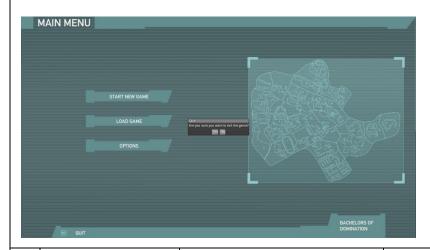
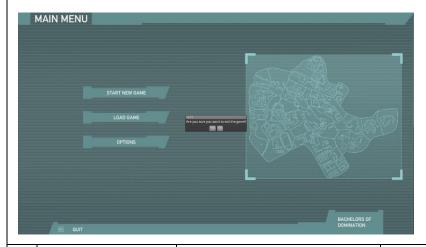
#### Main Menu

I	D	Description	Expected Outcome	Actual Outcome	Pass/Fail
•	1	Press the escape key	Dialog box opens confirming the if the player wishes to exit the game	Dialog box shown correctly and worked as needed	Pass



2	Press the Quit button	The dialog box should show the next player and number of troops to allocate	Dialog box shows the next player and the number of troops to allocate	Pass
		' '	•	



3	Select 'yes' in the	The game should close	The game closed	Pass
	quit confirmation dialog box			
	-			

The game was closed

Select 'no' in the quit confirmation dialog box

The game should remain active and the dialog box should hide

The game remained open on the main menu screen

Pass



5 Press the Start New Game button

The button should change colour and the screen should change to the game setup screen

The button flashed and the screen was changed to the game setup screen

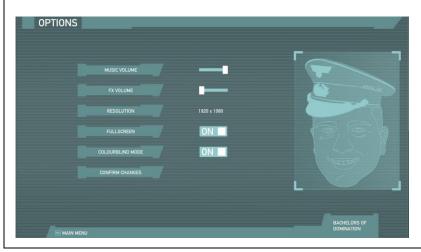


Press the Options button

The button should change colour and the screen should change to the options screen

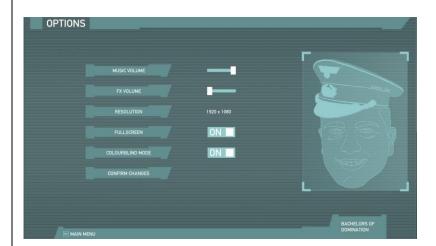
The button flashed and the screen was changed to the option screen.

Pass



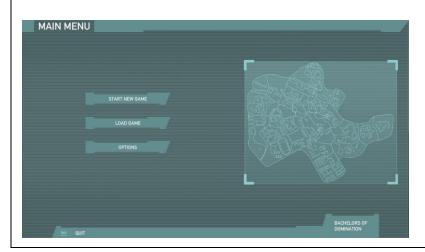
## Options Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Options screen is entered	The UI elements will show the current settings	The current settings are set on the UI elements	Pass

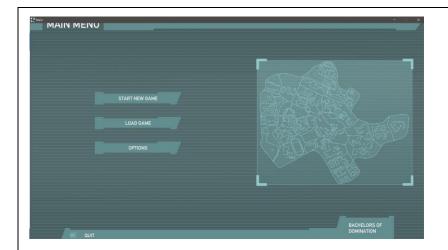


2	Press the escape key	The settings are not saved and the screen is changed to the main menu screen	The settings were not saved and the main menu was shown	Pass

3	Press the Main Menu button	The settings are not saved and the screen is changes to the main menu screen	The settings were not saved and the main menu was shown	Pass
4	Press the Confirm Changes Button	The button changes colour; the updated display settings applied to the game and the screen is set to the Menu Screen.	The button worked as expected	Pass
5	Toggle Fullscreen from off to on and select confirm changes	The game is rendered in fullscreen mode and the game moves to the main menu screen	The game was rendered in full screen	Pass



6	Toggle Fullscreen from on to off and select confirm changes	The game is rendered in windowed mode and the game moves to the main menu screen	The game was no longer rendered in full screen mode	Pass
---	---	--	---	------



7 Change the resolution and select confirm changes

The screen is rendered at the specified resolution if fullscreen is not enabled

The screen changes to the desired resolution

The screen changes to the desired resolution



### One Player Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Attempting to start a game without turning on any players	The game will display an error explaining the issue to the player	Dialog box was shown correctly and worked as needed	Pass



