Test number	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
3	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
4	Acquiring a plot that has already been acquired by the other player. When allowed to acquire plots. 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
5	Buying 1 roboticon when you have enough money. On your 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	Your money should decrease an uncustomised roboticon should be added to your inventory	yes
6	Buying 2 roboticons 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 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
7	Attempting to buy 11 roboticons when you do not have enough money. On your turn. When at the roboticon buying stage use the spin box to change the number of roboticons to eleven and click the purchase button	A popup message should be deployed telling you that you don't have enough money. Your inventory should remain unchanged.	yes
8	Attempting to buy 0 roboticons. At the roboticon buying stage of the game use the spinbox to set 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
10	When in the placing roboticons stage of the game let the timer run to 0 (and do nothing else)	You should be taken to the resource generation stage when the timer runs out	yes
11	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 try to set the spinbox to largest value you can again	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
12	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 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 change	yes
13	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 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 change	yes
14	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 change	yes
15	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 changage	yes
16	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	Your inventory should not change	yes
17	When in the customising roboticons stage try to customise a roboticon for food 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 food customisation and click the buy roboticon customisation button	Your inventory should not change	yes
18	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	yes
19	When in the purchasing roboticons stage and you have enough money and at least 1 uncustomised roboticon customise a roboticon for energy 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
20	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
22	When in the roboticon placing stage click on a plot acquired by the other player	Nothing should happen	yes
23	When in the roboticon placing stage with at least one energy roboticon click on a plot that you own with no roboticons on it	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory	yes
24	When in the roboticon placing stage with at least one ore roboticon click on a plot that you own with no roboticons on it	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory	yes
25	When in the roboticon placing stage with at least one food roboticon click on a plot that you own with no roboticons on it	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory	yes
26	When in the roboticon placing stage with no customised roboticons in your inventory click on a plot with no roboticons on it	The roboticon placing menu should open and display the correct number of ore, energy and food roboticons in your inventory (all zero in this case)	yes
27	When in the roboticon placing stage click on a plot that you own that already has a roboticon on it	A menu should open that contains the text "This plot already has a roboticon on it" and only one button to close the menu	yes
28	When in the roboticon placing stage with at least one energy roboticon click on a plot that you own with no roboticons on it and click the place energy roboticon button	The menu should close, an energy roboticon should be placed on the plot and the number of energy roboticons in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage)	yes
29	When in the roboticon placing stage with at least one ore roboticon click on a plot that you own with no roboticons on it and click the place ore roboticon button	The menu should close, an ore roboticon should be placed on the plot and the number of ore roboticons in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage)	yes
30	When in the roboticon placing stage with at least one food roboticon click on a plot that you own with no roboticons on it and click the place food roboticon button	The menu should close, a food roboticon should be placed on the plot and the number of food roboticons in your inventory should be reduced by 1 (this can be checked at the roboticon purchasing stage)	yes
31	When in the buying and selling resources to and from the market stage use the buy ore spinbox to set the amount of ore you want to buy to 0 and click the buy ore button	Nothing should happen	yes
32	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
33	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 and use the spinbox to set the amount of energy you want to buy from the market to 0 and click the complete transaction button	Nothing should happen	yes
34	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 and click the complete transaction button	Nothing should happen	yes
35	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 0 and click the complete transaction button	Nothing should happen	yes
36	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 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
37	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 to the largest value you can	This value should be the same as the quantity of ore the market has in stock	yes
38	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
39	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 energy and the player drop down to player 1 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
40	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
41	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 and use the spinbox to set the amount of food you want to sell to the market to to the largest value you can	This value should be the same as the quantity of food player 1 has in their inventory	yes
