

Test Case ID		TC_01	Test Case Description		Test downloading game				
Created By		Sovathana	Reviewed By		Version				
QA Tester's Log									
Tester's Name		Sadiq Sarwar	Date Tested		04/30/2019		Test Case (Pass/Fail/Not Executed)		Pass
S #	Prerequisites:				S #	Test Data Requirement			
1	Player is connected to internet				1	Reached Designated Download Link			
2	System requirement is met				2				
3					3				
4					4				
Test Conditions									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	User navigates to game repository		option to download the game is shown						
2	User clicks on download		download start						
3	User runs the game on laptop		game is running						

Test Case ID		TC_02	Test Case Description		Testing view user manual						
Created By		Sovathana	Reviewed By		Version			1			
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		04/30/2019		Test Case (Pass/Fail/Not Executed)		Pass		
S #	Prerequisites:				S #	Test Data Requirement					
1	Player is connected to internet				1						
2	Game has been launched				2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Player clicks on 'Help'		User Manual is opened		User Manual opens through Electron PDF			Pass			
2	Player clicks close manual		Maunual is closed		User Manual closes			Pass			

Test Case ID		TC_03	Test Case Description		Test creating a game function					
Created By		Sovathana	Reviewed By		Version			1.0		
QA Tester's Log										
Tester's Name		Sadiq	Date Tested		04/30/2019			Test Case (Pass/Fail/Not Executed)		Pass
S #	Prerequisites:				S #	Test Data Requirement				
1	Player is connected to internet				1					
2	Game is connected to server				2					
3					3					
4					4					
Test Conditions										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Click on 'Create Game' button		Taken to create game page		Game Page is displayed			Pass		

Test Case ID		TC_04	Test Case Description		Testing enter game name				
Created By		Sovathana	Reviewed By		Version				
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Pass
S #	Prerequisites:				S #	Test Data Requirement			
1	No game is currently in session				1	Game Name = 'Test Game'			
2	A player is hosting the game				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	Host enters the name for the game		New name is saved for the game session		Game name is taken and saved		Pass		

Test Case ID	TC_05	Test Case Description	Enter Game Description					
Created By	Ellen	Reviewed By		Version	1			
<u>QA Tester's Log</u>								
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019		Test Case (Pass/Fail/Not Executed)	Pass		
S #	Prerequisites:		S #	Test Data Requirement				
1	Host has created a new game		1	Game Description = 'Test Game'				
2			2					
3			3					
4			4					
<u>Test Conditions</u>								
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not executed / Suspended			
1	Player enters the description for the game	New description is saved for the game session	Game Description is taken and saved		Passed			

Test Case ID		TC_06	Test Case Description		Set Adjucation Period						
Created By		Ellen	Reviewed By					Version		1	
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019			Test Case (Pass/Fail/Not Executed)		Pass	
S #	Prerequisites:				S #	Test Data Requirement					
1	Host has created a game session				1	Adjudication Period = '15 Minutes'					
2					2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Host enters a period		The period is saved by the session		Adjudication Period is taken and saved			Pass			

Test Case ID	TC_07	Test Case Description	Testing join game as player						
Created By	Sovathana	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Pass				
S #	Prerequisites:		S #	Test Data Requirement					
1	Player is connected to the internet		1	Username = 'player2'					
2	Game is connected to the server		2	Game ID = '12345'					
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Click 'Join Game'	Open to Join Game Page	Joining game page is opened	Pass					
2	Enter username	Username is saved	Username is taken and saved	Pass					
3	Enter host IP address	Host IP Address is saved	Host IP Address is taken and saved	Pass					
4	User clicks submit	Game lobby is opened	Game lobby is opened	Pass					

