## **INTRODUCTION**

This game is similar to real Pac-man which was first created by Namaco in Japan. In this popular game we have used "Flutter" and "C++" logic for providing it with new design features and new Gaming environment, like generating Random Maze for players to increase the difficulty level of the player. Multiplayer features are also added in this, so that more than one person can compete with each other. Flutter also provide some very excellent design features which is not possible in some other tools like SDL/SDFL, it makes the game more user-friendly (i.e. better GUI).

This game is also created

This game is for the age group 5+.

## Games Rule: 1. Pacman is on a mission to collect a maximum amount of gold coins. 2. Each player has to maximize their amount of gold coins collected in the game. 3. Pacman is allowed to move in four directions i.e left, right, up and down. 4. Ghosts are also constrained to move in four directions i.e. left, right, up and down.

- 5. Neither Pacman nor Ghosts can move through barriers i.e. they cannot occupy barrier space.
- 6. If Pacman collides with any ghosts ,then it will die or survive depending on whether it is in "Normal State" or "Ultra-super State" respectively.
- After collecting "Ultra\_super gold", the survival of Pacman increases by one time, meaning ,it will only die if it is collided 2 times with any ghosts successively.
- 8. When Pacman is in it's "Ultra-super" state then after collision with any ghost,
  Pacman state will drop down to Normal from "Ultra-super" state.
- 9. There are 2 types of gold coins in this game:

Normal gold :- This is represented by yellow color.

Ultra\_super gold:- This is represented by red color and its size is bigger than "Normal" gold.

- 10. Game can be paused/stopped in between and it can continue in the same place where the player was paused/stopped his game.
- 11. After the end of the game ,i.e.(when Pacman got collided with a ghost at "Normal State") ,player name, Total score on that game and Total time taken to play that game will be displayed on Screen.
- 12. At the end of the game, when all players have played the game, The player with the maximum score will be declared as the winner.
- 13. If there's a tie between player's for first rank/winner, then it will be broken as follows:
  - a. The player with minimum total time is declared as a winner.
  - b. Otherwise, they are jointly declared as the winner.

## Game Stages: 1. Open the pacman game app. (first look of App without opening it) 2. A Screen will be visible with following option: a) Pacman: Tap on this to play the pacman game. It will open a new dialog box/Screen where various options are provided for various levels of Pacman game. b) Maze Game: Tap on this and it will take you to different maze games.

- c) High Scores: Tap on this and it will take to show you some saved higher scores of the past.
- d) About the Developers: After tapping on this one can get some information about developers.
  - 3. After tapping on "Pacman" a new screen "Set Difficulty" will be open for the Pacman game.
  - 4. You can see various options are provided on the "Set Difficulty" window. They are as follows.
    - a) Choose the number of Ghosts to be present in the game.
    - i) 1(Easy): It will provide you with only one ghost in the game.
    - ii) 2(Medium ): It provides 2 ghosts in the game.
    - iii) 3(Hard): It provides 3 ghosts in the game.
- b) Choose movement speed: It provides you three types of speed option for the ghosts.
- i)Slow(Easy): This option provides very slow speed to the ghosts , hence making the game easy to play.
- ii)Intermediate(Medium): This option provides normal speed to the ghosts, but increases difficulty as compared to Slow motion option.
- iii) Fast(Hard): This option provides much faster speed of ghosts as compared to above one, and players have to make a very quick decision to play. Hence in speed parameter it is much harder than previously mentioned speed.
- c) Choose Maze Difficulty: This provides different types of Maze as per difficulty level.

- i) Easy: The maze at this level is very simple.
- ii) Medium : The maze at this level is not very simple , it will have some traps , it will be a little bit difficult as compared to the Easy option above.
- iii) Hard: The maze at this level requires a very quick decision response for movement and analysis of path in maze, it contains multiple traps with unique path property .
- d) Enter the number of players: Write number in this Text Box. Number corresponds to the number of players who want to participate in this game.
- e) Submit : After selecting each option given above , tap on the Submit button to start the game.
  - 5) Game will be open after completing the 4 Steps mentioned above.

NOW ENJOY THE GAME!!!!