## Le point sur le travail réalisé :

I made a big step in implementing the graphics, with the help of my mate. I've add some code to create buttons, labels etc. and all that running with events (click, hover, mouse move). When creating the Font class to render text I used a third party tool called BMFont that created an image called "glyph atlas" with a given font. Then I had to write some code to use that image along with a .font file which tell us where each glyph is in the atlas. With all that I have been able to create a HUD (head up display) for the actual game 'frame'. I also created a PlayerOctopus and GridOctopus that display the players and the grid. To do so I did a complete refactor of the grid coordinates when I had to create the grid octopus. I also created geometry helpers: line, polygon class that permit to fill and draw a polygon or to know if a given point is inside the polygon. The game is now graphically playable and even has small movement animations for the players!

I also helped Morgan creating the Selection Menu by answering his questions about the code I created (buttons, labels, octopus, events, callback etc.) and added the music performed by Thomas to the project.

## Les difficultés rencontrées :

I had troubles making the grid octopus because of the expectation of Morgan in term of 'graphic render'.

After these troubles, I had more when I wanted to highlight cells or test when the mouse pointer is on 1 cell. I first created a Cell octopus, but I figured out that it was taking too much time to go through each cell object to 'update' its state. I finally wrote my Polygon class and all the cells are in the GridOctopus and not in separated objects.

## La remédiation:

Concerning the first troubles I had making the grid, I had to change completely the coordinates system of the grid. Morgan wanted a graphic render pretty much like the game called "LeekWars" so I took their coordinates system and implemented it in Warfare of Heroes. They have several way of identifying a

cell: with (x, y) coordinates or the cell number. It was not easy at all to figure out how to convert the number to (x,y) coordinates and vice versa. I finally managed to convert (x, y) to the cell number, but to get the (x,y) coordinates out of the number I had to map the values 1 by one and store them (I asked Morgan to help me but we didn't found a valid formula for the conversion). Finally this does not take a lot of memory so it doesn't matter.

## <u>Les objectifs à atteindre</u>:

In the coming days I will have to fix some bug in the game rendering. For example the dash of the Knight use the same movement animation as the normal move, but it should be different. When Amaury has finished with the images I will include the last images in the game frame (mainly backgrounds).

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