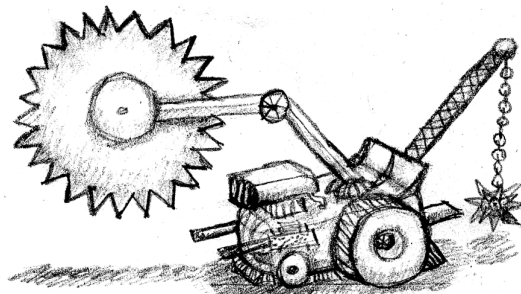


INCREDIBLE BATTLE MACHINES

Game Programming Laboratory
Interim report

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Revision: 1



Progress

By today, we have almost finished our low target. The only thing that is not completely done is the robot exterior editor, although it's really close to being finished. Nevertheless there is no need for being disappointed, because we have already finished some points from our desired target. We have successfully implemented advanced physics (with the BEPU physics engine), multiple plug-on weapons and a more interesting map with obstacles.

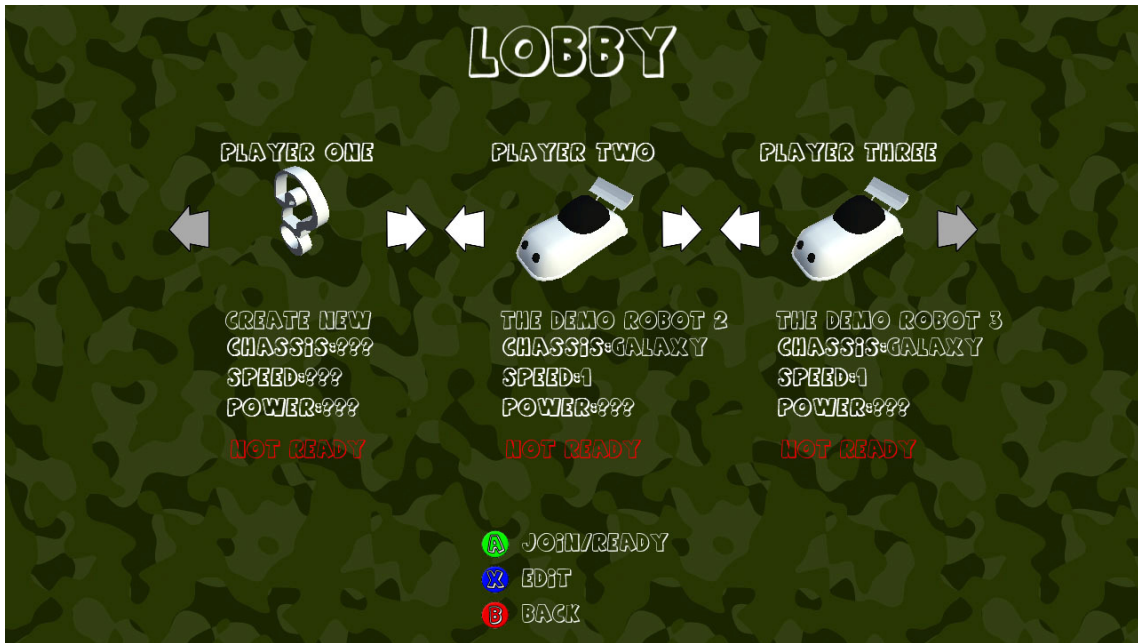
Current State (with many many screenshots)



The main menu when you enter the game.



