

Pygame assignment planning document

Title: Escape game

Game Style: 2D platform, Mario based

Developer: Hung Tran

Github repo : <https://github.com/polowis/escapegame>

Overview

Escape game is a Mario based game that enable player to go through a series of challenges such as avoiding obstacles and enemies. The player needs to manage to get the key to the next door. As the level increases, so does the difficulty. At higher level, player constantly sees a lot of high health monsters and different combat fighting. The player does not have to kill all the monsters but coins are rewarded per kill. This eventually helps the player to upgrade his own equipment, allows him to fight against the final boss stage which is the hardest level.

This game currently has no sounds.

Win Condition:

Currently, there is no winning stage in the game as more map level will eventually be added. The player can consider themselves as winner after they defeated the final boss stage.

Lose Condition:

The player loses when collide with bullets, monsters or fall out of map.

Game Screens

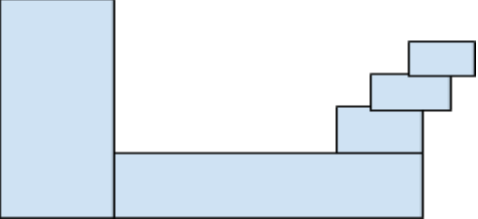
Screen 1 – Start Screen and Menu

<p>Start</p> <p>Shop</p> <p>How to play</p>	<p>Events, Transitions and Callbacks:</p> <ul style="list-style-type: none"> · Use mouse to navigate through different options <p>Objects and Variables:</p> <ul style="list-style-type: none"> · None required – Menu options and title will be hardcoded.
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Screen 2 – Shop/How to play Table

<p>Title (shop, how to play)</p> <p>Actions (buy, upgrade, exit)</p>	<p>Events, Transitions and Callbacks:</p> <ul style="list-style-type: none"> · Use mouse to navigate through different options <p>Objects and Variables:</p> <ul style="list-style-type: none"> · Upgrade weapon if shop · Display information if is on how to play <p>Notes:</p> <ul style="list-style-type: none"> · The shop and how to play stage have similar layouts
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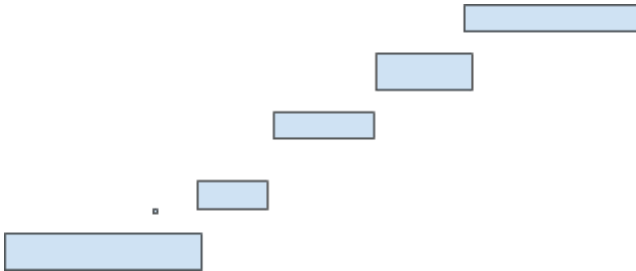
Screen 3 – Easy Level Example

	<p>Events, Transitions and Callbacks:</p> <ul style="list-style-type: none">· Use arrow keys to move, kill flying monster to earn some coins, find the key and exit through the next door <p>Player die if get hit by monsters</p> <p>Objects and Variables:</p> <ul style="list-style-type: none">· Player has only one live <p>Notes:</p> <ul style="list-style-type: none">· Game ends and the player has to start over again
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Screen 4 – Medium Level Example

	<p>Events, Transitions and Callbacks: Similar to the previous level. There is a hidden monster when the player tries to jump over it</p> <ul style="list-style-type: none"> · Use arrow keys to move, kill flying monster to earn some coins, find the key and exit through the next door <p>Player die if get hit by monsters</p> <p>Objects and Variables:</p> <ul style="list-style-type: none"> · Player has only one live <p>New monster</p> <p>Notes:</p> <ul style="list-style-type: none"> · Game ends and the player has to start over again
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Screen 5 – Hard Level Example

	<p>Events, Transitions and Callbacks: Similar to previous level but this is the current final stage</p> <ul style="list-style-type: none"> · Use arrow keys to move, kill flying monster to earn some coins, find the key and exit through the next door <p>Player die if get hit by monsters</p> <p>Player need to dodge bullet (10 in total), I plan to add more but it seems it will become impossible to pass through.</p> <p>The final boss has no special ability but the map will be the player's nightmare.</p> <p>Objects and Variables:</p> <ul style="list-style-type: none"> · Player has only one live <p>Kill the boss to win this stage, this stage has no key to pick up</p> <p>Notes:</p> <ul style="list-style-type: none"> · The map background and grid layout are in similar colors, watch your step!
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Screen 6 – Win/Lose Screen

<p>THIS WILL BE SIMILAR TO MENU STARTING SCREEN EXCEPT WORDS ARE CHANGES</p>	<p>Events, Transitions and Callbacks:</p> <ul style="list-style-type: none">· click go back to menu and start again <p>Objects and Variables:</p> <ul style="list-style-type: none">· There is no winning stage, there is only losing stage.
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Supporting Information

Development Environment

The game will be developed in Python using Pygame. All game assets (such as sprites and obstacles) will be created by the designer – no attribution will be required for assets owned by other people.

Key Features

Assets

Pixel blocks look really good.

User can easily customize the map layout even if they don't understand a single line of code

Enemy AI

- Enemies move in a fixed direction but sometimes they will try to target the player
- As the levels increase in difficulty, enemies may move faster and/or slower to make it harder for the player to progress.