

Testing plan and execution

Project Title: Happiness Plus 1

Name: Jeff Redmond

SID: 200335711

Table of contents

Table of contents	2
Testing plan	3
Level testing	3
Transition object testing	3
Puzzle testing	6
Alpha testing	7
General Test cases for levels	7
Testing for the Item interaction object	8
Beta testing	9
Testing results	9
Transition object testing	9
Puzzle testing results	12
Test number 1	12
Test number 2	13
Test number 3	13
Test number 4	13
Test number 5	14
Test number 6	14
Interpretation of puzzle testing results	14
Alpha testing	15
rm_lv1_1	15
rm_lv1_2	16
rm_lv2_1	17
rm_lv2_2	18
Testing for the Item interaction object	19
Beta testing	20

Testing plan

Level testing

The current plan is to create a npc character that will navigate around the borders of each map and report on if it goes out of bounds. This npc has yet to be built but it will add in a component of automated testing to the game. Every trigger that allows the player to navigate from one room to another will need to be tested

Transition object testing

Current Room	Destination room	Type of transition	Expected results	Actual results
rm_Title screen	rm_create_character	script/obj_controller	Pass	
rm_Title_screen	rm_credits	script/obj_controller	Pass	
rm_Title_screen	rm_loading	script/obj_controller	Pass	
rm_create_character	rm_Title_screen	script/obj_controller	Pass	
rm_create_character	rm_lv1_1	script/obj_controller	Pass	
rm_lv1_1	rm_lv1_2	script/obj_controller	Pass	
rm_lv1_2	rm_lv1_1	script/obj_controller	Pass	
rm_lv1_1	rm_lv2_1	cutscene_controller	Pass	
rm_lv2_1	rm_lv2_2	script/obj_controller	Pass	
rm_lv2_2	rm_lv2_1	script/obj_controller	Pass	

rm_lv2_1	rm_lv3_1	cutscene_controller	Pass	
rm_lv3_1	rm_lv3_2	script/obj_controller	Pass	
rm_lv3_2	rm_lv3_1	script/obj_controller	Pass	
rm_lv3_1	rm_lv3_house1	script/obj_controller	Pass	
rm_lv3_1	rm_lv3_house2	script/obj_controller	Pass	
rm_lv3_house1	rm_lv3_1	script/obj_controller	Pass	
rm_lv3_house2	rm_lv3_1	script/obj_controller	Pass	
rm_lv3_1	rm_lv4_1	cutscene_controller	Pass	
rm_lv4_1	rm_lv4_2	script/obj_controller	Pass	
rm_lv4_2	rm_lv4_1	script/obj_controller	Pass	
rm_lv4_1	rm_lv4_house1	script/obj_controller	Pass	
rm_lv4_1	rm_lv4_house2	script/obj_controller	Pass	
rm_lv4_1	rm_lv4_house3	script/obj_controller	Pass	
rm_lv4_1	rm_lv4_school	script/obj_controller	Pass	
rm_lv4_2	rm_lv4_store	script/obj_controller	Pass	
rm_lv4_house1	rm_lv4_1	script/obj_controller	Pass	

rm_lv4_house2	rm_lv4_1	script/obj_controller	Pass	
rm_lv4_house3	rm_lv4_1	script/obj_controller	Pass	
rm_lv4_school	rm_lv4_1	script/obj_controller	Pass	
rm_lv4_store	rm_lv4_2	script/obj_controller	Pass	
rm_lv4_1	rm_lv5_1	cutscene_controller	Pass	
rm_lv5_1	rm_lv5_2	script/obj_controller	Pass	
rm_lv5_2	rm_lv5_1	script/obj_controller	Pass	
rm_lv5_1	rm_lv5_hospital	script/obj_controller	Pass	
rm_lv5_1	rm_lv5_gym	script/obj_controller	Pass	
rm_lv5_hospital	rm_lv5_1	script/obj_controller	Pass	
rm_lv5_gym	rm_lv5_	script/obj_controller	Pass	
rm_lv5_2	rm_lv5_apartment1	script/obj_controller	Pass	
rm_lv5_2	rm_lv5_apartment2	script/obj_controller	Pass	
rm_lv5_2	garage1	script/obj_controller	Pass	
rm_lv5_2	garage2	script/obj_controller	Pass	
rm_lv5_apartment1	rm_lv5_2	script/obj_controller	Pass	