Test Case ID		TC_08	Test Case Description		Testing join game as spectator					
Created By		Sovathana	Reviewed By		Version			1		
QA Tester's Log										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019			Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement				
1	A game is created				1					
2	The game has not started yet				2					
3	Player is not hosting the game				3					
4	Game room has at least 7 players				4					
Test Conditions										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	User join a game via game ID		User is in the game room		Joining game page is opened			Pass		
2	User click on 'spectater' option		Uses becomes spectator of the game when the game start		Spectator Option is unavailable			Fail		



Test Case ID	TC_09	Test Case Description	Login						
Created By	Ellen	Reviewed By		Version					1

#### QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Application has finished starting up	1	Username = "player1"
2		2	Game ID = "12345"
3		3	
4		4	

#### Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	User clicks host or join game	User is prompted to enter a username	Username is taken and saved	Pass
2	Username is already in use	Prompt to enter a different name	Game accepts same name that is already in use	Fail
3	Username is available	Assign a color and country when user connects to the game. Display game elements and basic rules	User is assigned to a country and color	Pass

Test Case ID		TC_10	Test Case Description		Start Game				
Created By		Ellen	Reviewed By		Version		1		
QA Tester's Log									
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Pass
S #	Prerequisites:				S #	Test Data Requirement			
1	A game is being hosted				1				
2	No one is yet playing				2				
3					3				
4					4				
Test Conditions									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
	Host clicks start game		The host and connected players are assigned countries and the first spring begins		All players are taken to the main game page and are assigned a country.		Pass		

Test Case ID	TC_11	Test Case Description	User Interface / User Display						
Created By	Vishant	Reviewed By		Version					1

#### QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Pass
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S #	Prerequisites:	S #	Test Data Requirement
1	User has generated a player name	1	Username = "player1"
2	User has successfully joined a game	2	Game ID = "12345"
3		3	
4		4	

#### Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Confirm choice to join a game	User should have an interface displaying the map, legend, and available actions	Username that were saved are displayed	Pass

Test Case ID		TC_12	Test Case Description		Test assign powers						
Created By		Sovathana	Reviewed By					Version			
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested			05/02/2019		Test Case (Pass/Fail/Not Executed)		Pass	
S #	Prerequisites:					S #	Test Data Requirement				
1	Game is started					1					
2	All players are in the game					2					
3						3					
4						4					
<u>Test Conditions</u>											
Step #	Step Details		Expected Results			Actual Results			Pass / Fail / Not executed / Suspended		
1	Game start		Players are in the game			All players are taken to the game page			Pass		
2	System randomly assign each player a power		A power is assigned to each player			Each player is assigned to a power			Pass		

Test Case ID	TC_013	Test Case Description	Change to Spring season						
Created By	Ellen	Reviewed By		Version					1
<u>QA Tester's Log</u>									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Winter Season is ended.		1						
2	Gain Troops phase is complete in Winter		2						
3	All players selected end turn		3						
4			4						
<u>Test Conditions</u>									
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not executed / Suspended				
1	Choose unit to build	New units are built	No options are presented for unit building		Fail				
2	Retreat or disband unit	units are retreated or disbanded	Units do not retreat/disband		Fail				
3	At least one player doesn't select end turn	The turn continues and season doesn't change until otherwise	Game continues until all players end their turn		Pass				
4	All players select end turn	Changes to Spring	No season change is displayed		Fail				

Test Case ID		TC_014	Test Case Description		Change to Fall season					
Created By		Ellen	Reviewed By			Version			1	
QA Tester's Log										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	Spring Season is ended.				1					
2	All orders in spring are resolved				2					
3	All players selected end turn				3					
					4					
Test Conditions										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Resolves orders		All orders are resolved		No resolve order options are presented			Fail		
2	At least one player doesn't select end turn		The turn continues and season doesn't change until otherwise		Game continues until all players end their turn			Pass		
3	All players select end turn		Changes to Fall		No season change is displayed			Pass		

