# IT 140 Design Document Template

## Instructions

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

**Tyler Bryant.**

## Storyboard (Description and Map) Storyline: Sir Toiletry, was given a request from the King to go and defeat any Evil Plumbers he finds. So, he accepts the kings request, and on his journey, Sir toiletry finds an old castle, he enters the castle only to fall and lose his stuff, now he must track down his 7 items which will help him defeat the Evil Plumbers or he’ll might get flushed to death! My theme is toiletry items/things and anything toilet related. The villain is named the ‘Evil Plumber’. Rooms are Lobby(starting room), Garden, Entry way, Dining room, Kitchen, Library, Basement, Bathroom, Evil Lair(Villain). Items are Toilet brush, Plunger, Rusty faucet, Trash can, Toilet paper roll, Turd, Bar of soap.

East

South

North

East

West

 Garden  
(room #6)  
item(Rusty faucet)

Bathroom  
(room #5)   
item(Plunger)

South

North

South

North

West

Dining room  
(room #8)  
item(Toilet brush)

Library room  
(room #9)   
item(Toilet paper roll)

East

East

East

West

West

Entry way  
(room #7)  
item(Trash can)

Lobby  
(starting room #1)

Kitchen  
(room #2)  
Item(Bar of soap)

West

West

East

Basement   
(room #3)  
item(Turd)

Evil Lair   
(Boss, room #4)

## Psuedocode for Code to “Move Between Rooms”

* Move commands are go South, go North, go East, go West.  
  Display “Enter your move:”
* If player is in Lobby:  
   if direction is “go North”  
   Enter Dining room.  
   Elif direction is “go South”  
   Enter Bathroom  
   Elif direction is “go East”  
   Enter Entryway  
   Elif direction is “go West”  
   Enter Kitchen  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Entry way:  
   if direction is “go West”  
   Enter Lobby  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Dining room:  
   if direction is “go South”  
   Enter Lobby  
   Elif direction is “go West”  
   Enter Library  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Library:  
   if direction is “go East”  
   Enter Dining room  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Bathroom:  
   if direction is “go North”  
   Enter Lobby.  
   Elif direction is “go West”  
   Enter Garden  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Garden:  
   if direction is “go North”  
   Enter Basement.  
   Elif direction is “go East”  
   Enter Bathroom  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Basement:  
   if direction is “go South”  
   Enter Garden  
   Elif direction is “go East”  
   Enter Evil Lair  
   Elif direction is “go West”  
   Enter Kitchen  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Kitchen:  
   if direction is “go East”  
   Enter Lobby  
   Elif direction is “go West”  
   Enter Basement  
   Else  
   Output shows “Invalid Direction.”
* Else If player is in Evil Lair:  
   if direction is “go East”  
   Enter Basement  
   Else  
   Output shows “Invalid Direction.”
* LOOP END

## Pseudocode for Code to “Get an Item”

**Collect 7 items to win or get flushed by the Evil Plumber.   
  
Initialize empty inventory list**

**function GetItem(item\_name):**

**Identify the item  
if item is identifiable:**

**Check if item already exists in inventory  
if item does not exist in inventory:  
 Prompt user for item pickup  
 if they pickup item:  
 add it to inventory list**

**If player has all 7 items and faces the Evil Plumber:**

**The player wins:**

**Else:**

**Continue the game**

**Else:**

**Do not update inventory list**

**Continue the game  
Else:  
 Inform player they already have the item in their inventory  
 Continue the game**

**Else:  
 Inform player item is not recognized  
 Continue the game**