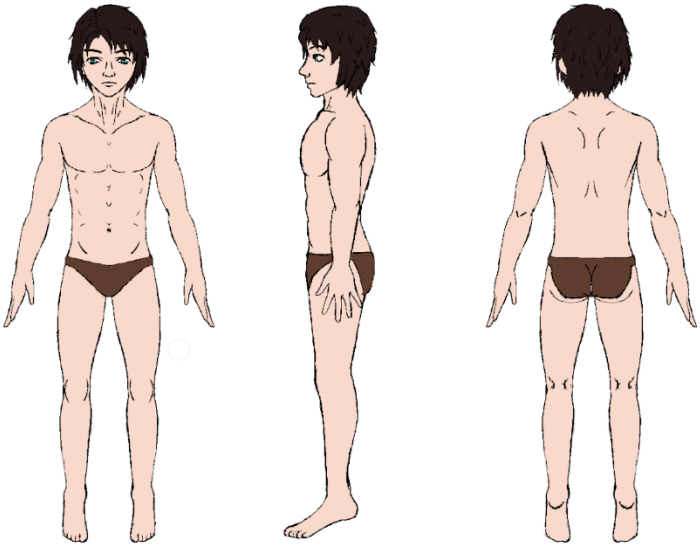
# Design Document Prototype
# Team Valkan

Johan Titulaer 6931499

## Custom 3D models and animations.

The animations of this game will add up to the player's experience as they display the game in a more detailed and stylish way.



That's why I decided to create our own models so, that not only will they be copyright-free, but I can also create various animations and change the models to my liking. Also, the reason I chose to make 3D models and not draw sprites by hand is because with 3D models you can simply rotate the camera around the model to get different perspectives. Compared to drawing each and every frame of the spritesheet by hand, I would prefer saving time by making 3D models.

Firstly, I had to create the 3D model from scratch, so I drew a 2D character sheet to use as reference for my 3D model.

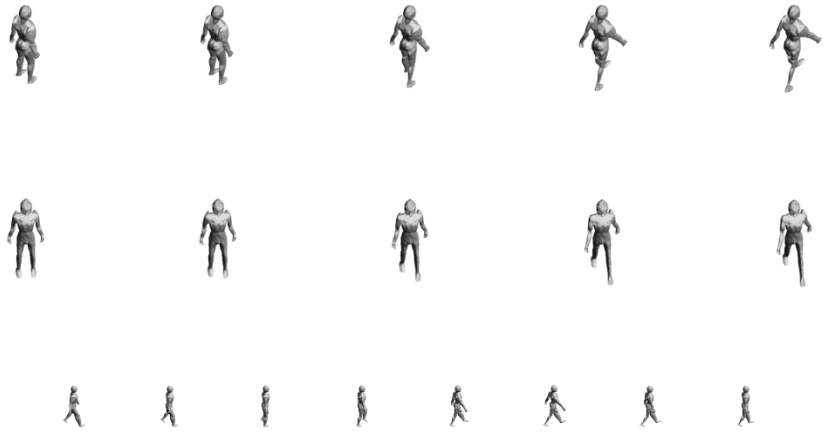
From this I've made a simple 3D model in Blender to work further with.

I decided to leave away details and color, so that I could still change the model or decide to redo it.
To animate the model I had to apply a rig. Again, I had left out detailed rigging because it was not necessary at this stage.
After setting everything up I wanted to create the following simple movements:

- Idle breathing
- Walking cycle
- Transition from idle to walking starting with left leg
- Transition from idle to walking starting with right leg

After creating these animations, I rendered all of them in 8 different directions, so that I can use this in the isometric game.

A few examples of the sprite sheets:





To transition from idle to walking, the player finishes his short idle animation and then anticipates to walk by starting the transition animation. Once the transition animation is completed, it switches over to the walking cycle which will loop until the player stops walking. If the player stops walking, the program will detect in which frame the walking cycle is currently on. If the cycle is in a position where the right foot is extended, the transition animation with the right foot first will be reversed so that it looks like it stops walking instead of anticipating to walk.

I will also add a turning animation, so that when the player stands still and changes direction, the player will turn around its axis and take small steps. This together will make the movement look smooth and pleasant to watch.

The idea is to add transitional animations to every main animations in the game. That is, later on the combat animations.
The importance of the animations will be so that the collisions are easier to detect(it’s not possible to move immediately, first there will be a transitional animation) and for certain events to happen.

For example, when the player stabs an enemy, the weapon will get stuck and the player can tear out the weapon afterwards. But when the player misses the stab, this will not happen.