Meeting Agenda

Group: Super duper Omega gruppen
Date: 2020-10-12 15:00
Chair: Samuel
Participants: Samuel, Oskar, Erik, Behroz, Sebastian

Objectives (5 min)

- Look at drawing enemies in reverse order
- Rotated particles change size
- Change starting window size
- Why does tower.getRange exist?
- change name of didFire method
- Should we move collision detection outside projectile like Alex suggested?
- Look into how we should implement service for loading maps
- TowerFactory in Controller problems
- Beer, difficult to implement for current Buff system.
- Should the player be able to sell towers
- Should there be labels close to the healthbars
- Should we add click-and-drag
- constant in application, should maybe be in utils.
- tasks/assignments

Reports (15 min) from previous meeting

Samuel: Made and added a picture to the starting screen, also changed background color when in game.

Sebastian: Updated layout of config file and constant class. Added towerProxies to the controller and changed how button clicks are handled for selecting a tower. Refactored the GUI class, so it got smaller, but now there are more classes representing part of gui instead.

Samuel and Sebastian: Added a start screen to the game, this start screen currently has a button to start a game. Also added a button when in game to exit to the start screen. Note that currently it doesn't stop the game when exiting. Also added a label to display the current wave the player is on.

Oskar and Erik: Fixed ConcurrentModificationExceptions by synchronizing collections in the model and particles and by implementing the Command design pattern for when the Controller modifies the Model.

Also made it so particle Emitters can have angles to make towers that shoot out of a gun have smoke that comes out of the gun rather than from the center of the tower.

Erik: Began to implement the ability to load maps from files into the game and look into how the service should work.

Oskar: Changed constructor of WaveHandler to take in an EnemyFactory instead. Implemented angles for Particles. Added many new Waves so all enemies are spawned at some point. Implemented BuffManager so Towers can get Buffs from other towers. The Buff system may change in the future.

Behroz: Changed BurstChargeStrategy so that there is more than one update delay between attacks in one burst.

Discussion items (835 min)

Currently the order in which enemies are drawn can't be changed as they're an collection. To change this we either gotta change collections to List, or find another solution such as drawing the enemy with the furthest distance first. We instead decided to remove the task regarding the problem as it wasn't really worth it and had no actual stories to it.

Currently particles change sizes when drawn with rotation as it's not currently accounted for as it is in TowerDrawer. We discussed multiple possibilities like making a new MapImageDrawer but ultimately decided that it wasn't worth the effort compared to 3 duplicated lines in different parts of the code. A drawImage method would have required an ImagePath, a position, an angle, a size, a graphicsContext and a windowState or some other way of getting the current TileSize.

Right now the game starts in a window of the size 1920x1080. We decided to make it so instead the game starts in "Border Fullscreen", meaning that the window will start in fullscreen with the window border around it.

We will change getRange() so that instead it returns the active range with buffs applied and such.

Currently didFire is a bit confusing as a name. We decided to change the name to notifyFirePerformed to clarify what it does.

Currently projectiles handle their own collision which they shouldn't do. Instead something higher up should handle collision as per supervisor suggested. The two choices we had were either to add collision detection to game which we didn't want as it's already big and would make game even messier. The other option we had which we went with was to move collision detection to ProjectileHandler and remove projectileService and move it's functionality to ProjectileHandler.

There was an issue with error handling when reading maps. They can error either because the file doesn't exist or because the map in the file is invalid. We decided that Application will fetch all maps (from Control which gets the from Service) at the start of the program and then send in a list of them when creating the Model. That way we can also easily draw previews of the maps when picking one.

Currently the controller wants a tower factory when created, but as game and controller are not created at the same time (game should be created after the controller when the user presses the start button) this causes problems. We couldn't come to a conclusion and decided to ask pelle for advice.

We decided that the Buff tower Beer shouldn't have different effects for each tower and one effect for all towers. We also decided that the desired effect should be +dmg, - fireRate, -range.

We thought that it would be nice to be able to sell towers, but that it isn't a priority currently and should be added later if we have time.