Attempting to start a game with one player selector (Tested on all permutations)

The game will display an error explaining the issue to the player

Dialog box was shown correctly and worked as needed

Pass



### Two Player Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Attempting to start a game with two players enabled (All permutations) with the same college	The game will display an error explaining the issue to the player	Dialog box was shown correctly and worked as needed	Pass



Attempting to start a game with two players enabled (All permutations) with different colleges

The game will display an error, explaining the neutral player needs to be enabled, to the player

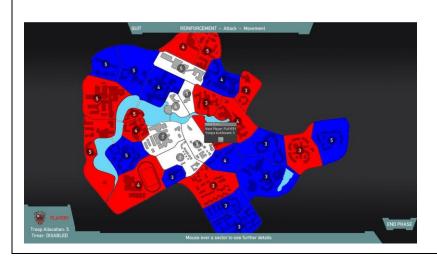
Dialog box was shown correctly and worked as needed



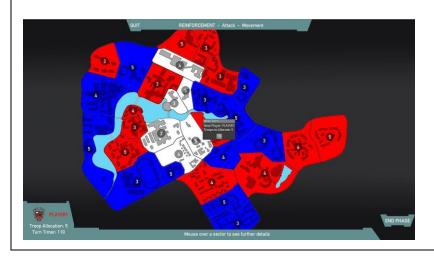
Attempting to start a game with two players enabled (All permutations) with the neutral player enabled

The game will successfully start with both players having a balanced selection of sectors and the neutral player will control the centre

Game started as expected

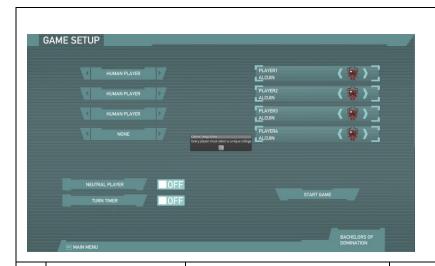


4	Attempting to start a game with two players enabled (All permutations) with the neutral player and a turn timer	The game will successfully start with both players having a balanced selection of sectors and the neutral player will control the centre, the timer will display in the bottom left corner	Game started as expected and turn timer was shown	Pass
---	---	--	---	------



## Three Player Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Attempting to start a game with three players enabled (All permutations) with the same college	The game will display an error explaining the issue to the player	Dialog box was shown correctly and worked as needed	Pass



Attempting to start a game with three players enabled.
Two with the same college and one with a different college

The game will display an error explaining that the players need to have different colleges, to the player

Dialog box was shown correctly and worked as needed

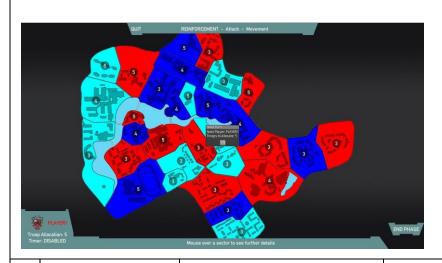


3	Attempting to start a game with three
	players enabled, with the neutral player
	the neutral player
	disabled

The game will successfully start with both players having a balanced selection of sectors

Game started as expected

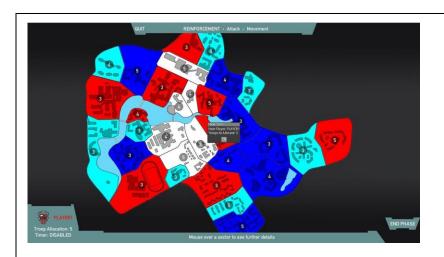
Pass



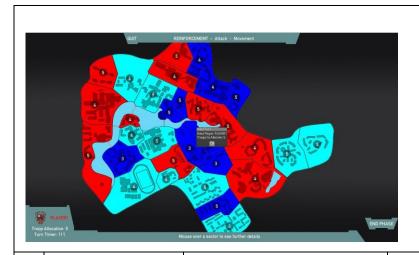
Attempting to start a game with three players enabled, with the neutral player enabled

The game will start successfully with both players having a balanced selection of sectors and the neutral player controlling the centre

Game started as expected



5	Attempting to start a game with three players enabled, with a turn timer enabled	The game will successfully start with both players having a balanced selection of sectors, the timer will display in the bottom left corner.	Game started as expected and turn timer was shown	Pass
	enabled	bottom left corner		

