

### TASK:

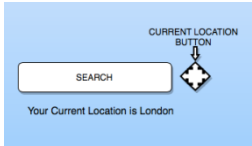
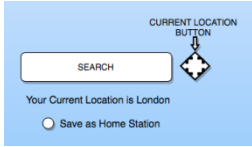

Design a set of black box test cases for the travel app. Test cases should concern both the functional and non-functional properties of the app. Non-functional properties concern the resources consumed by the app, such as, but not limited to: battery life, response time and network bandwidth.


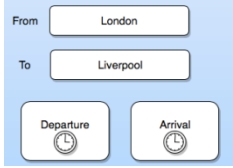
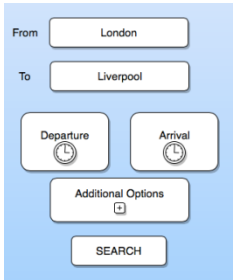
### ANSWER:

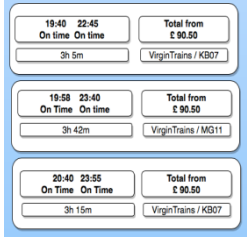

#### FUNCTIONAL TESTING

TEST CASE ID: Journey Planner

Testing method: Black box

N	Scenario	Description	Expected result	Interface	Android	Apple
1	User can find his Current Location.	User presses on “My Current Location” button. App finds his Current Location and reports it  (Ex: London).	User found his Current Location successfully.			
2	User can save his Current Location as a Home Station.	App finds user's Current Location and reports it (Ex: London). Under this report is an option “Save as a Home Station”. User selects this option.	User saved his Current Location as a Home Station successfully.			
3	User can select Home Station as a Default Start.	User types “Home Station” in a ‘From’ field. App automatically finds it in a list of possible stations. There is an option “Save as a Default Start”. User selects this option.	User selected Home Station as a Default Start successfully.			

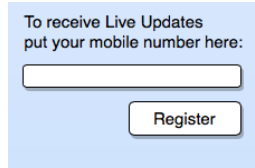
4	User can select Home Station as an End Point.	User types "Home Station" in a 'To' field. App automatically finds it in a list of possible stations. There is an option "Save as an End Point". User selects this option.	User selected Home Station as an End Point successfully.			
5	User can set the Date and Time of his journey	User presses either on "Departure" or on "Arrival" buttons and sets the date and time of his journey.	User has set the Date and Time of the journey successfully.			
6	User can select Additional Options of his journey.	<p>User presses on "Additional Options" button. User sees a list of additional options to select:</p> <ul style="list-style-type: none"> <li>*Travelers: Number of Adults, Number of Children;</li> <li>*Class: 1<sup>st</sup> class, 2<sup>nd</sup> class;</li> <li>* option to show Direct train;</li> <li>* option to show Fastest train.</li> </ul> <p>User selects options and presses "Search" button.</p>	User selected Additional Options successfully.			
7	User can select the most suitable journey variant from the	After user performed steps 3 or 4, 5, 6 – app reports to user a list of possible journey	User selected the most suitable journey variant from the alternatives in			

	alternatives in the app's report.	<p>variants with info about:</p> <ul style="list-style-type: none"> <li>*estimate journey times;</li> <li>*optional train connecting different train services;</li> <li>*ID number(s) of train(s);</li> <li>*ticket prices.</li> </ul> <p>User selects a suitable variant and presses on this variant.</p>	the app's report successfully.			
8	User can see and select extra info about the selected journey variant and selects the option to purchase it.	<p>After step 7 user sees all info about his journey variant:</p> <ul style="list-style-type: none"> <li>*time of Departure &amp; Arrival;</li> <li>*stations of Departure &amp; Arrival;</li> <li>*estimate journey time;</li> <li>*ticket price.</li> </ul> <p>And can select some extra options:</p> <ul style="list-style-type: none"> <li>*seating preferences (select seat number);</li> <li>*travel insurance option (yes/no);</li> <li>*possibility to use Train Card (yes/no).</li> </ul>	User saw and selected extra info about the selected journey variant and selected option to purchase it successfully.			

		User selects options and presses "Proceed to purchase" button.				
9	User can proceed a payment option.	After step 8 user selects a payment option Pay by card, type other details of payment and press "Submit card detail" button.	User selected a payment option, typed other details of payment and pressed "Submit card detail" button successfully.			

TEST CASE ID: Live Updates.

Testing method: Black box

N	Scenario	Description	Expected result	Interface	Android	Apple
1	User can register for Live Updates.	After user purchased a journey variant user has an option to register for Live Updates. User types in field 'Mobile' his mobile number and presses "Register" button.	User registered for Live Updates successfully.			
2	User can receive Live Updates via SMS on his smartphone.	App sends SMS with Live Updates info and link to a map view on the particular mobile phone number registered by the user.	User received Live Updates via SMS on his smartphone successfully.			
3	User can open SMS and see the progress of his train on the network via map view.	User opens SMS and reads info about his train's current location. User presses a link, Map Viewer opens, and user sees his train's current location on a map.	User opened SMS and saw the progress of his train on the network via map view successfully.			

TEST CASE ID: Personalisation

Testing method: Black box

N	Scenario	Description	Expected result	Android	Apple
1	User can save his selected info in app.	User has an option to save info about:  *journeys;  *ticket choice;  *seating preferences;  *payment details.  User selects options and presses "Save" button.	User saved his selected info in app successfully.		

TEST CASE ID: Sharing

Testing method: Black box

N	Scenario	Description	Expected result	Android	Apple
1	User can share info about his purchased journey via Facebook, Twitter, and other social networks.	After user purchased a journey, he has an option to share it with several social networks. User presses "Share" button and sees a list of possible social networks. User selects Facebook icon and shares it with it. User selects Twitter icon and shares it with it. User selects other social networks (ex: Instagram, LinkedIn) and shares it with them.	User shared info about his purchased journey via Facebook, Twitter, and other social networks successfully.		

## NON-FUNCTIONAL TESTING

TEST CASE ID: Battery

Testing method: Black box

N	Scenario	Description	Expected result	Android	Apple
1	Battery life.  Battery consumption during User's utilisation of the app.	User should:  1/ Verify the % of battery before he/she switch on the app.  2/Switch on the app, use all functions and close the app.  3/ Verify the % of battery again.	The consumption of the battery during the User's utilisation of the app should be reasonable.		
2	Battery life.  Low battery.	User should verify that during running of application, if the battery % becomes low, an appropriate message highlighting this is displayed on screen.	User verified that during running of application, if the battery % became low, an appropriate message highlighting this was displayed on screen successfully.		

**TEST CASE ID:** Incoming message/call

**Testing method:** Black box

N	Scenario	Description	Expected result	Android	Apple
3	Incoming message/call.	User should verify that during running of application, messages/calls can be accepted.	User verified that during running of application, messages/calls could be accepted successfully.		
4	Incoming message/call.	User should verify if he/she can continue running the application when message/call are ended.	User verified if he/she can continue running the application when message/call were ended successfully.		

**TEST CASE ID:** Network

**Testing method:** Black box

N	Scenario	Description	Expected result	Android	Apple
5	Network.	User should verify that if during data call operations of the application, a network error occurs, a message "Network error warning! Please try again later." is displayed on screen.	User verified that if during data call operations of the application, a network error occurred, a message "Network error warning! Please try again later." was displayed on		



			screen successfully.		
6	Network.	User should verify that when network connectivity is re-established after a network error, data calls are again possible.	User verified that when network connectivity was re-established after a network error, data calls were again possible successfully.		