Test Case ID	TC_015	Test Case Description	Change to Winter season						
Created By	Ellen	Reviewed By		Version					1
<u>QA Tester's Log</u>									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Fall season is ended.		1						
2	All orders in Fall are resolved		2						
3	All players selected end turn		3						
			4						
<u>Test Conditions</u>									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Resolves orders	All orders are resolved	No option to resolve orders are displayed	Fail					
2	At least one player doesn't select end turn	The turn continues and season doesn't change until otherwise	Game continues until all players end their turn	Pass					
3	All players select end turn	Changes to Winter	No season change is displayed	Fail					

Test Case ID		TC_16	Test Case Description		Testing advance year				
Created By		Sovathana	Reviewed By		Version				
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	Players finished building or disbanding units				1				
2	The Winter season has ended				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	Players disband/build units		units are disbanded/built		No option to resolve orders are displayed		Fail		
2	Players submit their orders		Winter is ended		No season change is displayed		Fail		
3	Game moved to new season		A year is advanced		No year change is displayed		Fail		



Test Case ID		TC_17	Test Case Description		Testing start chat with a single player function				
Created By		Sovathana	Reviewed By		Version		1		
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	Game is in session				1				
2	More than one users are in the game				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	Player click on chat button		list of players is shown		No players are shown in chat list		Fail		
2	click on a player in the list		chat window to the player open		Nothing can be selected		Fail		

Test Case ID	TC_18	Test Case Description	View Chat with a Single Other Player					
Created By	Ellen	Reviewed By		Version				1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	User has received a private message from someone	1	
2		2	
3		3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	User clicks chat option	Shows public chat and user list	No players are shown in chat list	Fail
2	User clicks on a user	Shows individual chat between the two players	No chat messages can be sent or displayed	Fail

Test Case ID	TC_19	Test Case Description	Testing send chat with a single player function						
Created By	Sovathana	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Game is in session		1	Message = "Hello"					
2	User have already opened the window chat		2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	player click on chat button	player can type in message	typed message is taken and saved	Pass					
2	click on send chat	chat is sent to the other player	message does not send and produced error	Fail					

Test Case ID		TC_20	Test Case Description		Spectator Views Chat					
Created By		Ellen	Reviewed By				Version		1	
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	User is a spectator in a game				1					
2					2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Spectator clicks the chat option		Public chat is displayed		Spectator is unable to join game			Fail		

Test Case ID	TC_21	Test Case Description	Testing view chat with all players function						
Created By	Sovathana	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Pass				
S #	Prerequisites:		S #	Test Data Requirement					
1	Game is in session		1						
2	User is in the game		2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	player click on chat button	different options are shown	Chat box opened	Pass					
2	player click on general chat pane	general chatroom is displayed	General chat box is displayed	Pass					

Test Case ID	TC_22	Test Case Description	Testing send chat to all players function						
Created By	Sovathana	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Game is in session		1	Message = "Hello"					
2	User is in the game		2						
3	User is in the general chatroom		3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	player clicks on chat button	player can type in message	Entered message is taken and saved	Pass					
2	click on send chat	chat is sent to the all players	Message is not sent and an error is produced	Fail					

Test Case ID		TC_23	Test Case Description		Test reorder the move					
Created By		Sovathana	Reviewed By			Version				
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	Player order a unit to move or hold				1					
2	Not all players have submitted the orders				2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Player clicks on a province to order		the unit is order to move or hold		Command is taken and saved			Pass		
2	Player clicks on another province		the previous order is cancelled		Old command is not overwritten			Fail		
3	Player makes new order		the order is given to the unit		New command it not implemented			Fail		

Test Case ID	TC_24	Test Case Description	Move unit						
Created By	Ellen	Reviewed By	Jason Nguyen	Version	1				

**QA Tester's Log**

Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Player has an army or fleet available	1	
2		2	
3		3	
4		4	

