u_{ver}

u_{hor}

Unit

(x_2,y_2)

(x_1,y_1)

u_g

$$[\vec{u}]=\frac{\vec{points}}{frame}$$

Size and position of unit can be described by two points: left bottom (x_1,y_1) ant top right (x_2,y_2).

For describe current state of the unit in the world it's enough to have a two current speed vectors: vertical and horizontal. Measure of speed in our game context is points per frame. Each frame = n seconds. Also it is speed given by gravitation, and it always force unit.

(x_2,y_2)

Unit

(x_1,y_1)

u_g
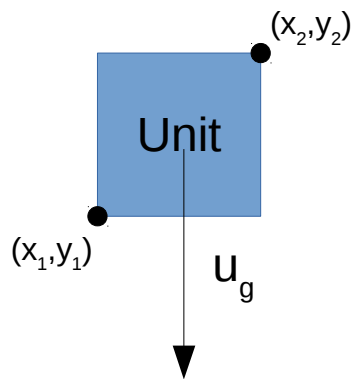
If unit is alone with no other units, it has only vertical gravitation speed, witch make unit move down.

(x_2,y_2)

Unit

(x'_2,y'_2)

(x_1,y_1)

Unit

(x'_1,y'_1)
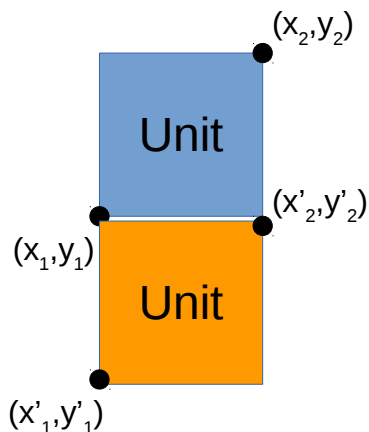
If two blocks bumped, block with lower priority takes speed of block with higher priority. So each unit should have priority. Units of ground and walls normally have the largest priority.