

# System Testing Log

Software Engineering Project (SEPR)

## Team “EEP”

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### Functional Requirements we have implemented:

Req ID	Description (Expected)	Actual outcome from testing	Status
Func. Req Replay.1.1 - Essential	The system must record and keep snapshots of every change of state of the game, keeping track of; the map, goals, resources, obstacles, trains and player's score, at every stage of the game.	The system takes a snapshot every time the state of the game changes. Whilst it can record the outcome of obstacles/disasters (i.e. trains being destroyed), it is not able to record the actual obstacle (e.g. if it was a volcano or earthquake).	Pass
Func. Req Replay.1.2 - Essential	The system must be able to iterate over every recorded snapshot of the game at a specified speed.	The system successfully iterates over each snapshot taken. It can do this at a specified speed (between 1X to 5X). It is not able to reanimate disasters, such as volcanoes, due to them not being fully recorded.	Pass
Func. Req Replay.1.3 - Essential	The system must reanimate the movements of trains during the replay, such that they move along exactly the same original route.	All trains movements are reanimated, and follow exactly the same route. The speed they travel in the replay is proportional to the speed they originally travelled.	Pass
Func. Req Replay.1.4 - Essential	The system must redraw the map at each iteration of the replay, to reflect any modifications that are made to connections during the game.	The system redraws the map for each screenshot, meaning any modifications made to connections (e.g. new connections or existing connections removed) are recorded.	Pass
Func. Req Modify.2.1 - Essential	The system must reward a player with a connection modification resource upon completing a goal. This can be spent once, allowing the player to enter the modify	The system will always reward a player with a connection modification resource upon completing a goal. On their next turn a 'Mod Connection' button	Pass

	connection mode and make one modification. Connection modification resource will not be removed if an invalid connection occurs.	becomes visible. Upon entering a valid modification the resource is spent, and the button is no longer visible.	
Func. Req Modify.2.2 - Essential	The system must allow a player to add a connection, if it does not already exist and does not intersect an already existing connection.	The system allows a player to create a new connection, providing it does not intersect an existing one. If it does intersect a connection, a warning message is displayed and the player must attempt again.	Pass
Func. Req Modify.2.3 - Essential	The system must allow a player to remove a connection, providing it does not currently have a train travelling along it.	The system allows a player to remove a connection, providing a train is not travelling along it - otherwise a warning message is displayed.	Pass
Func. Req Modify.2.4 - Essential	The system must update a train's route whenever a connection is removed which the train was due to travel along. The train must stop at the station/junction before the removed connection, so the player can reroute it.	The system will not allow a train to travel along a connection it was originally due to travel along as part of its routing. The train will halt at the station/junction before the removed connection. The player must then reroute their train.	Pass
Func. Req Modify.2.5 - Essential	The system must not allow goals to be generated which are not completable, due to the origin and destination station not being connected by any path of connections.	The system will never generate a goal involving two stations for which there exists no path of connections i.e. the goal is impossible to complete (without new connections being created).	Pass
Func. Req CP.3.1 - Preferable	The system should be playable on mobile based operating systems, particularly Android and iOS. The mobile version of the game should have the same functionality and theme as the desktop version.	The system is playable on Android devices. There can be difficulty with pressing buttons on devices with smaller screens.	Pass
Func. Req Goal.4.1 - Preferable	The system should allow a goal to be removed from a Player's goal list to allow them to receive another goal in the event that one may become not completable or wishes to be dropped.	The system allows a player to select an 'X' button next to goals, from where a player can remove a goal if they no longer wish to complete it.	Pass