**Lost Forest**

Description:

The game consists of the starting point, 3 stages, each with its own level of difficulty:

**Forest:** there is one enemy to defeat. By exploring the board, the player needs to find it and defeat it to earn the key to access the next stage. If not, the game is over.

**House:** there is an enemy to defeat. On the board there can also be found 2 chests with something inside.

**Cave:** there are enemies to defeat and one riddle to be guessed in order to win the whole game. If the player succeeds, he wins the game.

**The Starting Point:** It is the place where the player begins his story and returns after every won stage. It enables the player to access different stages of the game. It can be done only if the player possesses a key to the desired stage. However, once the stage is explored by the player, re-accessing it is not possible.

**The Stages:** There are 3 stages mentioned above. Each stage is arranged as a board (matrix 5x5). On each field is either an enemy, a chest or nothing (just to explore). The player can see only his position on the board, enemies and chests are placed randomly on the board.

**The Exploration:** The player decides between the direction where he wants to move: UP, DOWN, RIGHT, LEFT introducing keys (w,s,d,a) on the keyboard. The place can be either explored, when a chest is found it can be opened, and when an enemy is encountered it needs to be defeated to be able to continue the game.

**The Fight:** At each stage the player has to fight enemies, after winning the fight, he gets a key for the next level. The level of the fight depends on the difficulty of the stage the player is currently in. The player and every enemy has health and damage (randomly generated for the enemy), up to who is stronger, we have a winner.

**The Chest:** When the player encounters a chest on his way, it is opened. Inside there can be more health to defeat the enemies or the chest can be empty.

**End Of The Game:** The game ends if the player loses the fight at a current stage or wins the whole game. At the end of the game, there will be a picture shown with the proper information.

Modules Of The Code:

**game\_board:** the structure of each stage of the game, the rules

**board\_elements**: it has elements of the game connected with what is happening on board: fight – if enemy is encountered, opening chest if chest is found and a riddle to solve, if the player succeeds in every stage

**main\_game:** will have imports of the rest of modules and call its functions to initialise stages of the game, show messages about current status of the game. It is a skeleton of the whole game

**files:** functions for reading and writing files, creating an image and opening it

**user\_Input:** functions to take an input from a user

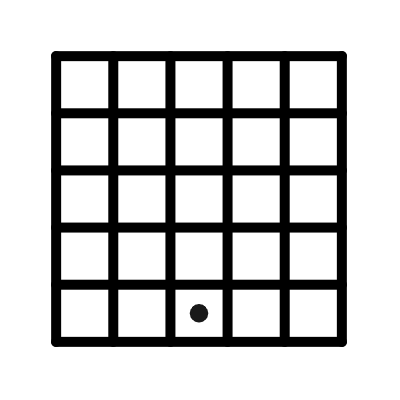
External Modules:

**Random:** using it to place an enemy, chest on the random position on the board, selecting a riddle to solve

**Time**: used to control the time between between consecutive messages to the player

**PIL - Image:** creating image with information about the end status of the game, opening the created image and showing it to the player at the end of the game.

Planned code structure:

Each functionality is coded in a different file, i.e. Game Logic will contain functions for the fight, chest etc. Those files will be imported to the main module where the whole code of the game will be executed.

List – creating list of enemies, list of the fields on the board visited by the player, list of riddles

Matrix – each stage is a board 5x5. Player changes his positions, introducing keys: w, a, s, d.