# IT 140 Design Document Template

## Instructions

Fill out the sections below. Be sure to remove the bracketed text before submitting your Design Document.

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## Storyboard (Description and Map)

Escape the Office! Its 5pm on Friday. The sun is shining, the birds are chirping, and you are still at work. The evil CEO Mikey Moneybags just came up with a new project and won’t let anyone leave until you see it through. Time for a breakout. Gather up your belongings, avoid Moneybags, who will be napping in his executive office (napping with one eye open!), and enjoy the weekend!

The dungeon-like office consists of 8 rooms:

-Main Office

-Back Office

-Executive Office

-Supply Closet

-Courtyard

-Break Room

-Bathroom

-Front Lobby

The belongings you need to gather:

-Your hat

-Your sunglasses

-The rest of your lunch

-your watch

-your keys

-some extra pens

East

North

West

East

South

West

East

South

North

West

East

North

South

West

Main Office

(player start)

Supply Closet

(item location: extra pens)

Front Lobby

(item location: keys)

Back Office

(item location: hat)

Bathroom

(item location: watch)

Courtyard

(item location: sunglasses)

Break Room

(item location: remains of lunch)

Executive Office

(villain location)

South

North

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

FUNCTION move(direction\_to\_go):

Check which room the player is in

Obtain a list of all available directions from the current room, save as list\_of\_directions

FOR each direction in list\_of\_directions:

IF direction is direction\_to\_go THEN

current\_room = room\_in\_that\_direction

OUTPUT the room description

OUTPUT inventory

IF there is an item THEN

OUTPUT item description

OUTPUT separator dashes

BREAK

ELSE:

OUTPUT can’t go that way

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

FUNCTION get\_item(item\_to\_get)

IF item in current room is in item\_to\_get:

Add item to inventory list

Remove item from the game’s list

OUTPUT the item was successfully retrieved

ELSE THEN

OUTPUT can’t get item

**Pseudocode for Main()**

Create Dictionary of rooms and their item or boss

Create Dictionary of each room and the room in each direction of that room

Create list of all available directions, save as valid\_input\_directions

VAR playing = TRUE

VAR current room = starting room

VAR inventory\_list

OUTPUT starting text, room description, inventory, and seperator

WHILE playing:

PROMPT enter your move and newline

GET input and save as input\_string

Split input string into list, separated by each blankspace, save as input\_list

IF “go” equals first element of input\_list THEN

IF input\_list second element is in valid\_input\_directions THEN

Move(input\_list[1])

ELSE:

Invalid\_input()

ELSE IF “get” equals first element of input\_list THEN

Get\_item(input\_ string)

ELSE IF “help” is in input\_string THEN

Print\_rules()

ELSE IF “quit” is in input\_string THEN

Playing = FALSE

ELSE THEN

Invalid\_input()

IF current\_room is boss\_room THEN

Lose()

IF inventory\_list is full THEN

Win()

ENDWHILE