42	When in the buying and selling resources stage and you have more than one energy set the buy/sell drop down menu to sell and the resource drop down to energy and the player drop down to player 1 and use the spinbox to set the amount of energy you want to the largest value you can	All the energy from your inventory should be removed and the number of units of energy of energy you sold multiplied by the price displayed should be added to the money in your inventory. The value in the spinbox should be reduced to 0	yes
43	When in the buying and selling resources stage and you have more than one energy set the buy/sell drop down menu to sell and the resource drop down to energy and the player drop down to player 1 and use the spinbox to set the amount of energy you want to 1	1 energy should be removed from your inventory and the price displayed for energy should be added to the money in your inventory	yes
44	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 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 the largest value you can	All the ore from your inventory should be removed and the number of units of ore of ore you sold multiplied by the price displayed should be added to the money in your inventory The value in the spinbox should be reduced to 0	yes
45	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 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 1	1 ore should be removed from your inventory and the price displayed for ore should be added to the money in your inventory	yes
46	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 and use the spinbox to set the amount of food you want to the largest value you can	All the food from your inventory should be removed and the number of units of food of food you sold multiplied by the price displayed should be added to the money in your inventory The value in the spinbox should be reduced to 0	yes
47	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 and use the spinbox to set the amount of food you want to 1	1 food should be removed from your inventory and the price displayed for food should be added to the money in your inventory	yes

#	Action	Expected Result	Pass
48	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to energy and the player drop down to player 2 and use the spinbox to set the amount of energy you want to one less than the market has in stock	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for energy and the energy should be added to player 2s inventory and removed from the markets inventory The spinbox should have its value reduced to 1	yes
49	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to ore and the player drop down to player 2 and use the spinbox to set the amount of ore you want to one less than the market has in stock	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for ore and the ore should be added to player 2s inventory and removed from the markets inventory. The spinbox should have its value reduced to 1	yes
50	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to food and the player drop down to player 2 and use the spinbox to set the amount of food you want to one less than the market has in stock	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for food and the food should be added to player 2s inventory and removed from the markets inventory. The spinbox should have its value reduced to 1	yes
51	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to energy and the player drop down to player 2 and use the spinbox to one more than half its maximum value	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for energy and the energy should be added to player 2s inventory and removed from the markets inventory The spinbox should have its value reduced by 1	yes
52	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to ore and the player drop down to player 2 and use the spinbox to one more than half its maximum value	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for ore and the ore should be added to player 2s inventory and removed from the markets inventory. The spinbox should have its value reduced by 1	yes
53	When in the buying and selling resources stage and player 2 has enough money set the buy/sell drop down menu to buy and the resource drop down to food and the player drop down to player 2 and use the spinbox to one more than half its maximum value	The amount of money in player 2's inventory should be reduced by the chosen quantity multiplied by the displayed price for food and the food should be added to player 2s inventory and removed from the markets inventory. The spinbox should have its value reduced by 1	yes
54	Keep playing the game until all plots have been acquired and both players had their turn	You should be taken to the game over screen	yes
55	Play the game until it ends and player 1 wins	All scores should be displayed correctly (all money in the players inventory plus by the price that the market would pay for all the energy, ore and food in their inventory) player 1's score should be more than all other player's scores and there should be a message displayed stating that player 1 won	yes
56	Play the game until it ends and player 1 loses	Both scores should be displayed correctly (all money in the players inventory plus by the price that the market would pay for all the energy, ore and food in their inventory) player 1's score should be less than all other player's score and there should be a message displayed stating that player 2 won	yes
57	Play the game until it ends and you draw with the other player	Both scores should be displayed correctly (all money in the players inventory plus by the price that the market would pay for all the energy, ore and food in their inventory) player 1's score should be the same as player 2's and there should be a message displayed stating that it was a draw	yes
58	When in the resource market stage set the bet spinbox to a value larger than the amount of money in player 1's inventory and the player drop down menu to player 1 then click the gamble button	A message should be displayed stating that player 1 does not have enough money to place that bet	yes
59	So long as you have enough money keep placing bets of a value greater than 1 and less than or equal to the amount of money in your inventory until you win	A message should be displayed stating that you won the bet and the amount of money you chose to bet should be added to your inventory	yes