**Test Conditions**

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	User selects area the unit is in and then clicks move button	The unit is selected	User specified province is selected	Pass
2	User selects an adjacent area to move to	The area is selected	User specified target province is selected	Pass
3	The movement is valid	The unit moves at the turn end	Move order is validated	Pass
4	The area is already occupied	The unit holds	Occupied province contains 2 powers	Fail
5	Army is ordered into water	The army holds	Army is moved into water	Fail
6	Fleet is ordered inland	The fleet holds	Fleet is moved inland	Fail



Test Case ID		TC_25	Test Case Description		Multiple Units Occupy Same Province					
Created By		Ellen	Reviewed By			Version				
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Pass	
S #	Prerequisites:				S #	Test Data Requirement				
1	Three or more units ordered into the same province				1					
2					2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	All units and defender(if any) have equal strength		No unit moves		No units are allowed to move			Pass		
2	One unit has greater strength than all others		The unit enters the province		Unit with greater strength wins			Pass		
3	Some units have greater strength than orders but tie other(s)		No unit moves		No units are allowed to move			Pass		

Test Case ID		TC_26	Test Case Description		Exchange Places via Convoy						
Created By		Ellen	Reviewed By			Version					
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Pass		
S #	Prerequisites:				S #	Test Data Requirement					
1	Armies are ordered into each others' provinces				1						
2	Both movements are via convoy				2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Prereqs are met		The units swap places		Units exchange places			Pass			
2	Both owned by opposing countries		Swap works anyway		Units exchange places			Pass			

Test Case ID		TC_27	Test Case Description		Testing dislodged unit causes standoff						
Created By		Sovathana	Reviewed By					Version			
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019			Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement					
1	A unit is dislodged				1						
2					2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	a unit dislodges another unit		attacked unit is dislodged		Units occupy the same province			Fail			
2	turn ended		move to next season		No season is displayed			Fail			
3	two or more units with equal strength move to same province as dislodged unit		None of the units can move		Units occupy the same province			Fail			

Test Case ID		TC_28	Test Case Description		Unit Rotation				
Created By		Ellen	Reviewed By		Version				
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	Players order units to move into each other's areas				1				
2	There are no direct swaps				2				
3	No attacks occur				3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	There is a swap or attack		None of the involved units move		Units still swap		Fail		

Test Case ID	TC_29	Test Case Description	Testing attacking own unit						
Created By	Ellen	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Player is in-game		1						
2	Player attempts to make attack order		2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Player selects own unit	the unit is ready to take order	User selected province is saved	Pass					
2	Player submit a move order that attacks its own unit	Player is notified of illegal move after orders are resolved	Specified unit is moved to target unit	Fail					
3	Unit attacks it's own convoy	Convoy continues	Specified unit is moved to target unit	Fail					
4	Unit attacks it's own support	Support isn't cut	Specified unit is moved to target unit	Fail					

Test Case ID	TC_30	Test Case Description	User makes a move order for army or fleet into a non-adjacent province						
Created By	Ellen	Reviewed By		Version					1
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Player owns a unit to order		1						
2			2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Unit moved to non-adjacent province	Unit holds instead	Unit is moved to non-adjacent province	Fail					
2	Unit is convoyed to non-adjacent province	If valid, unit attempts to move via convoy	Unit is moved to non-adjacent province	Fail					

Test Case ID	TC_31	Test Case Description	User makes a move order for army into water province						
Created By	Ellen	Reviewed By		Version					1
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/02/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Player owns an army unit		1						
2			2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Army unit is ordered into water province	Unit holds instead	Unit is moved into water province	Fail					
2	Army unit is convoyed into water province	Unit holds instead	Unit is moved into water province	Fail					

Test Case ID		TC_32	Test Case Description		User makes a move order for fleet into an inland province					
Created By		Ellen	Reviewed By				Version		1	
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/02/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	Player owns a fleet to order				1					
2					2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Fleet moves into inland province		Unit holds instead		Unit is moved to inland province			Fail		
2	Fleet moves into coastland province		Fleet is allowed to move to it		Unit is allowed to move into coastland province			Pass		