rm_lv5_apartm ent2	rm_lv5_2	script/obj_contr oller	Pass	
rm_lv5_garage 1	rm_lv5_2	script/obj_contr oller	Pass	
rm_lv5_garage 2	rm_lv5_2	script/obj_contr oller	Pass	
rm_lv5_2	rm_lv6_1	cutscene_contr oller	Pass	
rm_lv6_1	rm_lv6_2	script/obj_contr oller	Pass	
rm_lv6_2	rm_lv6_1	script/obj_contr oller	Pass	
rm_lv6_1	rm_lv6_grove	script/obj_contr oller	Pass	
rm_lv6_grove	rm_lv6_1	script/obj_contr oller	Pass	

Puzzle testing

Each level consists of 1 to 4 puzzles, before each puzzle is implemented in the game the puzzle will be tested with users on paper. The format for these are:

- Puzzle items with descriptions listed on individual queue cards
- Puzzle goals are listed on one queue card
- Results of combined items are listed on individual queue cards

Through efforts of the tester the individual being tested will attempt to solve the puzzle. The individual solving the puzzle will then fill out a questionnaire for each puzzle that they complete each puzzle. The questionnaires follow the format:

Date:

Tester name:

Puzzle being tested:

Questions:

1) Were you able to solve this puzzle?

2) How long did it take you to solve the puzzle?

3) How would you rate the difficulty on this puzzle? (high, med, low):

4) What changes would you make to this puzzle? Why?

After that the questionnaires are analyzed and then depending on the results any necessary modifications are made to the puzzle. Only after that point will the puzzles be implemented in the game.

Alpha testing

This testing will be completed by myself and I will play through the game and see if I can find any issues. This will include

General Test cases for levels

Test case	Expected results	Actual results	Notes
Can the player move around	pass		
Does the pause screen work	pass		
Does the inventory work	pass		
Does saving in the room work	pass		
Does loading from within the room work	pass		
Does loading from title screen to room work	pass		
Can all the puzzle items be acquired in the desired way	pass		
Do the puzzle items craft into the desired objects	pass		

Do all the cutscenes work	pass		
Can the player progress to the next level?	pass		
Does the inventory stay clean after each level	pass		
Can the player interact with all interactable items in the level	pass		

Testing for the Item interaction object

Test case	Expected results	Actual results	Notes
Interact with inventory room and no inventory requirements	pass		
Interact with inventory room and successful inventory requirements	pass		
Repeat 1 with full inventory	pass		
Repeat 2 with full inventory	pass		
Interacts with missing inventory requirement	Pass		

Interacts with missing requirements and full inventory	Pass		
--	------	--	--

Beta testing

This will be given to friends and other people that i can find. When they are playing i will provide a questionnaire that will contain:

- 1) Did you find any bugs/glitches? If yes please describe the issue
- 2) What did you like about the game?
- 3) What did you not like about the game?

Testing results

Transition object testing

Current Room	Destination room	Type of transition	Expected results	Actual results
rm_Title screen	rm_create_character	script/obj_controller	Pass	Pass
rm_Title_screen	rm_credits	script/obj_controller	Pass	Pass
rm_Title_screen	rm_loading	script/obj_controller	Pass	Pass
rm_create_character	rm_Title_screen	script/obj_controller	Pass	Pass
rm_create_character	rm_lv1_1	script/obj_controller	Pass	Pass
rm_lv1_1	rm_lv1_2	script/obj_controller	Pass	Pass
rm_lv1_2	rm_lv1_1	script/obj_controller	Pass	Pass