60	So long as you have enough money keep placing bets of a value greater than 1 and less than or equal to the amount of money in your inventory until you lose	A message should be displayed stating that you lose the bet and the amount of money you chose to bet should be taken from your inventory	yes
61	When in the buying land phase click the next button	You should be taken to the roboticon purchasing phase	yes
62	When in the roboticon purchasing phase click the next button	You should be taken to the roboticon placing phase	yes
63	When in the roboticon placing phase as player 1 click the next button	You should be taken to the resource generation phase and resources should be added to your inventory you should then be taken to the land purchasing phase for player 2	yes
64	When in the roboticon placing phase as player 2 click the next button	You should be taken to the resource generation phase and resources should be added to your inventory you should then be taken to the resource market phase	yes
65	When in the resource market stage and not all plots have been acquired click the next button	You should be taken to the land purchasing phase for player 1	yes
66	When in the resource market stage and all plots have been acquired click the next button	When in the resource market stage and all plots have been acquired click the next button you should be taken to the game over screen	yes
67	When in the resource market stage set the player to player sales selling player drop down to player 1 and the buying player drop down to player 1 and fill in any other values for any of the other fields then click the sell button	Nothing should happen	yes
68	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 and the price to 5 then click sell	20 money should be added to player 1's inventory and 4 energy removed 20 money should be removed from player 2's inventory and 4 energy added	yes
69	When in the resource market stage and player 3 has enough money and player 1 has 3 ore set the player to player sales selling player drop down to player 1 and the buying player drop down to player 3, select energy from the resource drop down and set the quantity to 4 and the price to 3 then click sell	6 money should be added to player 1's inventory and 3 ore removed 6 money should be removed from player 3's inventory and 3 ore added	yes
70	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 and the price to 7 then click sell	42 money should be added to player 4's inventory and 6 food removed 42 money should be removed from player 2's inventory and 6 food added	yes
71	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 and the price to 5 then click sell	20 money should be added to player 2's inventory and 4 energy removed 20 money should be removed from player 1's inventory and 4 energy added	yes
72	When in the resource market stage and player 1 does not have 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 and the price to 5 then click sell	A pop message should open stating that player 1 does not have enough money and the values in all 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 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 player should gain 2 ore	yes
75	When a roboticon with energy customisation is placed upon a city tile and the game enters the generation phase	The player should gain 3 energy	yes
76	When a roboticon with food customisation is placed upon a forest tile and the game enters the generation phase	The player should gain 1 food	yes
77	When a roboticon with ore customisation is placed upon a forest tile and the game enters the generation phase	The player should gain 2 ore	yes
78	When a roboticon with energy customisation is placed upon a forest tile and the game enters the generation phase	The player should gain 3 energy	yes
79	When a roboticon with food customisation is placed upon a water tile and the game enters the generation phase	The player should gain 2 food	yes
80	When a roboticon with ore customisation is placed upon a water tile and the game enters the generation phase	The player should gain 2 ore	yes
81	When a roboticon with energy customisation is placed upon a water tile and the game enters the generation phase	The 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 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
95	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 1. Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 1's inventory	yes
96	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 1. 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
97	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 2. Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 2's inventory	yes
98	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 2. 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
99	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 3. Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 3's inventory	yes
100	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 3. 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
101	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 4. Then click the chancellor.	The game should advance to the next stage and 50 money should be added to player 4's inventory	yes
102	Keep playing the game until the capture the chancellor phase occurs whilst playing as player 4. 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
103	Start a new game, choose 2 players using the drop down menu on the main menu screen.	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 (on the shared market phase) only two players should be selectable.	yes
104	Start a new game, choose 3 players using the drop down menu on the main menu screen.	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. Also whenver there is a drop down menu that allows you to choose amongst several players (on the shared market phase) three players should be selectable.	yes

| 105 | Start a new game, choose two players using the drop down menu on the main menu screen. | 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 four players. Also whenver there is a drop down menu that allows you to choose amongst several players (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 |