Imber Test description	Criteria for passing the test / expected outcome	test passed (yes/no
1 Start a new game and click on a plot the click purchase plot.	Upon clicking the plot it must be highlighted in blue	yes
2 Acquiring more than one plot. Click a plot and acquire it, then click any other unacquired plot.	It must not be possible to click on plot and acquire it and then right after click another and acquire that one as well	yes
Acquiring a plot that has already been acquired by the current player. When allowed to acquire plots. Click one that you have previously acquired	Nothing should happen. You should not reacquire that plot or advance to the next stage of the game.	yes
Acquiring a plot that has already been acquired by the other player. When allowed to acquire plots. 4 Click one that the other player has previously acquired	Nothing should happen. You should not acquire that plot or advance to the next stage of the game.	yes
Buying 1 roboticon when you have enough money. On your first turn. When at the roboticon buying stage of the game. Use the spinbox to change the number of roboticons you wish to purchase to 1. Then click the purchase button Buying 2 roboticons when you have enough money. On your first turn.	Your money should decrease an uncustomised roboticon should be added to your inventory	yes
When at the roboticon buying stage of the game. Use the spinbox to change the number of roboticons 6 you wish to purchase to 2. Then click the purchase button	Your money should decrease by twice the amount as in the previous test 2 uncustomised roboticons should be added to your inventory	yes
Attempting to buy 11 roboticons when you do not have enough money. On your first turn. When at the roboticon buying stage use the spin box to change the number of	A popup message should be deployed telling you that you don't have enough money.	yes
7 roboticons to eleven and click the purchase button Attempting to buy 0 roboticons. At the roboticon buying stage of the game use the spinbox to set	Your inventory should remain unchanged.	yes
8 the number of roboticons you wish to buy to 0 and click the purchase button	Nothing should happen	yes
9 When in the buy roboticons stage of the game let the timer run to 0 (and do nothing else)	The player should enter the auction phase where they	yes
When in the placing roboticons stage of the game let the timer run to 0 (and do nothing else) When in the buy roboticons stage and you know that the market has at least 4 ore (you can confirm this in the buying and selling resources to and from the market stage). Set the spinbox to largest value you can then click the produce roboticon button and then 11 try to set the spinbox to largest value you can again	You should be taken to the resource generation stage when the timer runs out After the market has produced a roboticon you should be able to set the value to a value that is one larger than before	yes
When in the buying/customising roboticons stage try to customise a roboticon for energy when you don't have enough money i.e. start a new game, acquire a plot then buy 9 roboticons 12 then select the energy customisation option and click the buy roboticon customisation button.	A popup message should open to tell you that you don't have enough money. Your inventory should not chanage	yes
When in the buying/customising roboticons stage try to customise a roboticon for ore when you don't have enough money i.e: start a new game, acquire a plot then buy 9 roboticons 13 then select the ore customisation option and click the buy roboticon customisation button.	A popup message should open to tell you that you don't have enough money. Your inventory should not chanage	yes
When in the buying/customising roboticons stage try to customise a roboticon for food when you don't have enough money i.e: start a new game, acquire a plot then buy 9 roboticons then select the foodcustomisation option and click the buy roboticon customisation button.	A popup message should open to tell you that you don't have enough money. Your inventory should not chanage	yes
When in the customising roboticons stage try to customise a roboticon for energy production when you dont have any uncustomised roboticons. Start a new game acquire a plot, go to the purchasing roboticons stage buy no roboticons, select energy customisation and click the buy roboticon customisation button	Your inventory should not chanage	yes
When in the customising roboticons stage try to customise a roboticon for ore production when you dont have any uncustomised roboticons. Start a new game acquire a plot, go to the purchasing roboticons stage buy no roboticons, select ore customisation and click the buy roboticon customisation button When in the customising roboticons stage try to customise a roboticon for food production when	Your inventory should not chanage	yes
you don't have any uncustomised roboticons. Start a new game acquire a plot, go to the purchasing roboticons stage 17 buy no roboticons, select food customisation and click the buy roboticon customisation button	Your inventory should not chanage The the amount of money displayed for the price should be removed from your inventory	yes
When in the purchasing roboticons stage and you have enough money and at least 1 uncustomised roboticon customise a roboticon for ore production	The the amount of money displayed for the price should be removed from your inventory The number of ore roboticons in your inventory should increase by 1 and the number of uncustomised decrease by 1 The the amount of money displayed for the price should be removed from your inventory	yes
When in the purchasing roboticons stage and you have enough money and at least 1 uncustomised roboticon customise a roboticon for energy production	The number of energy roboticons in your inventory should increase by 1 and the number of uncustomised decrease by 1 $$	yes
When in the purchasing roboticons stage and you have enough money and at least 1 uncustomised roboticon customise a roboticon for food production	The the amount of money displayed for the price should be removed from your inventory. The number of energy roboticons in your inventory should increase by 1 and the number of uncustomised decrease by 1.	yes
21 When in the roboticon placing stage click on an unacquired plot	Nothing should happen	yes