Test Case ID		TC_33	Test Case Description		Testing move to occupied province					
Created By		Sovathana	Reviewed By			Version			1	
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	User has an army or fleet				1					
2	It is Spring or Fall season				2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	User click on a unit		a unit is ready to take order		Used specified unit is selected			Pass		
2	User order the unit to occupied province		The order is submitted		Order is taken and saved			Pass		
3	Unit in occupied province has bigger support		The order failed		Order is accepted			Fail		
4	Unit in occupied province has weaker support		The order succeeded		Order is accepted			Fail		

Test Case ID	TC_34	Test Case Description	Support an Attack						
Created By	Ellen	Reviewed By		Version					1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Supporting unit adjacent to attacked province	1	
2		2	
3		3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Unit supports another unit	Supported unit gains strength for its attack	Strength is calculated	Pass
2	Supporting unit is attacked by a unit other than the attacked unit	Support is cut, strength bonus taken away	Support is still added and is not cut	Fail

Test Case ID		TC_35	Test Case Description		Test compare strength				
Created By		Sovathana	Reviewed By		Version				
QA Tester's Log									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	A unit attack another unit of equal strength and support				1				
2	the order is a legal move				2				
3					3				
4					4				
Test Conditions									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	A unit is order to attack another unit of equal strength and support		the order is made		Order is made		Pass		
2	Player submitted the order		the order is submitted		Order is taken and saved		Pass		
3	Both sides have equal strength		the attack failed		Attack strengths are not compared		Fail		
4	One side has greater strength		the greater strength win		Attack strengths are not compared		Fail		

Test Case ID		TC_36	Test Case Description		Seize Supply Center						
Created By		Ellen	Reviewed By				Version				
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail		
S #	Prerequisites:				S #	Test Data Requirement					
1	Unit holds on an unowned or foreign-owned SC				1						
2	Fall season is ending				2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Season changed to Winter		The country seizes the SC, numbe		Season not implemented			Fail			
2	Unit already owns the SC		No change		Season not implemented			Fail			
3	SC s unoccupied but owned		SC remains in ownership of country		Season not implemented			Fail			

Test Case ID		TC_37	Test Case Description		Gain Troops						
Created By		Ellen B.	Reviewed By					Version		1	
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019			Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement					
1	The season is winter				1						
2	The country owns more supply centers than units				2						
3	Country's original supply centers are unoccupied, at least one				3						
4	Fleets must be built on coasts				4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
	Player selects an army unit		Army is created		Gaining Troops not implemented			Fail			
	Player selects a fleet unit		Fleet is created		Gaining Troops not implemented			Fail			
	Player creates more units than they own supply centers		Only units up to the amount of supply centers are created, skipping some of the units		Gaining Troops not implemented			Fail			
	Player selects fleet on inland SC		No unit is created		Gaining Troops not implemented			Fail			

Test Case ID	TC_38	Test Case Description	Resolve Orders						
Created By	Ellen	Reviewed By		Version	1				
QA Tester's Log									
Tester's Name	Saidq Sarwar	Date Tested	05/05/2019		Test Case (Pass/Fail/Not Executed)	Fail			
S #	Prerequisites:			S #	Test Data Requirement				
1	All players have submitted orders, ending the turn			1					
2				2					
3				3					
4				4					
Test Conditions									
Step #	Step Details	Expected Results	Actual Results			Pass / Fail / Not executed / Suspended			
1	An order is invalid	The affected unit(s) holds, the order is highlighted and its failure reason displayed	Orders cannot be resolved			Fail			
2	An order is valid	The order is carried out, map updated	Orders cannot be resolved			Fail			
3	An attack order is successful	Attacked unit is told to retreat or disband	Orders cannot be resolved			Fail			

