

Testing Design and Evidence of Testing

Our testing was done in two major ways: Unit tests for inventory items and Play tests of minigame and shop. Our Unit test for inventory items checked that items returned the correct ability value when called as an attack. This test must currently be manually edited to check all items however a future team could easily automate this process. Below is a screenshot of this tests (along with Evil Geese's pre-existing tests passing):



Play Testing:

Our minigame and shop were tested through play testing as unit testing was “killing a mosquito with a bomb” due to the simplicity of particularly the minigames code, which mostly uses inbuilt Unity methods which have been already tested by the engines developers.

The playtest we carried out are detailed below:

Test name:	Test method:	Results:
Testing shop dialog	Talking through the shop dialog to check the shop is accessible	Pass, with the exception of market square which can prevent access to the shop if the wrong dialogue options are chosen. This is fine however as the shop is still accessible in Glasshouse
Testing item buying	Clicking to buy an item and then entering combat to use the item	Pass
Testing minigame start	Talking to the npc in chemistry to	Pass

	start the minigame	
Testing minigame movement	Testing that arrow keys move the player	Pass
Testing minigame death	Collision with geese returns the player to the minigame menu	Pass

Below is included Evil Geese's testing report. All of their testing still holds true for our version of the game so this is included.

Unit Tests

Test ID	Test Name	Pass/Fail	Related Requirements	Description
U1	CombatSystemCharacterDamage	Pass	F8	Tests that characters correctly take damage in combat.
U2	DialogSystemConditionalConstantEvaluations	Pass		Tests that DialogConditionals evaluate correctly when comparing constants.
U3	DialogSystemConditionalGamevarEvaluations	Pass		Tests that DialogConditionals evaluate correctly when comparing a gamevar to a constant.
U4	DialogSystemConditionalItemEvaluations	Pass	F9	Tests that DialogConditionals evaluate correctly when comparing a inventory item to a constant.
U5	DialogSystemConditionalStaticEvaluations	Pass		Tests that DialogConditionals evaluate correctly when set to always evaluate to true/false.
U6	GameStateInitializedEmpty	Pass	P1	Tests that GameState is initialized correctly.
U7	GameStateRetainsGameVars	Pass		Tests that GameState correctly handles Gamevars changing.
U8	GameStateRetainsInventoryItems	Pass	F4	Tests that GameState correctly handles items being given.
U9	GameStateSavesCorrectly	Pass	F5	Tests that GameStateManager correctly saves the game.
U10	GridSystemCollisions	Pass		Tests that the grid system handles collisions correctly.

Black Box/Integration Test

Test ID	Test Description	Expected Result	Pass/Fail	Related Requirements
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BB1	Game loads into menu on start	When the game executable is started, the player is taken directly to the main menu.	Pass	
BB2	Town mode movement responds to bound keys when not in pause screen or during dialog.	A player can use the W,A,S,D movement keys in town mode to move in their mapped directions when both a pause screen and dialog are not currently entered.	Pass	UH1, F16
BB3	Town mode movement is disabled during pause screen and during dialog.	Pressing the W,A,S,D movement keys within town mode when on a pause screen or during dialog does not move the player's character.	Pass	UH1, F16
BB4	Dialog system works as expected: Dialog boxes fit the screen, text is aligned, dialog options appear.	When the spacebar is pressed when the player is next to and facing an interactable character, the dialog system is entered. A dialog box opens, allowing for the player to interact with the aforementioned character.	Pass	
BB5	Combat system works as expected. Attacks and abilities have the expected effects.	Pressing the Attack button and then clicking an enemy should cause the current character to attack that enemy.	Pass	F8, F15
BB6	World Map works as expected.	Locations are unlocked as the story progresses, and can be accessed through clicking on a location on the world map.	Pass	F7
BB7	Pause menu opens correctly.	The pause menu opens when the bound key(Escape key) is pressed.	Pass	F5
BB8	Character roster opens correctly.	The character roster opens when the bound key (r key) is pressed.	Pass	F1
BB9	Pause Menu Saving and loading function.	Saving and loading correctly store and restore the gamestate.	Pass	F3
BB10	Pause Menu quit button returns to title screen.	When the player is on the pause menu and presses the quit button, they are returned to the title screen of the game.	Pass	
BB11	Character Roster displays character stats.	Selecting characters correctly displays each character's respective stats on screen.	Pass	F6
BB12	Character Roster correctly changes the character order.	Setting characters to specific orders in the team correctly updates the team (test by triggering a combat encounter after changing order).	Pass	F1