When in the roboticon placing stage click on a plot acquired by the other player When in the roboticon placing stage with at least one angree roboticon click on a plot that you	Nothing should happen The relation placing many should open and display the correct number of are energy and food relations in your	yes
When in the roboticon placing stage with at least one energy roboticon click on a plot that you own with no roboticons on it When in the roboticon placing stage with at least one are roboticon click on a plot that you own	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your	yes
When in the roboticon placing stage with at least one ore roboticon click on a plot that you own with no roboticons on it When in the roboticon placing stage with at least one food roboticon click on a plot that you own	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your	yes
when in the roboticon placing stage with at least one food roboticon click on a plot that you own with no roboticons on it When in the roboticon placing stage with no customised roboticons in your inventory click on a plot	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your	yes
when in the roboticon placing stage with no customised roboticons in your inventory click on a plot with no roboticons on it	inventory (all zero in this case) A menu should open that contains the text "This plot already has a roboticon on it" and only one button to	yes
When in the roboticon placing stage click on a plot that you own that already has a roboticon on it When in the roboticon placing stage with at least one energy roboticon click on a plot that you own with	close the menu The menu should close, an energy roboticon should be placed on the plot and the number of energy roboticons	yes
28 no roboticons on it and click the place energy roboticon button When in the roboticon placing stage with at least one ore roboticon click on a plot that you own with no	in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage) The menu should close, an ore roboticon should be placed on the plot and the number of ore roboticons	yes
29 roboticons on it and click the place ore roboticon button When in the roboticon placing stage with at least one food roboticon click on a plot that you own with no	in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage) The menu should close, a food roboticon should be placed on the plot and the number of food roboticons	yes
30 roboticons on it and click the place food roboticon button When in the buying and selling resources to and from the market stage use the buy ore spinbox to set	in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage)	yes
31 the amount of ore you want to buy to 0 and click the buy ore button	Nothing should happen	yes

When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy		
and use the buy energy spinbox to set the amount of ore you want to buy from the market to 0 and click the complete transaction button	Nothing should happen	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and	Nothing Should happen	yes
the resource drop down to energy		
and use the spinbox to set the amount of energy you want to buy from the market to 0		
33 and click the complete transaction button	Nothing should happen	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and		
the resource drop down to ore		
and use the spinbox to set the amount of ore you want to buy from the market to 0	N. 01 - 1 - 10	
34 and click the complete transaction button When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and	Nothing should happen	yes
the resource drop down to food		
and use the spinbox to set the amount of food you want to buy from the market to 0		
35 and click the complete transaction button	Nothing should happen	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and		,
the resource drop down to energy		
36 and use the spinbox to set the amount of energy you want to buy from the market to to the largest value you can	This value should be the same as the quantity of energy the market has in stock	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and		
the resource drop down to ore	m: 1 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
and use the spinbox to set the amount of ore you want to buy from the market to to the largest value you can	This value should be the same as the quantity of ore the market has in stock	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to buy and the resource drop down to food		
and use the spinbox to set the amount of food you want to buy from the market to to the largest value you can	This value should be the same as the quantity of food the market has in stock	yes
When in the buying and selling resources to and from the market tage set the buy/sell drop down menu to sell and	and an are the quantity of food the final field final stock	,
the resource drop down to energy and the player drop down to player 1		
39 and use the spinbox to set the amount of energy you want to sell to the market to to the largest value you can	This value should be the same as the quantity of energy player 1 has in their inventory	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to sell and		
the resource drop down to ore and the player drop down to player 1		
and use the spinbox to set the amount of ore you want to sell to the market to to the largest value you can	This value should be the same as the quantity of ore player 1 has in their inventory	yes
When in the buying and selling resources to and from the market stage set the buy/sell drop down menu to sell and		
the resource drop down to food and the player drop down to player 1	This calculates the self-the same as the constitution of find allowed the six the individual self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the constitution of find all the self-the same as the same as the self-the same as the self-the same as the self-the	
41 and use the spinbox to set the amount of food you want to sell to the market to to the largest value you can When in the buying and selling resources stage and you have more than one energy	This value should be the same as the quantity of food player 1 has in their inventory	yes
set the buy/sell drop down menu to sell and	All the energy from your inventory should be removed and the number of units of energy of energy you	
the resource drop down to energy and the player drop down to player 1	sold multiplied by the price displayed should be added to the money in your inventory.	