rm_lv1_1	rm_lv2_1	cutscene_controller	Pass	Pass
rm_lv2_1	rm_lv2_2	script/obj_controller	Pass	Pass
rm_lv2_2	rm_lv2_1	script/obj_controller	Pass	Pass
rm_lv2_1	rm_lv3_1	cutscene_controller	Pass	Pass
rm_lv3_1	rm_lv3_2	script/obj_controller	Pass	Pass
rm_lv3_2	rm_lv3_1	script/obj_controller	Pass	Pass
rm_lv3_1	rm_lv3_house1	script/obj_controller	Pass	Pass
rm_lv3_1	rm_lv3_house2	script/obj_controller	Pass	Pass
rm_lv3_house1	rm_lv3_1	script/obj_controller	Pass	Pass
rm_lv3_house2	rm_lv3_1	script/obj_controller	Pass	Pass
rm_lv3_1	rm_lv4_1	cutscene_controller	Pass	Pass
rm_lv4_1	rm_lv4_2	script/obj_controller	Pass	Pass
rm_lv4_2	rm_lv4_1	script/obj_controller	Pass	Pass
rm_lv4_1	rm_lv4_house1	script/obj_controller	Pass	Pass
rm_lv4_1	rm_lv4_house2	script/obj_controller	Pass	Pass
rm_lv4_1	rm_lv4_house3	script/obj_controller	Pass	Pass

rm_lv4_1	rm_lv4_school	script/obj_controller	Pass	Pass
rm_lv4_2	rm_lv4_store	script/obj_controller	Pass	Pass
rm_lv4_house1	rm_lv4_1	script/obj_controller	Pass	Pass
rm_lv4_house2	rm_lv4_1	script/obj_controller	Pass	Pass
rm_lv4_house3	rm_lv4_1	script/obj_controller	Pass	Pass
rm_lv4_school	rm_lv4_1	script/obj_controller	Pass	Pass
rm_lv4_store	rm_lv4_2	script/obj_controller	Pass	Pass
rm_lv4_1	rm_lv5_1	cutscene_controller	Pass	Pass
rm_lv5_1	rm_lv5_2	script/obj_controller	Pass	Pass
rm_lv5_2	rm_lv5_1	script/obj_controller	Pass	Pass
rm_lv5_1	rm_lv5_hospital	script/obj_controller	Pass	Pass
rm_lv5_1	rm_lv5_gym	script/obj_controller	Pass	Pass
rm_lv5_hospital	rm_lv5_1	script/obj_controller	Pass	Pass
rm_lv5_gym	rm_lv5_	script/obj_controller	Pass	Pass
rm_lv5_2	rm_lv5_apartment1	script/obj_controller	Pass	Pass
rm_lv5_2	rm_lv5_apartment2	script/obj_controller	Pass	Pass

rm_lv5_2	garage1	script/obj_controller	Pass	Pass
rm_lv5_2	garage2	script/obj_controller	Pass	Pass
rm_lv5_apartment1	rm_lv5_2	script/obj_controller	Pass	Pass
rm_lv5_apartment2	rm_lv5_2	script/obj_controller	Pass	Pass
rm_lv5_garage1	rm_lv5_2	script/obj_controller	Pass	Pass
rm_lv5_garage2	rm_lv5_2	script/obj_controller	Pass	Pass
rm_lv5_2	rm_lv6_1	cutscene_controller	Pass	Pass
rm_lv6_1	rm_lv6_2	script/obj_controller	Pass	Pass
rm_lv6_2	rm_lv6_1	script/obj_controller	Pass	Pass
rm_lv6_1	rm_lv6_grove	script/obj_controller	Pass	Pass
rm_lv6_grove	rm_lv6_1	script/obj_controller	Pass	Pass

Puzzle testing results

Test number 1

Date: 23 january

Tester name: Quinn

Puzzle being tested: 1

Questions:

1) Were you able to solve this puzzle?

yes

2) How long did it take you to solve the puzzle?

1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):
low

4) What changes would you make to this puzzle? Why?
It seems good

Test number 2

Date: 23 january

Tester name:quinn

Puzzle being tested: 2

Questions:

2) Were you able to solve this puzzle?
yes

2) How long did it take you to solve the puzzle?
1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):
low

4) What changes would you make to this puzzle? Why?
Bit short, make it longer

Test number 3

Date: 24 january

Tester name: Marlon

Puzzle being tested: 1

Questions:

3) Were you able to solve this puzzle?
yes

2) How long did it take you to solve the puzzle?
1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):
low

4) What changes would you make to this puzzle? Why?
good

Test number 4

Date: 24 january

Tester name: Marlon

Puzzle being tested: 2

Questions:

4) Were you able to solve this puzzle?

yes

2) How long did it take you to solve the puzzle?

1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):

low-med

4) What changes would you make to this puzzle? Why?

