

System Programming (MEEC/MEAer)

Project Assignment 2019/2020

Group 55 Students 84196 _____ Grade 20

Server minimum functionalities <ul style="list-style-type: none">• Server that reads the board• Accepts multiple clients• Sends board to clients• Receives characters movements• Send character updates to clients• Correct movement Client minimum functionalities <ul style="list-style-type: none">• Client reads movements• Client updates board• Color assignment	8.0 Values	Concluded/Correct (100%)
player connection <ul style="list-style-type: none">• kick out if there is no space• update of the number of fruits• unique ID	+ 0.5 Values	Concluded/Correct (100%)
2 movements per second	+ 1.0 Values	Concluded/Correct (100%)
Character inactivity (30 s + random)	+ 1.0 Values	Concluded/Correct (100%)
Fruits eating	+ 0.5 Values	Concluded/Correct (100%)
Superpowered pacman <ul style="list-style-type: none">• Transformation• Counting of fruits	+ 0.5 Values	Concluded/Correct (100%)
Character interaction (MM MP SPM) <ul style="list-style-type: none">• Same player• Monster – pacman• Superpowered pacman – monster	+ 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%)
Player disconnect (release resources) <ul style="list-style-type: none"> • Correct disconnect of clients • Correct management (destruction) of threads, sockets, memory • Update fruits 	+ 0.5 Values	Concluded/Correct (100%)
Project organization/quality <ul style="list-style-type: none"> • Correct structures (threads, communication channels) • Use of the correct algorithms • Correct code organization • Efficient communication 	+ 1.0 Values	Concluded/Correct (100%)
Synchronization <ul style="list-style-type: none"> • Definition of the various critical regions and implementation of correct synchronization 	+ 2.0 Values	Concluded/Correct (100%)
Errors treatment <ul style="list-style-type: none"> • Verification, correction of communication errors • Verification, correction of execution errors 	+ 1.0 Values	Concluded/Correct (100%)
Code Structure <ul style="list-style-type: none"> • 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 (–%)