We thought that it would be nice to have labels, but that it isn't a priority currently and should be added later if we have time.
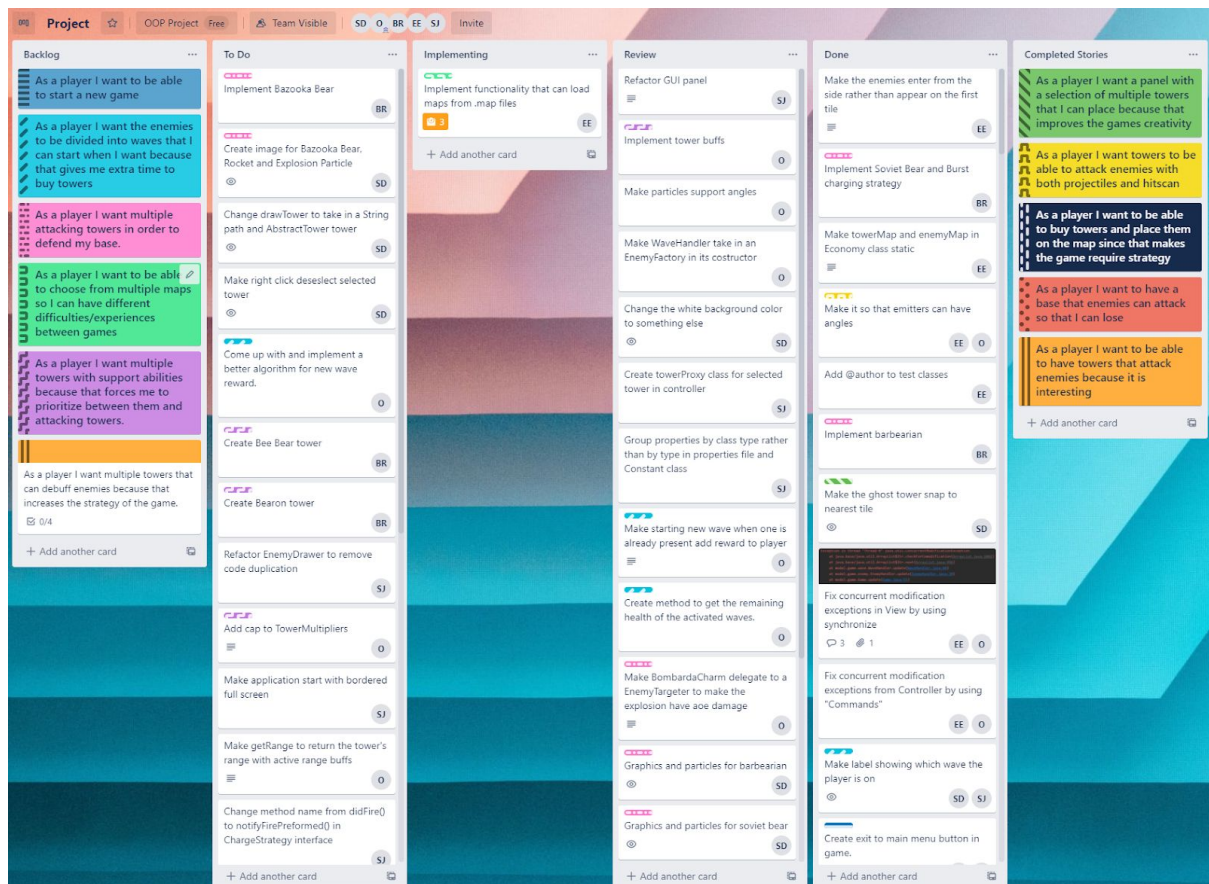
We thought that it would be nice to have drag and drop, but that it isn't a priority currently and should be added later if we have time.

After discussion we decided to ask Pelle on where the constant should be located.

Outcomes and assignments (5 min)

Added more tasks, see discussion for more outcomes.

Current trello board:

Wrap up

Next meeting: 2020-10-15 13:00