

	Requirement ID	Test ID	Test Objective	Precondition	Steps	Test Data	Expected Result	Actual Result	Status	Bug ID
REGISTER										
	F.1.1	Register-1	User can register with normal credentials	User is not registered	1. Insert username between 1 and 25 valid characters 2. Insert password between 5 and 25 valid characters 3. Insert valid email address (name@name.name) 4. Click Submit		User is successfully registered and taken to the Game Lobby			
	F.1.1	Register-2	Error is displayed if connection is lost	Server is NOT running	1. Stop the server during any stage of the game		Error message displayed			
	F.1.1	Register-3	User cannot register with too long/short username	User is not registered	1. Insert username above 25 characters 2. Insert password between 5 and 25 valid characters 3. Insert valid email address (name@name.name) 4. Click Submit		Error message displayed			
	F.1.1	Register-4	User cannot register with too long/short password	User is not registered	1. Insert valid username 2. Insert password less than 5 valid characters 3. Insert valid email address (name@name.name) 4. Click Submit		Error message displayed			
	F.1.1	Register-5	User cannot register without valid email	User is not registered	1. Insert valid username 2. Insert valid password 3. Insert invalid email 4. Click Submit		Error message displayed			
	F.1.1	Register-6	User cannot register with invalid characters	User is not registered	1. Insert valid length username with invalid characters 2. Insert valid password 3. Insert valid email address (name@name.name) 4. Click Submit		Error message displayed			
	F.1.1	Register-7	User cannot register with already existing username	Username is already registered	1. Insert username that has already been registered 2. Insert valid password 3. Insert valid email 4. Click submit		Error message displayed			
	F.1.2	Register-8	User can switch to login screen		1. Click on login link (Already have an account? Click here!)		Login screen is displayed			
LOGIN										
	F.1.2	Login-1	User can login with valid credentials	A user is loaded	1. Enter username into username field 2. Enter password into password field 3. Click Submit		Game Lobby is displayed			
	F.1.2	Login-2	User cannot login with invalid credentials		1. Enter invalid username/password 2. Click Submit		Error message is displayed			
	F.1.1	Login-3	User can switch to register screen		1. Click on register link		Register screen is displayed			
GAME LOBBY - CREATE GAME										
	F.2.1	Create-1	User can create a game	Login as user	1. Click create game 2. Enter game title 3. Pick a color 4. Click Submit		Game is added to users game list			
	F.2.1	Create-2	User cannot create game with title length > 25 characters	Be on create game modal	1. Enter game title > 25 characters 2. Pick color 3. Click submit		Error is displayed			
	F.2.1	Create-3	User cannot create game with title length < 3 characters	Be on create game modal	1. Enter game title < 3 characters 2. Pick color 3. Click submit		Error is displayed			
GAME LOBBY - MY GAMES										
	F.3.1	MyGames-1	I see a list of games I am a part of	Load user into games			Any game a user is a part of is displayed under the Current Games section			
	F.2.3	MyGames-2	I can rejoin a game that I am a part of	Load user into a game	1. Click rejoin		Game Board is displayed			
GAME LOBBY - AVAILABLE GAMES										
	F.3.1	Available-1	I see a list of available games	Load games without user			Games are displayed under the Available Games			
	F.3.1	Available-2	I see correct information for a particular game	Load a game			Current number of players is correct, player names are displayed, game title is displayed			
	F.2.2	Available-3	I can join a game	Load a game	1. Open game details 2. Click available color		User is added to game, game board is displayed			
	F.3.1	Available-4	I do NOT see games I am already a part of	Load games with/without user			Games I am a part of are not displayed under Available Games			
	F.3.1	Available-5	Games that are full/started are NOT displayed	Load started/full games			Games are not displayed			
GAME BOARD - VIEW										
	F.3.9	View-1	User can access left side menu	User logged in, game selected	1. Click menu button on top left corner		Game menu slides open from the left side			
	F.3.9	View-2	User can logout	User logged in, game selected	1. Click menu button on top left corner 2. Click logout button		Game menu slides open from the left side, logout button is displayed, when clicked, the user is taken to the login page.			