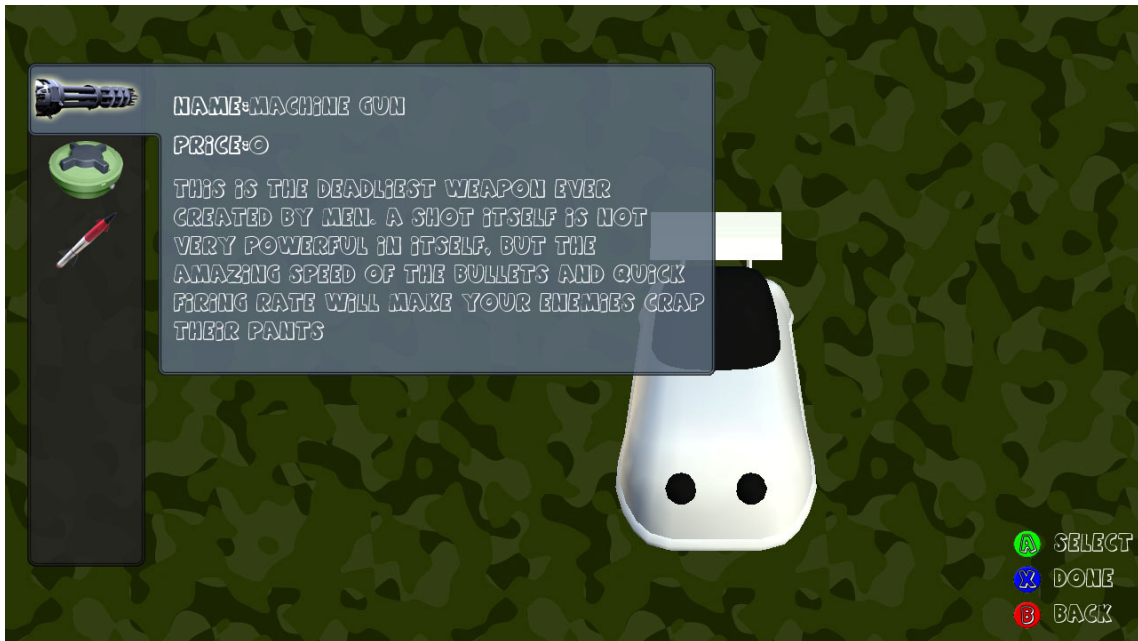
The lobby where players can join the game.



The lobby with three players (note that player one would like to create his own robot)



In the garage, player one can select a chassis (however, there's only one available yet)



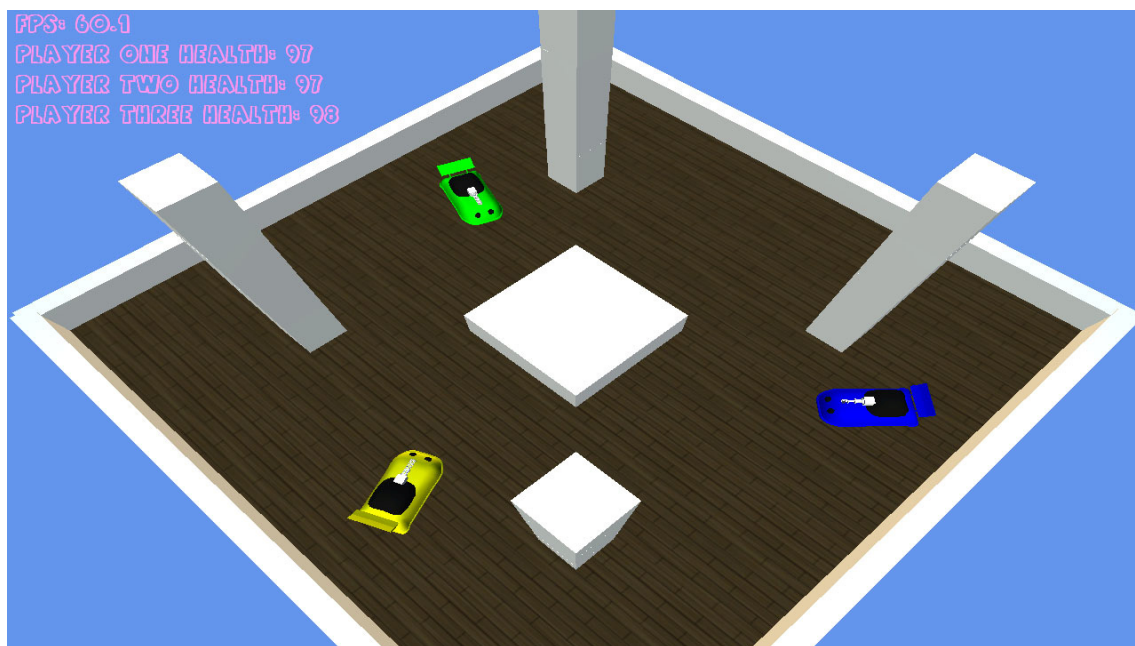
Now, player one can select the weapons he'd like to mount to his chassis. The weapons are free, because we have not yet implemented a budget. The three available weapons are a machine gun, a mine dropper and a missile launcher.