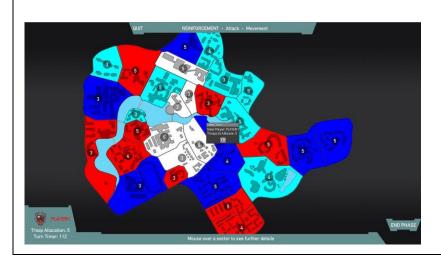


Attempting to start a game with three players enabled, with a turn timer and a neutral player enabled

The game will successfully start with both players having a balanced selection of sectors, the neutral player will control the centre and the timer will display in the corner

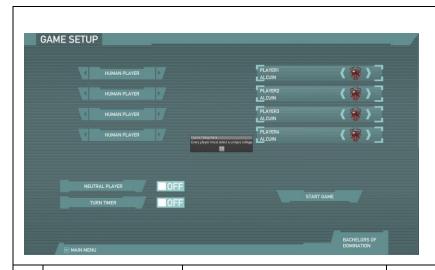
Game started as expected and the turn timer was shown

Pass



### Four Player Testing

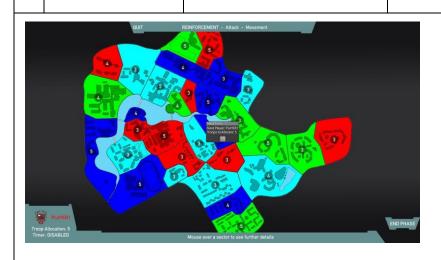
ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Attempting to start a game with four players enabled (All permutations) with the same college	The game will display an error explaining the issue to the player	Dialog box was shown correctly and worked as needed	Pass



Attempting to start a game with four players enabled, with the neutral player disabled

The game will successfully start with both players having a balanced selection of sectors

Game started as expected

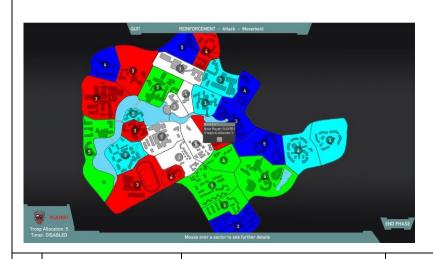


3	Attempting to start a game with four players enabled, with
	the neutral player
	enabled

The game will start successfully with both players having a balanced selection of sectors and the neutral player controlling the centre

Game started as expected

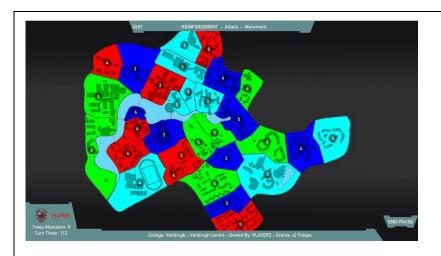
Pass



Attempting to start a game with four players enabled, with a turn timer enabled

The game will successfully start with both players having a balanced selection of sectors, the timer will display in the bottom left corner

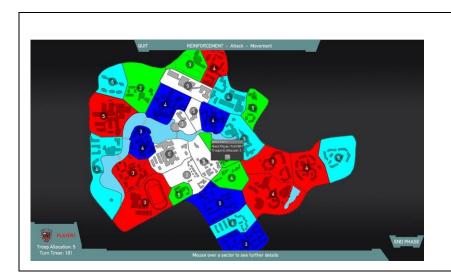
Game started as expected and turn timer was shown



Attempting to start a game with four players enabled, with a turn timer and a neutral player enabled

Attempting to start a game will successfully start with both players having a balanced selection of sectors, the neutral player will control the centre and the timer will display in the corner

The game will successfully start with both players having a balanced selection of sectors, the neutral player will control the centre and the timer will display in the corner



## Additional Validation Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Enabled two players and the neutral player, Set the two enabled players to be the same name and press the start game button	The game will display an error explaining the issue to the player	The game blocked the user if the names were identical, however, if the names had a spacing difference e.g. "Player 1" and "Player 1" it allowed it (Example shows the accepted names)	Fail



Enabled two players and the neutral player. Set one player to have a name containing a non alphanumeric character

The game will display an error explaining the issue to the player

Dialog box was shown correctly and worked as needed

Pass



Enabled two players and the neutral player. Set one player to have a name containing two or less characters

