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| **Folders/Files** | **Key Contents and Functions** |
| **Pac-man System Module** | Consists of all important folders and files of the Pac-man game. |
| **Source Code** | All source codes of the Pac-man game are stored in this folder. |
| . pacman.py | Consists of the main running code of the Pac-man game.  To create pages for the game such as Start Up Page, Game Page etc.  To determine which page to display on the screen according to the user’s choice. |
| . Game.py | The code of Game class is written in this python file.  Game Page is created from here. Runs and updates the game.  To create and initialize the attributes (player, ghosts, score etc.) and components (buttons) of the actual game.  Accepts inputs from external devices (keyboard, mouse) and show responses accordingly. For example, the Pac-man character moves left when the left arrow key is pressed and stops moving when the key is released.  The ability to pause or resume the game.  The ability to carry out appropriate actions after detecting collisions between Pac-man and dots, and between Pac-man and ghosts. |
| . Menu.py | Consists of the code of Menu class that creates the Start Up Page.  To display the title and logo of Pac-man, the year and course code, and the list of students in the group.  Consists of “START” button that brings the user to the Game Page if clicked, “MAP” button to allow user to select desired map in the Configure Page, “HELP” button that shows the instructions of the game in the Help Page, and “QUIT” button that terminates the entire program if clicked. |
| . Help.py | Consists of the code of Help class that creates the Help Page.  To display information of the Pac-man game.  Consists of “BACK” button to get user back to the Start Up Page. |
| . Configure.py | Consists of the code of Configure class that creates the Configure Page.  The ability to let user choose either predefined maps or randomly generated map for the game.  Consists of “OK” button to confirm user’s selected type of map and return to the Start Up Page. |
| . Character.py | Consists of the code of Enemy class, Player class and Animation class.  Enemy class is responsible for creating ghosts and updating the movement the ghosts.  Player class creates the Pac-man character and updates its movement that is controlled by the user.  Animation class produces animation for both the Pac-man character and the ghosts. |
| . Environment.py | Consists of the code of Path class, Dot class and Map class.  Is mainly used to create and draw the map of the game.  Path class creates sprite for every block of the path in the maze. These sprites make sure that the game characters stay on lane and do not move out of path.  Dot class creates the sprites for white dots and power pellets.  Both Path class and Dot class are used in Map class to generate and draw map. |
| . Layout.py | Consists of the code of the basic components in the game, which are the Text class, Image class and Button class.  Text class and Image class produces text message and images that will be displayed on various pages.  Button class is used to create buttons with different functions. Most of the buttons in this program allow user to navigate between pages. |
| **Compile Folder**  . Game.cpython-39  . Menu.cpython-39  . Help.cpython-39  . Configure.cpython-39  . Character.cpython-39  . Environment.cpython-39  . Layout.cpython-39 | Consists of all .cpython-39 files that are created by the Python interpreter when the .py files (modules) are imported. The .py files are compiled into bytecode the first time they are executed. This improves substantially the execution of the codes next time the modules are imported or executed, resulting in a better game performance. |
| **Maps**  . Map1.txt  . Map2.txt | Consists of the predefined maps for the Pac-man game.  To form the maze of the game. |
| **Sound** | Consists of the music and the sound effects files of the Pac-man game. |
| . bgm.ogg | To make the game more interesting and entertaining. |
| . clicked.ogg | Is used when a button is clicked. |
| . explosion.ogg | Is emitted when the Pac-man character explodes after colliding with one of the ghosts. |
| . eatDot.ogg | Is emitted whenever the Pac-man character eats a white dot. |
| . eatEnemy.ogg | Is used when the Pac-man character eats a ghosts under the power pellet effect. |
| . powPalEffect.ogg | Sound is emitted when the Pac-man character eats a power pellet and activate the power pellet effect. |
| . victory.ogg | Sound is emitted when the Pac-man character eats all the dots and power pellets, winning the game. |
| . gameOver.ogg | Is emitted when user has exhausted all three lives of the Pac-man character and loses the game. |
| **Font**  . Arcade\_Classic.ttf  . dpcomic.ttf  . papercut.ttf  . upheavtt.ttf  . VPPixel-Simplified.otf | Consists of all .ttf and .otf font files that are used in the program.  Different fonts are used in the game to improve the appearance of the game displayed on the screen. |
| **Img** | Consists of .png image files that are used in the program.  Also consists of folders that keep the sprite images for the game characters. |
| . Logo.png | The logo image is displayed on the Start Up Page as required. |
| . Arrow.png | The arrow image is shown in the Help Page. It is rotated or flipped accordingly to represent different arrow keys. |
| **. Player (folder)**  .. Moving(n).png  .. Explode(n).png | Consists of images that are used in the moving and explosion animation of the Pac-man character. |
| **. Enemy (folder)**  .. Enemy.png  .. PowPalEnemy.png  .. SwitchAni.png | Consists of images that are used to represent ghosts that are either in the normal state or in the influence of the power pellet effect.  These images are also used to create animation when the ghost character changes its state. |
| **Doc**  . Technique Report 1.doc  . Technique Report 2.doc | Consists of the documentations of the Pac-man program.  Show clear information and explanation of the program. |