Test Documentation

4 test documents exist:

- Test_maze.py that tests maze.py
- Test_player.py that tests player.py
- Test_score.py that tests score.py
- Test_score_manager.py that tests score_manager.py
- Test_app.py that tests app.py
- Test_game_move.py that tests game_move.py
- Test_game_start.py that tests game_start.py
- Test_maze_view.py that tests maze_views.py

Test_maze.py

List of unit tests and their functions:

- Test_content
    - o Checks to see if Maze class has the content attribute
- Test_player
    - o Checks to see if Maze class has the player attribute
- Test_location
    - o Checks to see if Maze class has the location attribute
    - o Checks to see if the type of the location attribute is a tuple
- Test_can_move_to
    - o Checks to see if Maze class has the can_move_to attribute
    - o Checks to see if it returns the correct Boolean value depending on the location tuple
    - o If tuple location indicates "x" (a wall), return False
    - o If " " (empty, accessible space), return True
- Test_display
    - o Checks to see if Maze class has the display attribute
- Test_find_random_spot
    - o Checks to see if Maze class has the find_random_spot attribute
    - o Uses the find_random_spot function to locate a random location. Return true if it is an empty space and can be accessed by the player sprite.
- Test_exit
    - o Checks to see if the Maze class has the is_exit attribute
    - o Checks to see if the location indicated by the tuple is "E", an exit. Return True if it is the case

Test_player.py

List of unit tests and their functions:

- Test_bag
    o Checks to see if the Player class has attribute backpack
    o Checks to see if the type of backpack attribute is a list
- Test_pickup
    o Checks to see if the Player class has attribute appendItem
- Test_append_item
    o Tests the appendItem function
    o Checks to see if appendItem correctly appends the item to
      the backpack list.
    o Checks if there is an item in the backpack list, and if the
      expected output matches the item in the backpack

Test_player.py

List of unit tests and their functions:

- Test_change_name
    o Attempt to reassign the name attribute of a fixture
    o Check to see if name attribute of fixture matches expected
      output
- Test_change_score
    o Attempt to reassign the score attribute of a fixture
    o Check to see if score attribute of fixture matches expected
      output
- Test_change_date
    o Attempt to reassign the date attribute of a fixture
    o Check to see if date attribute of fixture matches expected
      output
- Test_score_to_dict
    o Use the to_dict() function to convert the score to a
      dictionary
    o Check to see if the converted output matches the expected
      output as dictionary

Test_score_manager.py

List of unit tests and their functions:

- Test_manager_len
    o Uses the add_score function to add a fixture to an empty
      list
    o Tests to see if item has been appended to list
- Test_manager_scores_property

  o Checks to see if the type of .scores of ScoreManager class
   is a property
- Test_manager_remove_score
  o Uses the add_score function to add a fixture to an empty
   list
  o Then uses remove_score function to remove the item from the
   list
  o Checks to see if the list length is 0
- Test_manager_serialize
  o Uses add_score to append two fixtures to the score list
  o Tests to compare the values of manager.serialize()and the
   predicted output. Test passes if the values are equal.

Test_score_manager.py

List of unit tests and their functions:

- Test_get_list
  o Gets data and decodes for contents
  o Uses json.loads to obtain contents
  o Checks to see if the loaded json content matches expected
   output (ie. Empty)
- Test_put_new
  o Uses put() on json items
  o Checks to see if the status code matches expected output
  o Uses get() and chekcs to see if get_json output matches
   expected output
- Test_delete_list
  o Tests for delete function
  o Checks to see if status code matches expected output
  o Checks to see if get() outputs expected output(ie. Empty)

Test_game_move.py

List of unit tests and their functions:

- Test_maze_controller
  o Tests to see if the fixture has the following attributes:
    ▪ Maze
    ▪ Name
    ▪ Start_time
    ▪ End_time
    ▪ Timer
    ▪ Move

Test_game_start.py

List of unit tests and their functions:

- Test_maze_controller
  - o Checks to see if fixture has the following attributes:
    - Maze
    - Name
    - Run

Test_game_start.py

List of unit tests and their functions:

- Teset_maze_view
  - o Checks to see if fixture has the following attributes:
    - Maze
    - Name
    - Start_time
    - timer