	F.3.3	View-3	User can view game History	User logged in, game selected	1. Click menu button on top left corner		Game menu slides open from the left side, game history is visible in text window			
	F.3.3.1	View-4	Game history events are of the correct player color	User logged in, game selected	1. Click menu button on top left corner 2. Observe the events in the game history		At minimum, there will be a game history event for each player joining the game, each event should be the color of the respective player that joined. Similarly, any game event taken by a given player should be of that player's color			
	F.3.3.1	View-5	Game history updates as turns are taken	User logged in, game in progress	1. Run two clients in the same game, one of which has the next turn 2. Client 1 takes their turn 3. Client 2 observes the game history update		When Client 1 takes their turn, the game history updates with Client 1's actions			
	F.3.6, F.3.7	View-6	User can access their hand view	User logged in, game in progress	1. Click "hand" tab in the lower menu		The lower menu tabs over to show the players current hand, the quantity of each card and the status of each destination ticket			
	F.3.7	View-7	User can access the board view	User logged in, game in progress	1. Click "board" tab in the lower menu		The lower menu tabs over to show the deck the player can draw from. The closed deck, the visible deck, and the deck of destination cards			
	F.3.10	View-8	Player info updates as turns are taken	User logged in, game in progress	1. Run client 1 and client 2 2. Client 1 builds a route 3. Client 2 observes Client1's info update		Client 1's number of remaining trains decrease and number of points increase			
	F.3.10	View-9	Players appear in colors they chose	User logged in, game selected	1. Observe players colors in left menu		Each player color corresponds to the color they chose when game was joined			
	F.3.4	View-10	Players can view game board	User logged in, game selected	1. Observe the visible map		For game that has not started, the map will not have any trains. Otherwise, the map will be populated with various players' trains over the routes			
GAME BOARD - NEW GAME										
	F.3.5, F.3.6, F.3.7	New-1	Player cannot play if game has not begun	User has joined game			All buttons are disabled			
	F.2.5	New-2	Game creator cannot start game if only 1 player	Load game with one player	1. Rejoin game as creator		Game cannot be started			
	F.2.5	New-3	Game creator can start game if >1 players	Load game with > one player	1. Rejoin game as creator		Game can be started			
	F.3.6	New-4	On initial turn, player sees "Select Your Tickets" modal	Game has started			Game modal is displayed			
	F.3.6	New-5	Players cannot leave "Select Your Tickets" modal without selecting 2 tickets	Game has started	1. Select 0/1 tickets 2. Click submit		Error is displayed			
	F.3.6	New-6	Players can leave "Select Your Tickets" modal by selecting 2 or 3 tickets	Game has started	1. Select 2/3 tickets 2. Click submit		Destinations are given to player			
	F.3.6, F.3.7	New-7	Player cannot see hand when "Select Your Tickets" modal is up	Select Tickets modal is up			Cannot view hand			
GAME BOARD - DRAW TRAIN CARD										
	F.3.7	Train-1	Player can draw from the deck	Is user's turn	1. Click on deck		Two cards are added to the player's hand, turn is over			
	F.3.7	Train-2	Player can draw one from the visible cards and one from the deck	Is user's turn	1. Select non-wild from visible cards 2. Click deck		Selected card and random card are added to player's hand, turn is over			
	F.3.7	Train-3	Player can draw two from the visible cards	Is user's turn	1. Select non-wild from visible cards 2. Select non-wild from visible cards		Two selected cards are added to player's hand, turn is over			
	F.3.7	Train-4	Player can only draw one wild from the visible cards	Is user's turn, wild card is in visible card	1. Select wild from visible cards		Wild is added to player's hand, turn is over			
	F.3.7	Train-5	Visible cards are reset if there are more than two wilds	Load visible cards with 3 wilds			Cards are updated to have < 3 wilds			
