## System Programming (MEEC/MEAer) Project Assignment 2019/2020

Group \_\_\_\_ Students: Mauro Pungo Grade 19/20

<ul> <li>Server minimum functionalities</li> <li>Server that reads the board</li> <li>Accepts multiple clients</li> <li>Sends board to clients</li> <li>Receives characters movements</li> <li>Send character updates to clients</li> <li>Correct movement</li> <li>Client minimum functionalities</li> <li>Client reads movements</li> <li>Client updates board</li> <li>Color assignment</li> </ul>	8.0 Values	Concluded/Correct ( 100 %)
<ul> <li>player connection</li> <li>kick out if there is no space</li> <li>update of the number of fruits</li> <li>unique ID</li> </ul>	+ 0.5 Values	Concluded/Correct ( 100 %)
2 movements per second  Character inactivity (30 s + random)	+ 1.0 Values Funciona mal. Im + 1.0 Values	Concluded/Correct ( 30 %) nplementação parece adequada  Concluded/Correct ( 100 %)
Fruits eating	+ 0.5 Values	Concluded/Correct ( 100 %)
<ul><li>Superpowered pacman</li><li>Transformation</li><li>Counting of fruits</li></ul>	+ 0.5 Values	Concluded/Correct ( 100 %)
<ul> <li>Character interaction (MM MP SPM)</li> <li>Same player</li> <li>Monster – pacman</li> <li>Superpowered pacman - monster</li> </ul>	+ 1.0 Values	Concluded/Correct ( 100 %)

Bounce on bricks	+ 0.5 Values	Concluded/Correct ( 100 %)
Bounce on walls	+ 0.5 Values	Concluded/Correct ( 100 %)
Game score board sending	+ 0.5 Values	Concluded/Correct ( 100 %)
<ul> <li>player disconnect (release resources</li> <li>Correct disconnect of clients</li> <li>Correct management (destruction) of threads, sockets, memory</li> <li>Update fruits</li> </ul>	+ 0.5 Values	Concluded/Correct ( 100 %)
<ul> <li>Project organization/quality</li> <li>Correct structures (threads, communication channels)</li> <li>Use of the correct algorithms</li> <li>Correct code organization</li> <li>Efficient communication</li> </ul>	+ 1.0 Values	Concluded/Correct ( 100 %)
Synchronization     Definition of the various critical regions and implementation of correct synchronization	+ 2.0 Values	Concluded/Correct ( 100 %)
<ul> <li>Errors treatment</li> <li>Verification, correction of communication errors</li> <li>Verification, correction of execution errors</li> </ul>	+ 1.0 Values	Concluded/Correct ( 100 %)
Code Structure     Correct implementation of suitable function to encapsulate functionalities	+ 0.5 Values	Concluded/Correct ( 100 %)
Report	+ 0.5 Values	Concluded/Correct ( 100 %)

Discussion	+ 0.5 Values	Concluded/Correct ( 100 %)

## Tempo extra usado para:

- Movimentos superpacman + interações
- Contagem das frutas
- Janela do servidor
- Limpeza dos recursos