc0b2fb444b64201db62c0fd1a4

Author: Thecodebilly <N01401127@unf.edu>

Date: Sat Oct 23 13:03:14 2021 -0400

finishing touches

commit 466d7e92c667d40b40c22d61daad0ed0d877176d

Author: Thecodebilly <N01401127@unf.edu>

Date: Sat Oct 23 12:09:20 2021 -0400

fixed variable names

commit 53ce7a3561ee711247b1a4348563c40367e10979

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Fri Oct 22 17:27:28 2021 -0400

Updated Board.java

commit 697671cc8ad7781a952e8758e033d83d89f6d52f

Author: alejandrokatz <n01362083@unf.edu>

Date: Fri Oct 22 15:48:36 2021 -0400

Removed mainTest.java, not needed. Added comments to board.java and



todo.txt

commit 9825953b32b1f69acd1be3a618356a30474abc1d

Author: alejandrokatz <n01362083@unf.edu>

Date: Fri Oct 22 15:36:35 2021 -0400

Removed COMMITTED. Added test stubs

commit 472fc9d527136ae961368b4c60ee00ddae084f2c

Author: marat <marat@DESKTOP-DCT3DBM>

Date: Fri Oct 22 00:52:24 2021 -0400

Pop up window

commit e410369c3ef7b2407bd6c04aaefbf8a1f9bc306d

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 13:55:58 2021 -0400

Game Started.

commit 38097059120a73ef461023170cecd6ab469ce44a

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 13:53:36 2021 -0400

New and improved X's and O's

commit a95614a4e04e22f27ed035760ed2f7ac6c5e9d8a

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 13:40:57 2021 -0400

No more overwriting!

commit 9b9f2c2aba59a87a5cace6db7337d179f049a41c

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 13:28:34 2021 -0400

Timers added

commit acc2aca66c88ca6b3f3802f3639928e72277b0ae

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 11:53:28 2021 -0400

Pushed before timer add

commit a7e6d657e99cfe040eec4cd95275f60517745eff

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 11:48:23 2021 -0400

Border Layout Stuff

commit b61a484cc59c5757f91938ab44443123f1625c76

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 11:33:11 2021 -0400

Incorporation of GUI\_Rework branch which was done by Marat

commit b42dc83b9d72d88566ebc683ad68ad801aa2eb5c

Author: Thecodebilly <N01401127@unf.edu>

Date: Thu Oct 21 10:27:24 2021 -0400

fixed board references

commit 91886a3ed026a7206323a0374284cf71efda59cf

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Wed Oct 20 17:25:45 2021 -0400

Added comment to gameDraw()

commit 8aeaa46fba3ddb004f676cd6c446ccac62114a60

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Wed Oct 20 15:18:41 2021 -0400

Updated board.java

commit a22c84f8eaff6ff2bf3c0fa934b22da004845910

Merge: d46c5a6 47548c0

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Wed Oct 20 15:17:19 2021 -0400

# WARNING: head commit changed in the meantime

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4> into main

commit d46c5a6dcc2a783641eb0b017962b7e82dce2d40

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Wed Oct 20 14:43:01 2021 -0400

Added first draft of playerWin and gameDraw functions to board.java

# WARNING: head commit changed in the meantime

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4> into main

commit 47548c04121672b5cb6d67dcd412fb57110c3b07

Author: Thecodebilly <N01401127@unf.edu>

Date: Wed Oct 20 14:03:59 2021 -0400

Timer shtuff

commit 2c8b2eddf74be1ae303b9511c1beb2eb6ba9da0

Author: Thecodebilly <N01401127@unf.edu>

Date: Wed Oct 20 13:06:40 2021 -0400

added timer jlabels

commit c71a0e7754ea9c761d54376a0b930b9580991bf0

Author: alejandrokatz <n01362083@unf.edu>

Date: Tue Oct 19 21:35:56 2021 -0400

added to todo

commit e60ec9a2f1567fc4de6b1676e04bd74ffe69b186

Author: marat <marat@DESKTOP-DCT3DBM>

Date: Mon Oct 18 14:12:18 2021 -0400

added BoardTODO and LogicTODO

commit 91b45dbce8cb3fbf3f803c7ee258d78b96d6126c

Author: marat <marat@DESKTOP-DCT3DBM>

Date: Mon Oct 18 14:06:11 2021 -0400

TODO list

commit bb074f723f019518249bafb2caa76283976ef450

Author: Thecodebilly <N01401127@unf.edu>

Date: Wed Oct 13 11:19:54 2021 -0400

added comments

commit da49911cd86f06891384bfeb7018a14c32982992

Author: nhsbi <nhsbi@DESKTOP-6JCP41M>

Date: Tue Oct 12 13:19:33 2021 -0400

Added mark adding, more formatting, and button listener.

