## **System Test case Document for Backend**

Tested again with new document

Date: 2.6.2016

Performed by (Chrome):

Mzeen @ Acer Laptop, Windows 10

Started SpringBootApp in 13.745 seconds (JVM running for 14.662)

Tested on PRAKTIKUM01 again

Date: 3.6.2016

Performed by ricarda42

Use Case	Function Being Tested	Initial System State	Input	Expected Output	Test execution documentation
IC_C1	SF_S3: Send list of stops	Stop table exists in database	./stops	stop name, lines passing through	List of stops with stopID, stop name, line passing through the stops, location of the stop, bus schedule of the stop is displaying. Schedule contains line name, lineID, stopID, arriving time and timestamp.
IC_C2	SF_S5: Send properties of bus			Not implemented in this iteration. SF_S2 can be used instead (see below)	
	SF_S6: Send GPS-Data	GPS data was sent to database	(In interface doc:	Send Current GPS Data coordinates with timestamp	Bus GPS coordinates shown with timestamp
IC_C3	SF_S6: Send GPS-Data			See above	
IC_B1	SF_S1: Send list of lines	Line table exists in database	./lines	Send List of Lines with properties lineID, name, routeID, timestamp and busses running on that specific line	List of Lines with lineID, name, routeID, timestamp and busses running on that specific line is displayed
	SF_S2: Send list of busses	Bus table exists in database	./busses	busID, number plate, color,	List of busses containing busID, number plate, the line served, color and picture is displayed
	SF_S4: Send list of routes	Route table exists in database	./routes	coordinates in	List of all routes with routeID, route coordinates in geojson format and timestamp
	SF_S7: Store bus and line	Bus and line tables exist in database	./updateBusStatus Method: POST Content type: application/json Content: { "lineId":number, "busId":number }	Bus and line information stored	Tested with lineID = 3, busID = 2, with initially bus 2 on line 1. Output of post is 200 OK, calling ./lines reveals that bus 2 is now on line 3.

IC_B2	SF_S13: Store number of available seats			For next iteration	
IC_B3	SF_S4: Send list of routes			See above	
IC_B4	SF_S3: Send list of stops			See above	
-	SF_S8: Store GPS data	Bus table exists in database	./realTimeData  Method: POST Content type: application/json Content: { "busId":number, "position": { "type": "Point", "coordinates": [double, double]}, "timeStamp": timeStamp }	GPS Data of bus is stored	With busID = 1, coordinates [15.0, -3.4] and timeStamp = 1098692636000 the output of POST is 200 Ok, calling ./busses/1 reveals that coordinates have been changed to [15.0, -3.4]. The timeStamp remains 1098692634000.
-	SF_S9: Send latest timestamp	Line, bus, route and stops tables exist in database	./update	Last timestamps for bus, route, line and stops	Displays timestamp for bus, route, line and stops

Author: Muhammad Zeeshan

Status: complete

**Reviewer:** Ricarda Rosemann **Review Status:** incomplete