42 and use the spinbox to set the amount of energy you want to the largest value you can		yes
When in the buying and selling resources stage and you have more than one energy	The value in the spinion should be reduced to 0	y es
set the buy/sell drop down menu to sell and		
the resource drop down to energy and the player drop down to player 1	1 energy should be removed from your inventory and the price displayed for energy should be added to the money	
43 and use the spinbox to set the amount of energy you want to 1	in your inventory	yes
When in the buying and selling resources stage and you have more than one ore		
set the buy/sell drop down menu to sell and	All the ore from your inventory should be removed and the number of units of ore of ore you	
the resource drop down to ore and the player drop down to player 1	sold multiplied by the price displayed should be added to the money in your inventory	v.o.
44 and use the spinbox to set the amount of ore you want to the largest value you can When in the buying and selling resources stage and you have more than one ore	The value in the spinbox should be reduced to 0	yes
when in the duying and seining resources stage and you have more than one ore set the buy/sell drop down menu to sell and		
the resource drop down to ore and the player drop down to player 1	1 ore should be removed from your inventory and the price displayed for ore should be added to the money	
45 and use the spinbox to set the amount of ore you want to 1		yes
When in the buying and selling resources stage and you have more than one food		,
set the buy/sell drop down menu to sell and	All the food from your inventory should be removed and the number of units of food of food you	
the resource drop down to food and the player drop down to player 1	sold multiplied by the price displayed should be added to the money in your inventory	
and use the spinbox to set the amount of food you want to the largest value you can	The value in the spinbox should be reduced to 0	yes
When in the buying and selling resources stage and you have more than one food		
set the buy/sell drop down menu to sell and		
the resource drop down to food and the player drop down to player 1	1 food should be removed from your inventory and the price displayed for food should be added to the money in your inventory	VAC
47 and use the spinbox to set the amount of food you want to 1 When in the buying and selling resources stage and player 2 has enough money	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	yes
set the buy/sell drop down menu to buy and	displayed price for energy and the energy should be added to player 2s inventory and removed from the markets inventory	
the resource drop down to energy and the player drop down to player 2	The spinbox should have	
48 and use the spinbox to set the amount of energy you want to one less than the market has in stock		yes
When in the buying and selling resources stage and player 2 has enough money	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	
set the buy/sell drop down menu to buy and	displayed price for ore and the ore should be added to player 2s inventory and removed from the markets inventory.	
the resource drop down to ore and the player drop down to player 2	The spinbox should have	
49 and use the spinbox to set the amount of ore you want to one less than the market has in stock		yes
When in the buying and selling resources stage and player 2 has enough money	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	
set the buy/sell drop down menu to buy and	displayed price for food and the food should be added to player 2s inventory and removed from the markets inventory.	
the resource drop down to food and the player drop down to player 2 50 and use the spinbox to set the amount of food you want to one less than the market has in stock	The spinbox should have its value reduced to 1	yes
When in the buying and selling resources stage and player 2 has enough money	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	yes
when in the tuying and seining resources stage and player 2 has enough money set the buy/sell drop down menu to buy and	displayed price for energy and the energy should be added to player 2s inventory and removed from the markets inventory	
the resource drop down to energy and the player drop down to player 2	The spinbox should have	
51 and use the spinbox to one more than half its maximum value		yes

		e amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	
		played price for ore and the ore should be added to player 2s inventory and removed from the markets inventory.	
