# IT 140 Design Document Template

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## Storyboard (Description and Map)

The theme of the game happens inside the “character’s” mind. Each area the player can go represents areas of positive affirmations that further represent ways to overcome the ultimate villain in the game: **Imposter Syndrome**. The one area that does not support affirmations is the *Chamber of Shadows* - where Imposter Syndrome resides. The goal is for the player to explore each room and collect the items within them that imprint their respective affirmations onto the player to help defeat Imposter Syndrome. If the player finds the villain before finding all 6 items, they will lose the game; however, they win the game if they collect all 6 items first.

**Map of Mind Maze:**

*Includes: Rooms, items, and villain*

A diagram of a diagram

Description automatically generated

**Pseudocode or Flowchart for Code to “Display Current Status”**

FUNCTION display\_status():

PRINT “You are currently in: {player\_position}”

IF player\_position is ‘Sunlit Atrium’ OR current room ‘item’ is NONE:

PRINT “This room has no items available”

PRINT “Inventory: {inventory}”

END FUNCTION

END

**Pseudocode or Flowchart for Code to “Get Command”**

START

FUNCTION get\_command(input, player\_position, inventory):

INITIALIZE command to input.SPLIT

IF command[0] is “go” AND length GREATER THAN 1:

player\_position = CALL move\_player(command[1], player\_position)

ELIF command[0] is ‘get’ AND length GREATER THAN 1:

inventory = CALL add\_to\_inventory(command[1] JOIN with spaces, player\_position, inventory)

ELIF command[0] is ‘exit’:

PRINT “Exiting game. Thanks for playing!”

CALL exit()

ELSE:

PRINT “Sorry, command not recognized”

RETURN player\_position, inventory

END FUNCTION

END

**Pseudocode or Flowchart for Code to “Move Between Rooms”**

START

FUNCTION move\_player(direction, player\_position):

IF direction is “North” or “East” or “South” or “West:

IF direction exists in current room:

INITIALIZE player\_position to new room in specified direction

PRINT “You have moved to the {“player\_position”}”

PRINT *Description of room*

IF new room contains an item:

PRINT “You see {“item”}”

IF new room contains ‘villain’ key AND ‘villain’ is TRUE:

CALL game\_over()

ELSE:

Print “No room in that direction!”

END IF

ELSE:

PRINT: That is not a valid direction

END IF

RETURN player\_position

END FUNCTION

## Pseudocode or Flowchart for Code to “Get an Item”

START

FUNCTION add\_to\_inventory(item):

FOR inv\_item IN inventory:

IF item in inv\_item:

PRINT “You already have the <inv\_item>”

RETURN inventory

END FOR

IF ‘item’ in current room is not NONE:

IF ‘item’ exists in current room AND item is a valid item in room:

APPEND item to ‘inventory’

PRINT “ {‘item’} added to inventory!”

PRINT *Item description*

SET current room ‘item’ key to NONE

CALL check\_inventory()

ELSE:

PRINT “That item is not in this room”

CALL display\_status()

END IF

ELSE:

PRINT “This room doesn’t have any items available.”

END IF

RETURN inventory

END FUNCTION

FUNCTION check\_inventory(inventory):

IF length of inventory is 6:

PRINT “Congratulations! You collected all items needed to defeat Imposter Syndrome!”

CALL EXIT()

END IF

END FUNCTION

## Pseudocode or Flowchart for Code for “Game Over”

START

FUNCTION game\_over():

PRINT “Game is over”

EXIT()

END FUNCTION

END

**Pseudocode or Flowchart for Code “Main Game”**

START

FUNCTION main\_game():

INITIALIZE player\_position to ‘Sunlit Atrium’

INITIALIZE inventory *list* to EMPTY

INITIALIZE “rooms” as dictionary with Rooms, directions, items, and descriptions

CALL instructions()

PRINT *current room description*

WHILE *True*:

CALL display\_status(player\_position, inventory)

INITIALIZE command to *input*

ASSIGN player\_position AND inventory to CALL get\_command(command, player\_position, inventory)

END WHILE

END FUNCTION

END