commit 05d7d4eb795b435c3e90fb1241669c73febe15aa

Author: Thecodebilly <N01401127@unf.edu>

Date: Tue Oct 12 00:02:22 2021 -0400

needed more S P A C E.

Added spacing and second panel for timer and other operations :-)

commit ace515d07061a95d817bfc7f0fd9e63b9d89be6c

Author: alejandrokatz <n01362083@unf.edu>

Date: Mon Oct 11 16:43:40 2021 -0400

added padding to tic tac toe

commit 9ce87acafc4e8675f7e742609899cef8fc53a287

Author: nhsbi <nhsbi@10.253.62.17>

Date: Mon Oct 11 16:39:59 2021 -0400

squares

commit 5dfc7376bbb5724183555a695a0b305d71ff0da0

Author: nhsbi <nhsbi@10.253.62.17>

Date: Mon Oct 11 16:08:47 2021 -0400

Boxes... in

commit c4dc4c3ba57fa2e1084db30d60497fb83c77b7c3

Merge: 83dffe8 9fed2c3

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 10 18:51:36 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4>.git into main

commit 83dffe837a2381253e61ea52e85143970959ff31

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 10 18:50:42 2021 -0400

GUI update

commit 9fed2c30e6fafa92dd2412ef240074411dde7bff

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:34:36 2021 -0400

Commit message

commit 32251e2a9940c9c49176aa7f781bc23a6da0e1b4

Author: marat <marat@DESKTOP-DCT3DBM>

Date: Sun Oct 10 18:31:10 2021 -0400

Test comment

commit afdd7bd109b851bc7af086c226de1302fd3f3417

Merge: 12e4d07 ba45f44

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:25:15 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4.git> into main

commit 12e4d07f0ac7582274ce0473450f4279f0564f8d

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:25:07 2021 -0400

test cases

commit ba45f44448b69b13ee8c4dc3ec07d0a196494432

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 10 18:24:29 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4.git> into main

commit 3f5ea7cd1832c8ee343cf4af9f59a965d4e4e62c

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:21:40 2021 -0400

added tests directory

commit 079d69ee29112dfa75fd73de7fa2835c1ab37828

Merge: cd1cde7 1d7a21f

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 10 18:19:09 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4>.git into main

commit cd1cde723a8c2c8aa6aa539296c3367bcb6d8399

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Oct 10 18:18:23 2021 -0400

Board.java added

commit 1d7a21f53109423e17c1134a13c89f73da5bc3eb

Author: Jonathan Shih <71303353+EazyWei@users.noreply.github.com>

Date: Sun Oct 10 18:17:53 2021 -0400

Update Readme.txt

commit 2ae33afbb43d25e52394757e6204c38e30b6d1c6

Merge: 53897da 9a84b13

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:14:00 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4>.git into main

commit 53897da0174ee4e17ba582d4a9dcb5aa2a90f27c

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:13:42 2021 -0400



stuff

commit 9a84b1339f111dd4b0b542ea0adf85ee4bf67ebd

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sun Oct 10 18:11:20 2021 -0400

Added Readme

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4> into main

commit a54d572f57807b27adc0c8edf689f75ab6a917e4

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 10 18:05:02 2021 -0400

PA2

commit 5bc7ab5e7fdbdb99c4cc0cd873fc653f13aeb45a

Merge: f4c4ee3 5a3c187

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sun Oct 3 13:22:23 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4> into main

commit f4c4ee3552cfc2e74524147d23c1505aac8050f2

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sun Oct 3 13:20:08 2021 -0400

