

Enache Robert  
Informatică în limba engleza, an II, sg 4  
Universitatea de Vest din Timișoara  
Prof. Coord. Liviu Octavian Mafteiu-Scai

# Final Report

Programming for mobile devices

## **M.G.P-Multiplayer Games Platform**

# 1. Abstract

The goal of this application is to create a platform where users can interact with each other and play simple games that bring people together to play and i didn't want for them to download a lot of small games when you can have it all in one

## 2. Motivation and users

The motivation behind this app is because i want people to interact with each other and i wanted to make something with lots of games for people to enjoy simple games that bring people together to play and i didn't want for them to download a lot of small games when you can have it all in one

## 3. Similar Applications:

-2 3 4 Player Games



## 4. My Contribution

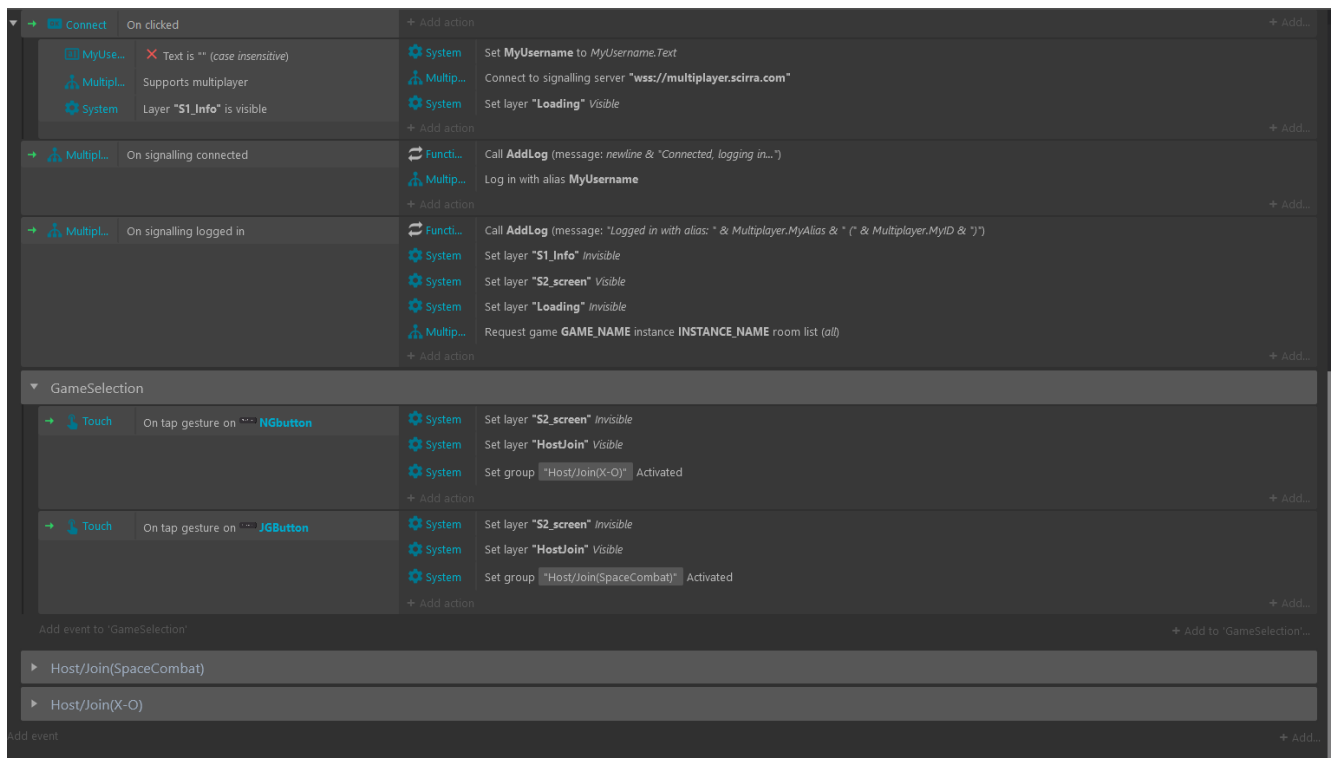
The majority of this kind of applications are pretty similar and they are only local play supported .This is why i wanted to create one that can be played online and to have my own collection of games.

## 5. User's Manual

My application has a simple interface, the first page has the are where you enter your alias and after that the game selection mode where you can chose what game you want to play.

When a game is selected you can chose to create a room and be the host or you can join the room or you.

## 6. App Structure



Connect

On clicked

MyUse...

Text is "" (case insensitive)

Multipl...

Supports multiplayer

System

Layer "S1\_Info" is visible

Multipl...

