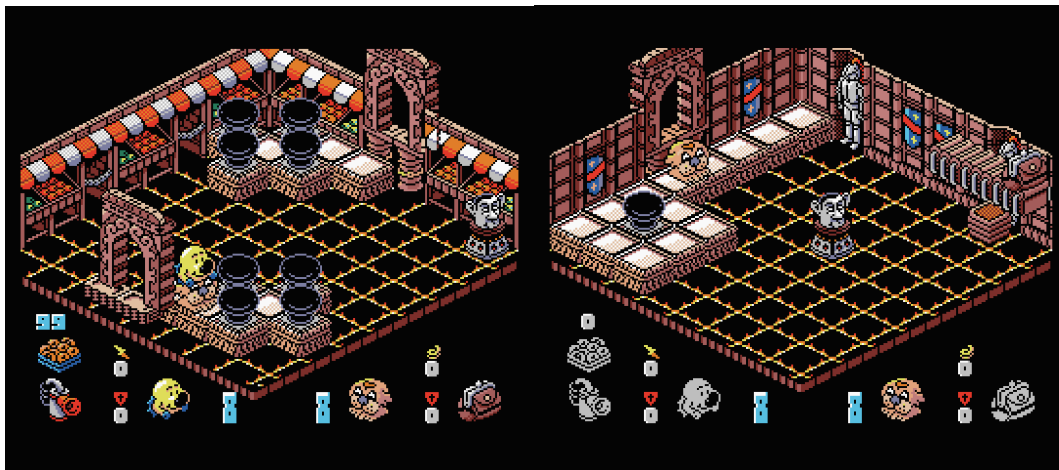# Isometric Adventure

## Intro

This document is intended as a development guide for an isometric perspective adventure game in the style of the 80's games.

Reference:

- Head Over Heels



[Head Over Heels Gameplay (PC Game).](#)

The game presents an adventure with an isometric perspective camera in which the player must solve certain puzzles in rooms, avoid enemies and collect an object that allows to continue the adventure, for example: a key. The game ends when the player reaches the last room, solves the puzzle and opens the exit door of the dungeon.

To do this we use three packs of assets that solve the graphical part. Here is the link to download them from the artist's website.
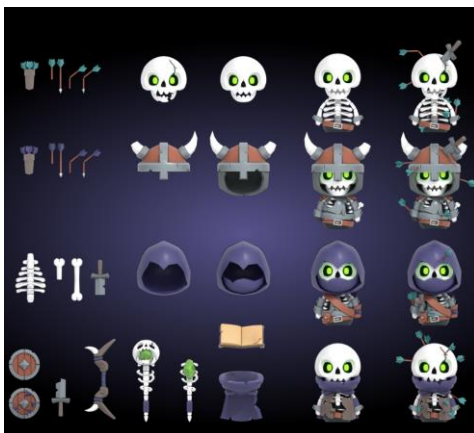
- Enviroment and character:

https://kaylousberg.itch.io/kaykit-dungeon

- Enemies:

https://kaylousberg.itch.io/kaykit-skeletons



- Animations:

https://kaylousberg.itch.io/kaykit-animations



# Player Character

In this section we intend to explain all the mechanics to be developed that have to do with the player character.

- **Movement:** The movement of the character will be the same as the 80's games. That is: Up = NE, Down = SW, Left = NW, Right = SE.



- **Jump:** The character will have the ability to jump but if he does not have the hat he will not be able to modify the trajectory of the jump. If he has the hat, in addition to jumping higher, he will be able to control where he falls.
- **Lifes:** The player starts with 5 lives. Each time he collides with an enemy or with any element of the environment that can hurt him, he will lose a life and return to the point where he entered the room he is in.
- **Hat:** Once the player has obtained the cap, he will be able to jump higher and glide.
- **Staff:** Once the player has recovered the staff, he will have a spell at his disposal. He will be able to shoot an ice ball that will paralyze an enemy for 3 seconds on impact. It will not be possible to launch a new ball if one is active.
- **Spell Book:** When the player has retrieved the spell book, he will be able by pressing a button to move on the ground (not while jumping or falling) faster for 5 seconds. It will not be possible to cast the quickness spell again until 5 seconds have passed since the end of the effect.

# The Dungeon

The dungeon consists of different square rooms. Each room has at least one door through which you can transition to the next room. We propose three ways of transitioning and presenting the different rooms to study the complexity when implementing them and decide once we have a more concrete idea about it.

- **Classic:** Rooms generally occupy the entire screen but there may be larger rooms that cannot be presented in their entirety on the screen. To do this, we then take a larger room and "chunk" it into parts that can be presented on the screen. The parts that do not have walls will be the transition zone to the next piece of room.
- **New:** The whole dungeon is placed on the mapping but only the room the player is in is shown. The rest of the rooms will "disappear" by fading to black right after transitioning.
- **New with Zoom:** In the case of entering rooms of different sizes, a zoom in or out could be implemented to show the whole room on the screen.

In each room the dangers can be very different, some will cause the player to lose a life and others will prevent the puzzle from being solved. Let's name all the elements that the player can find in the dungeon.

- **Spikes:** If you fall or step on a spiked tile, you lose a life.
- **Elevated platforms:** When you step on these platforms, after a short time, they will fall and make the character fall to the ground.
- **Arrows and Fire:** Arrows, fireballs or flames can appear from the walls and when they hit the player they will lose a life.

# The Enemies

Encontraremos diferentes tipos de enemigos de acuerdo a su comportamiento.

- **Random:** This enemy will move randomly around the room.
- **Pattern:** This enemy has a defined pattern by which it moves, moving from one point to the next and not leaving the route.
- **Chaser:** This enemy chases you around the room.