Overview done

commit 5a3c18710007ca014ac950f2fe188f20f0193d1d

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 3 13:00:11 2021 -0400

modified tests to more closely resemble rubric

commit cab970440d6405efa244a1072f6b3c676faf8085

Merge: 297b44b e7cd2db

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 3 12:53:11 2021 -0400

Merge branch 'main' of <https://github.com/UNF-CEN4010/T4.git> into main

commit e7cd2db9e27e473dcda481c8a987f5fda8ebbb55

Author: Alejandro K <79485148+AleAlejandrok@users.noreply.github.com>

Date: Sun Oct 3 12:52:59 2021 -0400

Update Vector3D.java

commit 297b44b525fcf50e55e2abe944dcb0a477a1913a

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 3 12:52:14 2021 -0400

removed comments code

commit 860c324c43bfa6d7508e5136dddf06469a81553c

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 3 12:51:05 2021 -0400

removed bill's comment

commit d51cd04a071de1927b834a31cf36379f303ab27b

Author: Jonathan Shih <jonnyshih@gmail.com>

Date: Sun Oct 3 12:50:55 2021 -0400

Put in names

commit c353ff62f04015cf14741cbc244edd0b53066e25

Author: alejandrokatz <n01362083@unf.edu>

Date: Sun Oct 3 12:31:39 2021 -0400

Moved things to be in line with package directory reqs, finished 3Dtests

commit 0bb153afa79187a645b5180016ebe67cd0aa5327

Merge: 1ead005 2b91318

Author: Alejandro K <79485148+AleAlejandrok@users.noreply.github.com>

Date: Thu Sep 30 17:21:35 2021 -0400

Merge pull request #3 from UNF-CEN4010/AlejandroTestAttempt

Alejandro added testing capabilities and checking fixing structure of project to match prompt

commit 2b9131888ad17b5e67cdb649f5bbe0ece47654a4

Author: alejandrokatz <alejandrokatz@hackbookpro.attlocal.net>

Date: Thu Sep 30 17:14:52 2021 -0400

Added basic implementations of all tests. Add, dot, Subtract, and string tests don't work

commit e0d0fbb1e842bd109ad640dbf031a845919e0806

Author: alejandrokatz <alejandrokatz@hackbookpro.attlocal.net>

Date: Thu Sep 30 17:08:16 2021 -0400

Restructured to match prompt. Added a few tests

commit 1ead0057f17ff76c79dfc4a886bbe93d2e0d21a0

Author: alejandrokatz <alejandrokatz@hackbookpro.attlocal.net>

Date: Thu Sep 30 16:40:44 2021 -0400

RM NegateTest

Added Vector3DTest with stubs

commit ba1793c5d9e9fb3c62b96c8f1959d9b9f9591c30

Author: Thecodebilly <N01401127@unf.edu>

Date: Sun Sep 26 09:51:35 2021 -0400

Added single test case for negate

could be used as a template for the other tests

commit 1e8f25c6ee181d50cd8d08f60bddfeb1114ace84

Merge: 659eb97 20a16e5

Author: Thecodebilly <64550116+Thecodebilly@users.noreply.github.com>

Date: Thu Sep 16 12:18:52 2021 -0400

Merge pull request #1 from UNF-CEN4010/master

all the classes implemented, just need tests

commit 20a16e54fb43b9f89dc56dd7a8df1cfc14ebd402

Author: Billy Shaw <N01401127@unf.edu>

Date: Thu Sep 16 12:13:03 2021 -0400

all the classes implemented, just need tests

commit 659eb970efc3e5d2ce3788b61d4908add39fdd4b

Author: Thecodebilly <64550116+Thecodebilly@users.noreply.github.com>

Date: Thu Sep 16 10:12:35 2021 -0400

Update Members

commit 2e5ada48bc1f123f5d32e2c54dd006f009c5ae21

Author: JeanPaulMarat95 <79609412+JeanPaulMarat95@users.noreply.github.com>

Date: Tue Sep 14 14:42:51 2021 -0400

Update Members

commit 29de01101afcd72329dc555e10afa7aef1ccf7d3

Author: Jonathan Shih <71303353+EazyWei@users.noreply.github.com>

Date: Tue Sep 14 13:57:42 2021 -0400

Create Members