On signalling connected

Multipl...

On signalling logged in

GameSelection

Touch

On tap gesture on **NGbutton**

System

Set layer "S2\_screen" Invisible

System

Set layer "HostJoin" Visible

System

Set group "Host/Join(X-O)" Activated

Touch

On tap gesture on **JGbutton**

System

Set layer "S2\_screen" Invisible

System

Set layer "HostJoin" Visible

System

Set group "Host/Join(SpaceCombat)" Activated

Host/Join(SpaceCombat)

Host/Join(X-O)

HOST-SC

COLLISION

Multipl...

On peer connected

System

Create object **SPACE** on layer "Gameplay" at (1845, 500), create hierarchy: False

SPACE

Set angle to 780 degrees

SPACE

Set animation to "P2" (play from beginning)

SPACE

Set MULTI\_ID to Multiplayer.PeerID

SPACE

Set PLAYERN to 2

Multiplayer

Associate **SPACE** with peer Multiplayer.PeerID

Host(SC)\_CONTROL

PEER-SC

SPACE

On created

SPACE

Set MULTI\_ID to Multiplayer.PeerID

SPACE

Set PLAYERN to 2

Multiplayer

Associate **SPACE** with peer Multiplayer.PeerID

PEER\_CONTROL

SPACE

ACTIVE = 1

SPACE

MULTI\_ID = Multiplayer.MyID

Multipl...

On client update

Touch

Is touching

SPACE

Set INPUTS to setbit(SPACE.INPUTS,1,1)

SPACE

Set INPUTS to setbit(SPACE.INPUTS,3,0)

System

Else

SPACE

Set INPUTS to setbit(SPACE.INPUTS,1,0)

Signaling-SC

System

On start of layout

LaserBullet

Destroy

Multiplayer

Add client input value tag "INPUTS", precision Very low (uint8, 1 byte), interpolation None

Multiplayer

Sync **SPACE** (with Position and angle, precision Normal (float, 4 bytes) at Normal bandwidth (unpredictable))

Multiplayer

Sync **SPACE** variable INPUTS (precision Very low (uint8, 1 byte), interpolation: None, client value tag: "INPUTS")

Multiplayer

Sync **SPACE** variable SCORE (precision Normal (float, 4 bytes), interpolation: None, client value tag: "")

Multiplayer

Sync **LaserBullet** (with Position and angle, precision Normal (float, 4 bytes) at Normal bandwidth (unpredictable))

Multiplayer

Join room ROOM\_NAME for game GAME\_NAME instance INSTANCE\_NAME (max peers: 2)

Multipl...

On signalling joined room

LogMessages

Set size to (0, 1, 1)

Multipl...

Is host

Functions

Call AddLog (message: "Joined room as host")

SPACE

Set MULTI\_ID to Multiplayer.MyID

Multiplayer

Associate **SPACE** with peer Multiplayer.MyID

System

Set group "HOST-SC" Activated

Multipl...

Is not host

Functions

Call AddLog (message: "Joined room as peer")

System

Set group "PEER-SC" Activated

SPACE

Destroy

Multipl...

On signalling disconnected

Functions

Call AddLog (message: "Signalling disconnected")

Multipl...

On signalling error

Functions

Call AddLog (message: "Signalling error: " & Multiplayer.ErrorMessage)

System

Go to **Menu**

Multipl...

On signalling left room

Functions

Call AddLog (message: "Signalling: left room")

HOST-SC

Global number **Player1** = 0

Global boolean **P2\_Available** = true

Global number **Test** = 0

Global number **Player2** = 1

Global number **Counter** = 0

System

Counter = 9

System

Wait 1.0 seconds

System

Restart layout

+ Add action

Player-1

Player-2

Win Condition2

P2-System

Add event to 'Player-2'

+ Add to 'Player-2'...

Signaling

System

On start of layout

Multip...

Join room **ROOM\_NAME** for game **GAME\_NAME** instance **INSTANCE\_NAME** (max peers: 2)

System

Set **Counter** to 0

+ Add action

+ Add...

Multip...

On signalling joined room

LogM...

Set size to (0, 1, 1)

+ Add action

+ Add...

Multip...

Is host

Func...

Call **AddLog** (message: "Joined room as host")

+ Add action

+ Add...

System

Else

Func...

Call **AddLog** (message: "Joined room as peer")

+ Add action

+ Add...

Multip...

On signalling disconnected

Func...

Call **AddLog** (message: "Signalling disconnected")

+ Add action

+ Add...

Multip...

On signalling error

Func...

Call **AddLog** (message: "Signalling error: " & **Multiplayer.ErrorMessage**)

System

Go to **Menu**

+ Add action

+ Add...