Test Case ID		TC_39	Test Case Description		Retreat				
Created By		Ellen	Reviewed By		Version		1		
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	A unit is attacked by an enemy with greater power				1				
2					2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details	Expected Results	Actual Results			Pass / Fail / Not executed / Suspended			
1	The unit moves in a valid manner	The retreat takes place before the next turn starts	Retreat not implemented			Fail			
2	Fleet is ordered to an inland area	The player must select a different retreat	Retreat not implemented			Fail			
3	Army is ordered into water	The player must select again	Retreat not implemented			Fail			
4	Unit is convoyed	The player must select again	Retreat not implemented			Fail			
5	There are no available areas to retreat to	The unit is destroyed	Retreat not implemented			Fail			

Test Case ID		TC_40	Test Case Description		Units retreat to the same province						
Created By		Ellen	Reviewed By				Version				
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail		
S #	Prerequisites:				S #	Test Data Requirement					
1	Two units are dislodged				1						
2					2						
3					3						
4					4						
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Units ordered to retreat to same province		Both units disband regardless of ownership or strength		Retreat not implemented			Fail			



Test Case ID		TC_41	Test Case Description		Disband Units					
Created By		Ellen	Reviewed By				Version		1	
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	Unit is attacked by an enemy with greater power				1					
2	There are no adjacent areas to retreat to				2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Unit is attacked and cannot retreat		The unit is removed from the game autmoatically		Disbandment not implemented			Fail		

Test Case ID	TC_42	Test Case Description	Civil Disorder						
Created By	Ellen	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Player leaves the game early		1						
2	OR player doesn't submit orders by end of turn		2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Country enters civil disorder	Session marks country as such	Civil Disorder not implemented	Fail					
2	All units hold in place	No supports or movement	Disbandment not implemented	Fail					
3	Unit is attacked	Disbands instead of dislodges	Disbandment not implemented	Fail					

Test Case ID		TC_43	Test Case Description		Civil Disorder Disbandment					
Created By		Ellen	Reviewed By			Version				
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	Country is in state of CD				1					
2	Country loses supply center, bringing number of units > number of SC's owned				2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Prereqs met		Unit furthest from home country disbands		Disbandment not implemented			Fail		
2	Two or more units are equidistant		Fleet is disbanded first		Disbandment not implemented			Fail		
3	Two or more equidistant units are fleets		Disbanded based on alphabetical order of province names		Disbandment not implemented			Fail		
4	All equidistant units are of one unit type		Disbanded based on alphabetical order of province names		Disbandment not implemented			Fail		

Test Case ID	TC_44	Test Case Description	Hold						
Created By	Ellen	Reviewed By		Version					1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Unit is not ordered or told to take alternate action	1	
2		2	
3		3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	The unit is not ordered	The unit holds in place	Hold is not defaulted	Fail
	The unit is ordered to hold	The unit holds in place	Unit Holds in place	Pass
	Unit is attacked by enemy of greater power	The unit is dislodged and must retreat	Attacker and unit hold same province	Fail
	Unit is attacked by an enemy of lesser or equal power	The unit holds in place	Unit Holds in place	Pass

Test Case ID	TC_45	Test Case Description	Support an Attack					
Created By	Ellen	Reviewed By		Version				1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Supporting unit adjacent to attacked province	1	
2		2	
3		3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Unit supports another unit	Supported unit gains strength for its attack	No Support implemented for attack	Fail
2	Supporting unit is attacked by a unit other than the attacked unit	Support is cut, strength bonus taken away	No Support implemented for attack	Fail
3	Supporting unit attacked by the ori	Support is not cut	No Support implemented for attack	Fail

Test Case ID		TC_46	Test Case Description		Cut Support								
Created By		Ellen	Reviewed By						Version				
<u>QA Tester's Log</u>													
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019			Test Case (Pass/Fail/Not Executed)		Fail			
S #	Prerequisites:						S #	Test Data Requirement					
1	Unit attacks opposing player						1						
2	Attacked unit is giving support						2						
3							3						
4							4						
<u>Test Conditions</u>													
Step #	Step Details		Expected Results		Actual Results				Pass / Fail / Not executed / Suspended				
1	Attack fulfills prerequisites		Attacked unit's support is cut		No Support implemented for attack				Fail				
2	Attacked unit is supporting an attack		Support is never cut		No Support implemented for attack				Fail				
3	Attacker's strength is >= supporter's strength		Supporting unit is dislodged and support cut		No Support implemented for attack				Fail				