Would not make any changes

Test number 5

Date: 24 january

Tester name: Alex

Puzzle being tested: 1

Questions:

5) Were you able to solve this puzzle?

yes

2) How long did it take you to solve the puzzle?

1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):

low

4) What changes would you make to this puzzle? Why?

Have a looser correlation between items, so that players need to make leaps at times to figure out what items should be crafted together.

Test number 6

Date: 24 january

Tester name: Alex

Puzzle being tested: 2

Questions:

6) Were you able to solve this puzzle?

yes

2) How long did it take you to solve the puzzle?

1-2 min

3) How would you rate the difficulty on this puzzle? (high, med, low):

low

4) What changes would you make to this puzzle? Why?

Have some dummy items placed around that could fool the players.
Add more steps to stretch out the solving process.

Interpretation of puzzle testing results

Overall the testers were good, they did not provide any game changing insite that would cause a complete overhaul of the system. Instead the let me know that i need to focus on

creating puzzles that are more difficult going into the future. This can be done by increasing the number of puzzle items, have crafting items with a looser relation, and add in dummy items.

Alpha testing

This testing will be completed by myself and i will play through the game and see if I can find any issues. This will include

rm_lv1_1

Test case	Expected results	Actual results	Notes
Can the player move around	pass	pass	
Does the pause screen work	pass	pass	
Does the inventory work	pass	pass	
Does saving in the room work	pass	pass	
Does loading from within the room work	pass	pass	
Does loading from title screen to room work	pass	pass	
Can all the puzzle items be acquired in the desired way	pass	pass	

Do the puzzle items craft into the desired objects	pass	pass	
Do all the cutscenes work	pass	pass	

Can the player progress to the next level?	pass	pass	
Does the inventory stay clean after each level	pass	pass	
Can the player interact with all interactable items in the level	pass	pass	

rm_lv1_2

Test case	Expected results	Actual results	Notes
Can the player move around	pass	pass	
Does the pause screen work	pass	pass	
Does the inventory work	pass	pass	
Does saving in the room work	pass	pass	
Does loading from within the room work	pass	pass	
Does loading from title screen to room work	pass	pass	
Can all the puzzle items be acquired in the desired way	pass	pass	

Do the puzzle items craft into the desired objects	pass	pass	
Do all the cutscenes work	pass	pass	
Can the player progress to the next level?	pass	pass	
Does the inventory stay clean after each level	pass	pass	
Can the player interact with all interactable items in the level	pass	pass	

rm_lv2_1

Test case	Expected results	Actual results	Notes
Can the player move around	pass	pass	
Does the pause screen work	pass	pass	
Does the inventory work	pass	pass	
Does saving in the room work	pass	pass	
Does loading from within the room work	pass	pass	

Does loading from title screen to room work	pass	pass	
Can all the puzzle items be acquired in the desired way	pass	pass	

Do the puzzle items craft into the desired objects	pass	pass	
Do all the cutscenes work	pass	pass	
Can the player progress to the next level?	pass	pass	
Does the inventory stay clean after each level	pass	pass	
Can the player interact with all interactable items in the level	pass	pass	

rm_lv2_2

Test case	Expected results	Actual results	Notes
Can the player move around	pass	pass	
Does the pause screen work	pass	pass	
Does the inventory work	pass	pass	

Does saving in the room work	pass	pass	
Does loading from within the room work	pass	pass	
Does loading from title screen to room work	pass	pass	
Can all the puzzle items be acquired in the desired way	pass	pass	

Do the puzzle items craft into the desired objects	pass	pass	
Do all the cutscenes work	pass	fail	
Can the player progress to the next level?	pass	N/A	
Does the inventory stay clean after each level	pass	N/A	
Can the player interact with all interactable items in the level	pass	pass	

Testing for the Item interaction object

Test case	Expected results	Actual results	Notes
-----------	------------------	----------------	-------

Interact with inventory room and no inventory requirements	pass	Pass	
Interact with inventory room and successful inventory requirements	pass	Pass	
Repeat 1 with full inventory	pass	Pass	
Repeat 2 with full inventory	pass	Pass	
Interacts with missing inventory requirement	Pass	Pass	
Interacts with missing requirements and full inventory	Pass	Pass	

Beta testing

This has yet to be implemented yet and will be completed and inserted into the final version of the document before April 9th.