		e spinbox should have value reduced by 1	yes
		e amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the	yes
		played price for food and the food should be added to player 2s inventory and removed from the markets inventory.	
		e spinbox should have	
		value reduced by 1	yes
54	Keep playing the game until all plots have been acquired and both players had their turn You	u should be taken to the game over screen	yes
		scores should be displayed correctly (all money in the players inventory plus by the price	
		t the market would pay for all the energy, ore and food in their inventory)	
		yer 1's score should be more than all other player's scores	
55		d there should be a message displayed stating that player 1 won	yes
		th scores should be displayed correctly (all money in the players inventory plus by the price	
		t the market would pay for all the energy, ore and food in their inventory) yer 1's score should be less than all other player's score	
56		I there should be a message displayed stating that player 2 won	yes
		th scores should be displayed correctly (all money in the players inventory plus by the price	765
		t the market would pay for all the energy, ore and food in their inventory)	
	play	yer 1's score should be the same as player 2's	
57	Play the game until it ends and you draw with the other player and	l there should be a message displayed stating that it was a draw	yes
	When in the resource market stage set the bet spinbox to a value larger than the amount of money in player		
		nessage should be displayed stating that player 1 does not have enough money to place that bet	yes
		nessage should be displayed stating that you won the bet and the amount of money you chose to bet	
		ould be added to your inventory	yes
		nessage should be displayed stating that you lose the bet and the amount of money you chose to bet	
		ould be taken from your inventory	yes
		u should be taken to the roboticon purchasing phase	yes
62		u should be taken to the roboticon placing phase	yes
62		a should be taken to the resource generation phase and resources should be added to your inventory	
63	1 01 17	a should then be taken to the land purchasing phase for player 2	yes
6.1		u should be taken to the resource generation phase and resources should be added to your inventory u should then be taken to the resource market phase	yes
	1 01 1 3		
65		u should be taken to the land purchasing phase for player 1 ten in the resource market stage and all plots have been acquired click the next button you should be taken to the	yes
66		ne over screen	yes
	When in the resource market stage set the player to player sales selling player drop down to player 1	ne over sereen	yes
	and the buying player drop down to player 1 and fill in any other values for any of the other fields then click		
67	the sell button Noti	thing should happen	yes
	When in the resource market stage and player 2 has enough money and player 1 has 4 energy		
	set the player to player sales selling player drop down to player 1		
	and the buying player drop down to player 2, select energy from the resource drop down and set the quantity to 4	money should be added to player 1's inventory and 4 energy removed	
68	and the price to 5 then click sell When in the resource market stage and player 3 has enough money and player 1 has 3 ore	money should be removed from player 2's inventory and 4 energy added	yes
	set the player to player sales selling player drop down to player 1		
		noney should be added to player 1's inventory and 3 ore removed	
		noney should be removed from player 3's inventory and 3 ore added	yes
	When in the resource market stage and player 2 has enough money and player 4 has 6 food		
	set the player to player sales selling player drop down to player 4		
	and the buying player drop down to player 2, select energy from the resource drop down and set the quantity to 4 42 n	money should be added to player 4's inventory and 6 food removed	
		money should be removed from player 2's inventory and 6 food added	yes
	When in the resource market stage and player 1 has enough money and player 2 has 4 energy		
	set the player to player sales selling player drop down to player 2 and the buying player drop down to player 1, select energy from the resource drop down and set the quantity to 4	manay abauld be added to player 2's inventory and 4 aparay re	
		money should be added to player 2's inventory and 4 energy removed money should be removed from player 1's inventory and 4 energy added	yes
	When in the resource market stage and player 1 does not have enough money and player 2 has 4 energy	,	J
	set the player to player sales selling player drop down to player 2		
	and the buying player drop down to player 1, select energy from the resource drop down and set the quantity to 4	op message should open stating that player 1 does not have enough money and the values in	
	•	inventories should not change	yes
73	When a roboticon with food customisation is placed upon a city tile and the game enters the generation phase The	e player should gain 1 food	yes
74	When a roboticon with ore customisation is placed upon a city tile and the game enters the generation phase The	e player should gain 2 ore	yes
		e player should gain 3 energy	yes
		e player should gain 1 food	yes
		e player should gain 2 ore	yes