Test Case ID	TC_47	Test Case Description	Convoy an army unit using a fleet unit						
Created By	Ellen B.	Reviewed By		Version					1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Army is adjacent to water being crossed	1	
2	Fleet is in the body of water being crossed	2	
3	The body of water is adjacent to the target land	3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
1	Convoy orders are valid	Army is moved at turn end	Convoys not implemented	Fail
2	Fleet isn't adjacent to the army	Fleet holds instead	Convoys not implemented	Fail
3	Army doesn't select the same target land as the fleet	Both units hold	Convoys not implemented	Fail
4	Fleet isn't adjacent to the target	Fleet holds instead	Convoys not implemented	Fail
5	Fleet isn't in the water being crossed	Fleet holds instead	Convoys not implemented	Fail
6	Fleet is convoyed	Convoy fails	Convoys not implemented	Fail

Test Case ID		TC_48	Test Case Description		Testing multiple convoys on same unit						
Created By		Sovathana	Reviewed By					Version			
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019			Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:						S #	Test Data Requirement			
1	different fleets are ordered to support one same unit						1				
2							2				
3							3				
4							4				
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Fleets ordered to convoy a unit		the unit is being convoyed		Convoys not implemented			Fail			
2	no convoy is cutted off		convoyed is succeeded		Convoys not implemented			Fail			
3	some convoys cutted off, at least one convoy route is not attacked		convoyed is succeeded		Convoys not implemented			Fail			
4	all convoys are cutted off		convoyed failed		Convoys not implemented			Fail			



Test Case ID		TC_49	Test Case Description		Illegal move: Unit attempts position trade without convoy				
Created By		Ellen	Reviewed By				Version		
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	Two players give move orders into each other				1				
2	Convoy is not used				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	Each unit has equal strength		Neither unit moves		Both units move		Fail		
2	One unit has greater strength, of d		Weaker unit is dislodged		Both units move		Fail		

Test Case ID		TC_50	Test Case Description		Attacking Convoy						
Created By		Ellen	Reviewed By					Version			
<u>QA Tester's Log</u>											
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019			Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:						S #	Test Data Requirement			
1	An army is being convoyed by a fleet						1				
2	A foreign unit attacks the fleet						2				
3							3				
4							4				
<u>Test Conditions</u>											
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended			
1	Each unit has equal strength		The convoy continues		Convoys not implemented			Fail			
2	The attacker has greater strength		The convoy is cancelled and fleet dislodged		Convoys not implemented			Fail			

Test Case ID		TC_51	Test Case Description		Testing disrupting a Convoy					
Created By		Sophanna	Reviewed By				Version		1	
<u>QA Tester's Log</u>										
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail	
S #	Prerequisites:				S #	Test Data Requirement				
1	A fleet is dislodged				1					
2					2					
3					3					
4					4					
<u>Test Conditions</u>										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	A fleet is ordered to convoy		the unit is being convoyed		Convoys not implemented			Fail		
2	The fleet is dislodged during the turn		The fleet is dislodged		Convoys not implemented			Fail		
3	The convoy order is failed		convoy order is not successful		Convoys not implemented			Fail		

Test Case ID	TC_52	Test Case Description	Supported Attack Cuts a Convoyed Attack						
Created By	Ellen	Reviewed By		Version					1
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	Convoyed unit A attacks unit B's support		1						
2	Supported unit B attacks unit A's convoy		2						
3	Attackers don't attack units of same country		3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	Prereqs are met	Support not cut, unit A holds, A's fleet dislodges	Supported attacks do not add strength	Fail					
2	Prereqs aren't met	All involved units hold	Supported attacks do not add strength	Fail					