	F.3.7	Train-6	Player cannot select wild card after drawing one from visible cards	Is user's turn, wild card is in visible card	1. Select non-wild from visible cards		User cannot select the wild card			
	F.3.7	Train-7	Player cannot draw destination ticket after initial train draw until next turn	Player has drawn a train card	1. Draw a train card 2. Draw a destination card		User cannot draw the destination card			
	F.3.7	Train-8	Player cannot build route after initial train draw until next turn	Player has drawn a train card	1. Draw a train card 2. Select a route on the map		The map is inactive, not route is selectable to purchase			
GAME BOARD - DRAW DESTINATION TICKET										

	F.3.6	Dest-1	Player can scroll through list of destination tickets in hand	Game is in progress	1. Click on hand tab in lower menu 2. Draw enough cards to fill the text box of destination cards 3. Scroll	Scrolling is enabled, players can view all of their destination cards			
	F.3.6	Dest-2	When destinations are exhausted, deck no longer appears	Destination deck size = 0		Destination deck should be disabled/gone			
	F.3.6	Dest-3	When less than three destinations are left, card(s) do not appear on the modal	Destination deck size = 1/2	1. Click on destination deck	Correct number of destinations are displayed			
	F.3.6	Dest-4	Player cannot draw a train card after drawing destination	Player has drawn a dest card	1. Click on train deck	Error is displayed			
	F.3.6	Dest-5	Player cannot build a route after drawing destination	Player has drawn a dest card	1. Click on a route	Error is displayed			
	F.3.6	Dest-6	When destinations are completed upon drawing, status is automatically changed	Player has enough routes	1. Click on destination deck 2. Select card that you already have a route to complete	Status of the destination card is automatically updated to completed			
	F.3.6	Dest-7	When destinations are drawn they appear in the player's hand	Game is in progress	1. Click on destination deck 2. Select at least one card	Destination cards updated in player's hand			
GAME BOARD - BUILD ROUTE									
	F.3.5	Route-1	Player can select a route on the map to purchase	Player can afford a route	1. Click on a route	Purchase modal is displayed			
	F.3.5	Route-2	Player can use wilds as part of a route purchase	Purchase modal is open, has wild	1. Click wild option	Wild card is included in purchase			
	F.3.5	Route-3	Player cannot purchase a route with less than the required cards	Purchase modal is open	1. Enter cards 1 less than cost 2. Click purchase	Error is displayed			
	F.3.5	Route-4	Player cannot purchase a route with more than the required cards	Purchase modal is open	1. Enter cards 1 more than cost 2. Click purchase	Error is displayed			
	F.3.5	Route-5	Player cannot purchase a route with cards of the wrong color	Purchase modal is open		Verify non allowed colors do not appear			
	F.3.5	Route-6	Player cannot purchase a route they do not have enough trains for	Player cannot afford a route	1. Click on a route	Nothing happens			
	F.3.5	Route-7	Player can cancel buying a route	Purchase modal is open	1. Click on cancel	Train count remains the same			
	F.3.11	Route-8	Player cannot buy adjacent route if less than 4 players in the game	Player owns adjacent route	1. Click on adjacent route	Error is displayed			
	F.3.5	Route-9	Routes are populated with trains the color of the player who purchased them	User logged in, game in progress	1. Choose a route to purchase 2. Click "Buy Route" 3. Observe the map update	The route on the map populates with trains the color of the player who purchased it			
	F.3.5	Route-10	Player cannot draw a destination ticket after building	Route has been purchased	1. Build a route 2. Draw a destination card	The turn advances to the next player after the route is built, the destination cards will be inactive			
	F.3.5	Route-11	Player cannot draw a train card after building	Route has been purchased	1. Build a route 2. Draw a train card	The turn advances to the next player after the route is built, the train cards will be inactive			
	F.3.5	Route-12	Player's destination cards are updated when building the route completes the destination	Destination has been completed	1. Build the last route of a destination	The status of the destination card in the players hands gets a green check			