The game will display an error explaining the issue to the player

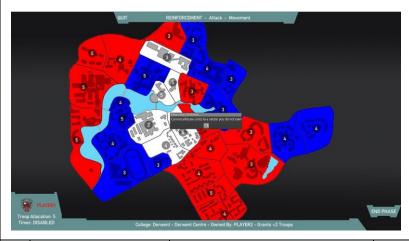
Dialog box was shown correctly and worked as needed



# Game Testing

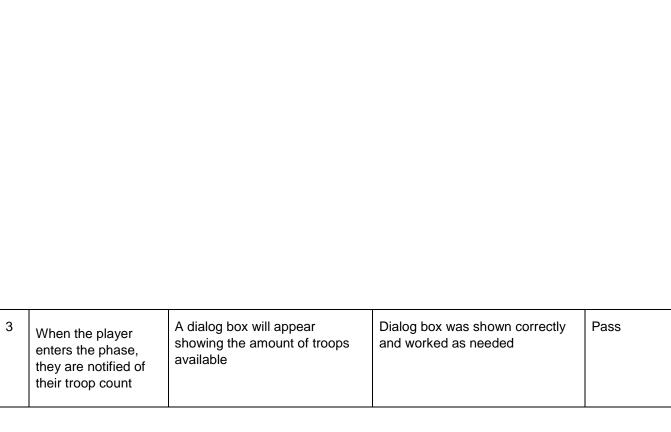
## Reinforcement Phase Testing

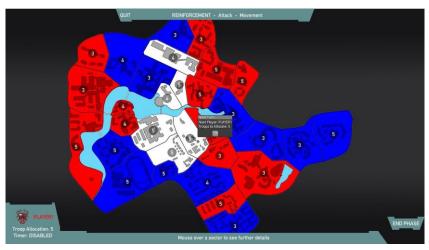
IC	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	The player tries to add troops to an enemy tile	The game will display an error explaining that the player cannot add troops to the tile	The game showed the correct error and worked as expected	Pass



2	The player tries to allocate troops after they have allocated all possible troops	The game will display an error explaining that the player has no remaining troops for allocation	The game showed the correct error and worked as expected	Pass
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### Attack Phase Testing

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	The player tries to attack from a sector they don't own	Nothing should happen	No attack arrow was shown and no functions were run	Pass
2	The player tries to attack a non adjacent sector	Nothing should happen	The attack arrow disappeared and no functions were run	Pass
3	Player tries to attack from a sector with 1 troop	Nothing should happen	No attack arrow was shown and no functions were run	Pass
4	Player tries to attack from a sector they own with more than 1 troop to an adjacent sector they don't own.	Attack should commence	The attack commences, giving the user a range input to select number of troops to attack with	Pass

### Movement

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	The player tries to move from a sector they don't own	Nothing should happen	No attack arrow was shown and no functions were run	Pass
2	The player tries to move to a non adjacent sector	Nothing should happen	No attack arrow was shown and no functions were run	Pass
3	Player tries to move from a sector with only 1 troop	Nothing should happen	No attack arrow was shown and no functions were run	Pass
4	Player tries to move from a sector they own with more than 1 troop to an adjacent sector they don't own.	Nothing should happen	No attack arrow was shown and no functions were run	Pass
5	Player tries to move from a sector they own with more than 1 troop to an adjacent sector they do own	Move should commence	The move commences, giving the user a range input to select number of troops to move	Pass

### Sounds

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Player clicks a button in the main menu	Menu sound is played	Menu sound is played	Pass
2	Player presses esc in the main menu	Menu sound is played	Menu sound is played	Pass
3	Player clicks a button in the game setup menu	Menu sound is played (except for switches)	Menu sound is played (except for switches)	Pass
4	Player clicks esc button in game setup menu	Menu sound is played	Menu sound is played	Pass
5	Player clicks a button in the options menu	Menu sound is played for confirm and main menu	Menu sound is played for confirm and main menu	Pass
6	Player clicks to select where to reinforce	Menu sound is played	Menu sound is played	Pass
7	Player selects how many troops to reinforce with	Reinforce sound is player	Reinforce sound is played	Pass
8	Player selects where to attack from	Menu sound is played	Menu sound is played	Pass
9	Player selects where to attack to	No sound played	No sound played	Pass
10	Player selects how many troops to attack with	Attack sound played	Attack sound played	Pass
11	Player selects where to move from	Menu sound is played	Menu sound is played	Pass
12	Player selects where to move to	No sound played	No sound played	Pass
13	Player selects how many troops to move	Move sound is played	Move sound is played	Pass
14	Player is eliminated	Player Eliminated sound played	Player Eliminated sound played	Pass

