

Note: to run reatures, make sure that CombatInstance camera is commented out (the camera obscures the full view of sprites), the for loop with Helena's Motions for fighter sprites is commented out, that the update and render loops are checking the nonplayers arraylist, and that the update has the method call "commitSpawnedSprites" at the beginning.

There are also slightly more subtle issues with the collision/physics engine checker (which will come about if the physics engine returns the wrong boolean for CollisionKindNeutral - you will know this has happened if the player collides with platforms but not the fireballs), but I won't go into those now.

Features implemented:

- general spriteTemplate that can accept any "propertyObject" and "collisionEvent" into a map (essentially compositing), also some predefined ones (especially for fighters, which had to merge with the animations project). This adds to its list of possible actions/properties. If you wanted new behavior, create new subclasses of PropertyObject or CollisionEvent.
- propertyObject is sort of a storage for a sprite's statistics, collisionEvent is what happens when another sprite collides with this sprite.
- cloneable sprites and properties- good for sprites that can spawn other new sprites (not just shallow copies)

Features in demo game "resources/fulldemotest.xml": 3 platforms, 2 fighter sprites with nonanimated body parts, 1 AI fighter (the equivalent of a single torso on a fighterBody), 1 fireball that spawns 3 sprites in preset locations (health packs), 1 sprite (far right fireball) that reduces health, deletes itself 2000 millisecs after first colliding with a player.

Features intended to implement, but didn't:

- a demo bomb that creates a larger "explosion" sprite that can damage sprites, overlaying the original bomb, the explosion disappearing after half a second. I just didn't have enough time.
- Blocks and directions. The ability to block was going to be both the animation, and creating an invisible sprite 1px width, 20 px height, with no properties (so any damages wouldn't be transferred to the fighterbody) that was a nodeSprite spawned by the hands limbs. This was not implemented because it involved too much cooperation among different features by different people that were not all finished at the same time - something with collisionStatus (implemented by the physics engine) that I still don't understand, something with Animations.
- using groupIDs to automatically group sprites - the physics engine decided to scrap goldenT's spriteGroups entirely, the way the CombatInstance and physics engine were organized wasn't conducive to such fluid groupings.
- using reflection in LevelObjectsFactory to create lists of collisionEvents and propertyObjects. I don't know enough reflection, not enough time, last minute merging.

Bugs:

- NodeSprite has two constructors, each with a different function (the first one is for torso-root of the fighter bodies, the second is for all other limbs). It's entirely possible that someone calls the wrong constructor, and has a torso that flies off the screen. This is an inherited bug from the animations, which were originally worked on independently from the rest of the code base.
- Can have properties and collisions that don't correspond at all. I've written the checks in

collisions as carefully as possible, but it'd be better to have more restrictions on which collisionEvents are created, and that the collisionEvent can't act on the otherSprite at all.