

## Rogue Code Player's Guide v.0.11

1. Rogue Code is a programming game in which you script the behaviour of an adventurer who is exploring a dungeon. The dungeon has many rooms, which contain treasure (yay!), traps and guards. You are expected to die, a lot.

2. There are a few different stages you go through when playing this game:

- **Get a room!** – You play *Rogue Code* one room at a time. The contents of the room are clearly stated in advance (e.g. “this room contains one sleepy guard, one chest, one spike trap”) to provide a difficulty guide. However, the position of those contents is randomised each time you make a ‘run’ (see below).
- **Write some code** – Various aspects of the adventurer’s behaviour in a room (e.g. how fast he moves; how aggressive he is) can be modified using software code. During this stage, you will try to implement the right strategy for the room you selected.
- **The ‘run’** – In this stage, you release your adventurer into the room. Now, you can do nothing but watch. The action unfolds in *turns* on a top down, tiled based stage. First your adventurer moves, fights, steals etc. Then the environment *reacts* (e.g. a trap detonates, a guard wakes up). Turn based action continues until the rogue has stolen the treasure and exited the room, or he is dead. Note that this step is *repetitive*. The rogue is forced to run through a room 10, 100 or even 1000 times in a row. *Why do we do this?* Forcing the rogue to run the room multiple times mitigates the potential unfairness that randomising item and enemy position could introduce (e.g. you might start your run right next to an angry guard!).
- **Analysis** – In this stage, you take a look at your results. How did the adventurer do? How many times did he die? How much treasure did he manage to swipe? More importantly, did he meet the *success threshold* for the room, thereby unlocking the next challenge. Think of this stage as post-match analysis, medieval style.

3. The simplified diagram below will help you understand the components of a room in *Rogue Code*. Note that this is a very small room (6 x 6 tiles). Basic rooms start at 100 x 100 tiles.



Figure 1 Room components in *Rogue Code*

4. A rogue has three actions points per turn. Here is a list of the actions a rogue can perform.

- **Sneak** – For one action point, a rogue can *sneak* one tile in any direction. This includes diagonal movement. When sneaking, a rogue has a medium chance of detecting traps.
- **Move** – For one action point, a rogue can *move* two tiles in any direction. This includes diagonal movement. A walk action can combine directions (e.g. up and then left). When walking, a rogue has a low chance of detecting traps.
- **Melee attack** - For one action point, the rogue can *melee attack* a guard in the 8 tiles around him. Melee attacks made by the rogue have a high chance of hitting the target. A melee attack that hits will always kill the target.
- **Ranged attack** - For one action point, the rogue can attack any guard within 5 tiles (in any direction). Ranged attacks made by the rogue have a *variable chance* of hitting the target (the further away the target, the lower the chance it will hit). A ranged attack that hits will always kill the target.
- **Steal** - For one action point, the rogue can steal any treasure in the 8 tiles around him. There is no limit to the amount of treasure a rogue can carry. The reassure is assumed to be light and portable.

Note that *leaving the room* is a free action. It does not cost an action point. If you can get your rogue to the tile containing the exit door, you have beaten the room. Also note that a rogue can only attack twice (ranged or melee) in any given turn.

5. A guard has two action points per turn. Here is a list of the actions a guard can perform.

- **Walk** – For one action point, a guard can move two tiles in any direction. This includes diagonal movement. A walk action can combine directions (e.g. up and then left). Guards can walk through tiles containing traps without activating them.
- **Melee attack** - For one action point, a guard can attack a rogue in the 8 tiles around him. Melee attacks made by the guard have a medium chance of hitting a rogue. If a guard hits a rogue with a melee attack, it will always kill the rogue.

Unlike the rogue, a guard can only attack once per turn.

6. Note that there are some simplifying assumptions at work in *Rogue Code*:

- Both the rogue and the guards are assumed to be looking in all directions, all the time.
- Both the rogue and the guards can rotate in place for free i.e. both can attack to the east, then move to the west without performing a separate *rotate* action.

7. Here are some images that illustrate these basic actions:



Figure 2 Sneaking (one tile)



Figure 3 Moving (two tiles)



Figure 4 Melee attack

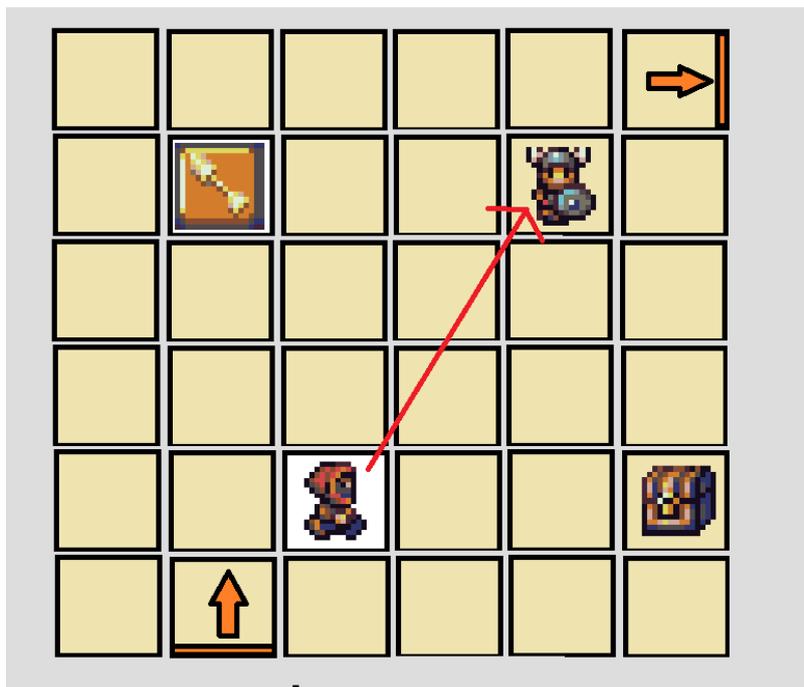


Figure 5 Ranged attack



Figure 6 Stealing treasure



Figure 7 Exiting the room (free action)