15	Player wins the game	Player win sound played	Player win sound played	Pass
16	PVC is discovered on capturing a sector	PVC sound played	PVC sound played	Pass
17	Slot machine launched	Slot machine launch and spin sounds played	Slot machine launch and spin sounds played	Pass
18	Player matches no symbols	Slot machine loss sound played	Slot machine loss sound played	Pass
19	Player matches 2 symbols	Slot machine match 2 sound played	Slot machine match 2 sound played	Pass
20	Player matches 3 symbols	Slot machine match 3 sound played	Slot machine match 3 sound played	Pass
21	Player matches 3 geese	Slot machine geese sound played	Slot machine geese sound played	Pass
22	Player presses pause or escape	Menu sound is played	Menu sound is played	Pass
23	Player presses resume in pause menu	Menu sound is played	Menu sound is played	Pass
24	Player presses options in pause menu	Menu sound is played	Menu sound is played	Pass
25	Player presses Save/Load in pause menu	Menu sound is played	Menu sound is played	Pass
26	Player presses quit in pause menu	Menu sound is played	Menu sound is played	Pass
27	Player clicks end phase	Menu sound is played	Menu sound is played	Pass

### Minigame

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Player captures a territory and discovers the PVC	A tooltip appears, taking the player to the minigame screen	A tooltip appears, taking the player to the minigame screen	Pass
2	Player clicks launch button on slot machine	Slot machine spins giving a combination of 3 symbols	Slot machine spins giving a combination of 3 symbols	Pass
3	Player matches 2 symbols	Player is awarded 2 pizzas	Player is awarded 2 pizzas	Pass

4	Player matches 3 symbols (but not geese)	Player is awarded 5 pizzas	Player is awarded 5 pizzas	Pass
5	Player matches 3 geese	Player is awarded 7 pizzas	Player is awarded 7 pizzas	Pass

## Bonus Exchange

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Player clicks exchange button	Player is taken to exchange page	Player is taken to exchange page	Pass
2	Player tries to convert 0 pizzas	Error dialog box appears	Error dialog box appears	Pass
3	Player tries to convert a non-zero value of pizzas	Player is given x number of pizzas and is taken back to map	Player is given x number of pizzas and is taken back to map	Pass
4	Player clicks return or presses esc	Player is taken back to map with any remaining pizzas kept	Player is taken back to map with any remaining pizzas kept	Pass
5	Player clicks increase arrow	UI changes to show +1 to student count	UI changes to show +1 to student count	Pass
6	Player clicks decrease arrow	UI changes to show -1 to student count	UI changes to show -1 to student count	Pass

### Save/Load

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Player clicks load without selecting a save	Nothing happens	A game will load	Fail
2	Player selects a save then clicks load	The selected game is loaded	The selected game is loaded	Pass
3	Player clicks save without selecting a save	Nothing happens	Nothing happens	Pass
4	Player selects a save then clicks save	Game is saved to slot	Game is saved to slot	Pass
5	Player selects a save then clicks load	Game selected is loaded	Game is loaded but pause menu breaks [1]	Fail

### Pause Menu

ID	Description	Expected Outcome	Actual Outcome	Pass/Fail
1	Player clicks resume button	Game is resumed, along with turn timer	Game is resumed, along with turn timer	Pass
2	Player clicks save/load	Player is taken to save/load screen	Player is taken to save/load screen	Pass
3	Player clicks options	Player is taken to options screen	Player is taken to options screen	Pass
4	Player clicks quit	Tooltip appears asking if player wants to quit (yes/no)	Tooltip appears asking if player wants to quit (yes/no)	Pass
5	Player selects no on quit tooltip	Tooltip disappears but game remains paused	Tooltip disappears but game remains paused	Pass
6	Player selects yes on quit tooltip	Player is taken to main menu	Player is taken to main menu	Pass

#### [1] - Broken pause menu screenshot