Test Case ID		TC_53	Test Case Description		End Turn				
Created By		Ellen	Reviewed By		Version		1		
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	Player selects end turn				1				
2	All orders are resolved				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	All players end their turn with no resolves needed		The turn ends		All turns are completed		Pass		
2	Orders about retreat need to be resolved		The players must retreat or disband before the turn is completely ended		No units can be retreated/disbanded		Fail		
3	Orders are invalid		The units involved in the orders hold as the turn ends		No units can be retreated/disbanded		Fail		

Test Case ID		TC_54	Test Case Description		Test time limit				
Created By		Sovathana	Reviewed By		Version				
QA Tester's Log									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	the current season is either Spring or Fall				1				
2	players did not submit orders				2				
3					3				
4					4				
Test Conditions									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	Move to new season		season is Spring or Fall		No seasons displayed		Fail		
2	Player made order but did not submit		all orders are not submitted		Waiting for all orders to submit		Pass		
3	Time limit is up		Unsubmitted orders are not executed. All units remain in same position		No time limit implemented		Fail		

Test Case ID	TC_55	Test Case Description	Request Draw					
Created By	Ellen	Reviewed By		Version				1

QA Tester's Log

Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail
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S #	Prerequisites:	S #	Test Data Requirement
1	Game is active	1	
2	The turn's actions haven't yet been sent	2	
3		3	
4		4	

Test Conditions

Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended
	Player sets their win condition to draw	The new condition is recorded	No option available to request for draw	Fail
	All players' win conditions are set to draw	The game ends	Game continues	Fail
	At least one player's win condition isn't set to draw	The game continues	No option available to request for draw	Fail

Test Case ID	TC_56	Test Case Description	Win Game						
Created By	Sovathana	Reviewed By		Version					
QA Tester's Log									
Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019	Test Case (Pass/Fail/Not Executed)	Fail				
S #	Prerequisites:		S #	Test Data Requirement					
1	One country controls eighteen supply centers		1						
2	Or All remaining country agreed to end game		2						
3			3						
4			4						
Test Conditions									
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended					
1	A country seize supply centers	supply center increased	No account for supply centers	Fail					
2	Check supply center of each country	supply center is counted	No account for supply centers	Fail					
3	A country has more than eighteen supply centers	The country win the game	Game continues	Fail					



Test Case ID	TC_57	Test Case Description	Exit Game							
Created By	Ellen	Reviewed By					Version			
QA Tester's Log										
Tester's Name	Sadiq Sarwar	Date Tested	05/05/2019			Test Case (Pass/Fail/Not Executed)	Pass			
S #	Prerequisites:		S #							Test Data Requirement
1	Player is in an active game		1							
2			2							
3			3							
4			4							
Test Conditions										
Step #	Step Details		Expected Results		Actual Results			Pass / Fail / Not executed / Suspended		
1	Player click on 'X' button		Player exit out of the game		Player exits game			Pass		
2	Host click on 'X' button		Host exit out of the game. All other players are kick out of the game.		Players forced out of game			Pass		

Test Case ID		TC_58	Test Case Description		Testing Stalemate				
Created By		Sovathana	Reviewed By		Version				
<u>QA Tester's Log</u>									
Tester's Name		Sadiq Sarwar	Date Tested		05/05/2019		Test Case (Pass/Fail/Not Executed)		Fail
S #	Prerequisites:				S #	Test Data Requirement			
1	All players are in the game				1				
2	One player has pressed the 'Request Draw' button				2				
3					3				
4					4				
<u>Test Conditions</u>									
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not executed / Suspended		
1	One player requested to draw		request is sent to all other player		No option available to request for draw		Fail		
2	All other players accept the requests		the game end in a stalemate		Game Continues		Fail		