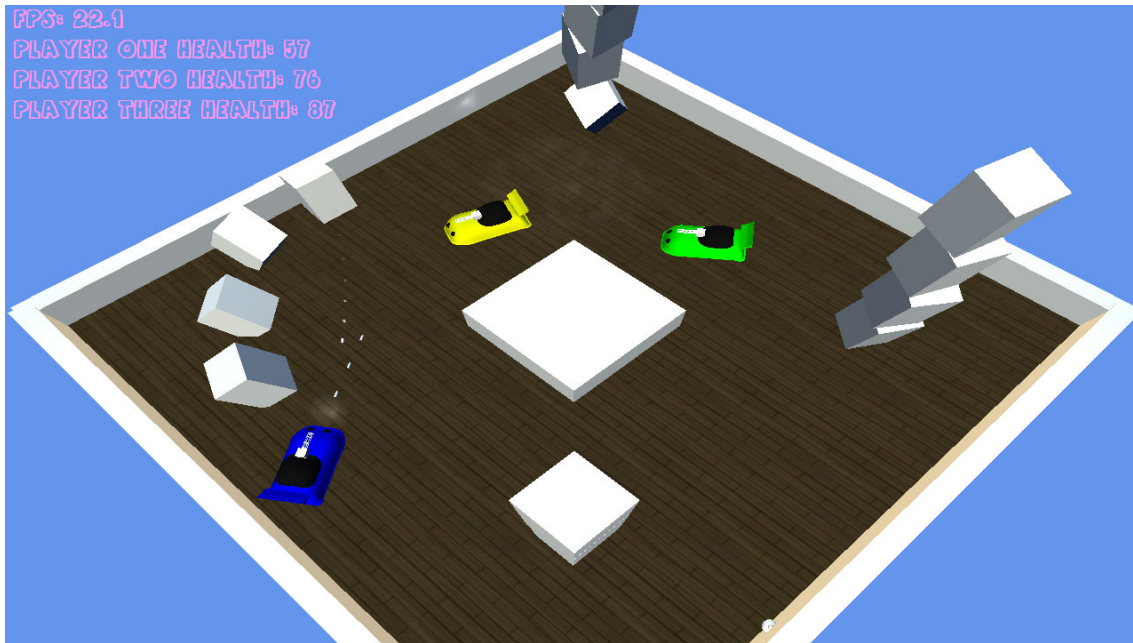
After selecting a weapon you can choose the mounting positions (in the final version you should now see the weapon on the chassis)



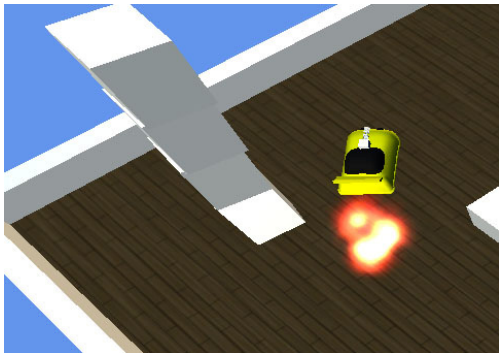
When all players are ready it's time to start the fight!



This is the map we have implemented so far. As you can see there are no textures yet (except for the floor). This will look much better when it's completely textured. Furthermore, there is only one weapon model, although we have implemented all the weapons you saw in the robot editor and even an additional one (the em-pulse) with nice particle effects. Moreover, the "health text" in the top left corner will soon be replaced by a nice health bar.



On this image you can finally see the physics engine in action. Behind the yellow player, you can see the smoke of an explosion, but it's really hard to capture that with an image. In the game it looks really cool.



An explosion effect, which - again - looks better in the game than on this image.

Problems

The main problem in our implementation so far is the control of the robot. Although there was a huge improvement in the last days, it's still quite hard to aim precisely. Another problem is the performance. We have successfully made our game multi-threaded and most of the time it runs at rock solid 60 frames per second. However, from time to time if a lot of action is going on and a lot of players are involved, the frame rate drastically drops for some seconds and we have still not found the cause of this.