		e player should gain 3 energy	
			yes
		e player should gain 2 food	yes
		e player should gain 2 ore	yes
		e player should gain 2 energy	yes
82	When a roboticon with food customisation is placed upon a hill tile and the game enters the generation phase The	e player should gain 1 food	yes

83 When a roboticon with ore customisation is placed upon a hill tile and the game enters the generation phase	The player should gain 3 ore	yes
84 When a roboticon with energy customisation is placed upon a hill tile and the game enters the generation phase	The player should gain 2 energy	yes
85 When a roboticon with food customisation is placed upon a landmark tile and the game enters the generation phase	The player should gain 2 food	yes
86 When a roboticon with ore customisation is placed upon a landmark tile and the game enters the generation phase	The player should gain 2 ore	yes
87 When a roboticon with energy customisation is placed upon a landmark tile and the game enters the generation phase	The player should gain 2 energy	yes
88 When a roboticon with food customisation is placed upon a road tile and the game enters the generation phase	The player should gain 2 food	yes
89 When a roboticon with ore customisation is placed upon a road tile and the game enters the generation phase	The player should gain 2 ore	yes
90 When a roboticon with energy customisation is placed upon a road tile and the game enters the generation phase	The player should gain 2 energy	yes
91 When in the auction phase player 1 tries to sell resources to player 1	Nothing should happen	yes
92 When in the auction phase player 2 tries to sell resources to player 2	Nothing should happen	yes
93 When in the auction phase player 3 tries to sell resources to player 3	Nothing should happen	yes
94 When in the auction phase player 4 tries to sell resources to player 4	Nothing should happen	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 1.		
95 Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 1's inventory	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 1. 96 Don't click the chancellor, let him fly off the screen.	The game should advance to the next stage and the player's inventory should remain unchanged	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 2.	Temain unchanged	yes
97 Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 2's inventory	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 2.	The game should advance to the next stage and the player's inventory should	
98 Don't click the chancellor, let him fly off the screen.	remain unchanged	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 3. 99 Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 3's inventory	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 3.	The game should advance to the next stage and 30 money should be added to player 3 s inventory The game should advance to the next stage and the player's inventory should	yes
100 Don't click the chancellor, let him fly off the screen.	remain unchanged	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 4.		
101 Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 4's inventory	yes
Keep playing the game until the capture the chancellor phase occurs whilst playing as player 4. 102 Don't click the chancellor, let him fly off the screen.	The game should advance to the next stage and the player's inventory should remain unchanged	yes
	Each phase (apart from the shared market phase and the capture the chancellor phase	
	that only happens some of the time) should be repeated once for each of the two players. Also whenver there is a drop down menu that allows you to choose amongst several players	
103 Start a new game, choose 2 players using the drop down menu on the main menu screen.	(on the shared market phase) only two players should be selectable.	ves
Too out the most grant of the party of the p	Each phase (apart from the shared market phase and the capture the chancellor phase	,
	that only happens some of the time) should be repeated once for each of the three players.	
104 Contraction to the 2 decrease that the description of the contraction of the contract	Also whenver there is a drop down menu that allows you to choose amongst several players	
104 Start a new game, choose 3 players using the drop down menu on the main menu screen.	(on the shared market phase) three players should be selectable. Each phase (apart from the shared market phase and the capture the chancellor phase	yes
	that only happens some of the time) should be repeated once for each of the four players.	
	Also whenver there is a drop down menu that allows you to choose amongst several players	
105 Start a new game, choose two players using the drop down menu on the main menu screen.	(on the shared market phase) four players should be selectable.	yes
106 Play 15 games in a row (or stop once three random events have occured)	At least 3 different random events should occur, and the modifications to the current players inventory that are displayed on screen should take place	yes
Keep playing until at least 16 plots of land have been acquired and had roboticons placed on them	that are displayed on screen should take place	y 00
	It must be possible for at least 16 plots of land to be acquired and to have roboticons placed on them	the state of the s