| Primary Actor | Use Cases |
|---|---|
| User | 1. Target Destination |
| Server | 2. Display nearest Bus Stop<br>3. Display Route |

| | | | |
|---|---|---|---|
| Use Case ID: | 1 | | |
| Use Case Name: | Target Destination | | |
| Created By: | Shahzaib Ali Jamal | Last Updated By: | Rao Fawad Qamar |
| Date Created: | February 28, 2013 | Date Last Updated: | May 02, 2013 |
| Actors: | User | | |
| Description: | User enters the name or address of geo-location of the target destination where he/she wishes to travel. The destination entered is set as the final point and the route to be calculated is between the starting point and the new destination entered. The Bus name through our database is also shown. | | |
| Preconditions: | • User must enable data (wi-fi or have a data plan) | | |
| Post conditions: | • The destination is stored in a dedicated data structure to be used as the final point of journey<br>• The destination sent to server to calculate best possible routes | | |
| Normal Flow: | **1.0 Proceed to enter target destination**<br>• User asked to enter the target destination<br>• Validate the entered location<br>• Wait for the server to respond<br>• Bus name is shown | | |
| Alternative Flows: | **1.1 N/A** | | |
| Exceptions: | **1.0.E.1 GPS module is not Present**<br>• Due to unavailability of GPS module the current location cannot be retrieved resulting in an error displayed<br>**1.0.E.2 GPS module not turned on**<br>• GPS module not activated resulting in an message to instruct user to turn it on.<br>**1.0.E.3 Entered location is not valid**<br>• If the entered location is invalid, raise an exception and aska gain for it. | | |
| Includes: | None | | |
| Priority: | High | | |
| Frequency of Use: | Once per activity | | |
| Business Rules: | N/A | | |
| Special Requirements: | • User shall be able to enter his/her target location in the form to be sent to the server. | | |
| Assumptions: | • Assume that GPS module is turned on and proceed with calculating current location | | |
| Notes and Issues: | | | |

| Use Case ID: | 2 | | |
|---:|:---|---:|:---|
| Use Case Name: | Display nearest Bus Stop | | |
| Created By: | Shahzaib Ali Jamal | Last Updated By: | Rao Fawad Qamar |
| Date Created: | February 28, 2013 | Date Last Updated: | May 02, 2013 |
| Actors: | Server | | |
| Description: | The nearest bus stop w.r.t to current location is shown to user. | | |
| Preconditions: | • Corrent Location must be calculated | | |
| Post conditions: | • Nearest Bus Stop is displayed | | |
| Normal Flow: | **1.0 Proceed to choose route**<br>• Nearest Bus Stop is displayed. | | |
| Alternative Flows: | **1.1 N/A** | | |
| Exceptions: | **1.0.E.1 Database Error**<br>• Error generated due to absence of such name in database of server<br>**1.0.E.2 Server timeout**<br>• Server takes too long to process the query<br>**1.0.E.3 Hardware error**<br>• Data not enabled.<br>• Wi-Fi module turned off. | | |
| Includes: | None | | |
| Priority: | High | | |
| Frequency of Use: | Once per activity | | |
| Business Rules: | N/A | | |
| Special Requirements: | • User shall be able to view the screen. | | |
| Assumptions: | • Assume that data is enabled. | | |
| Notes and Issues: | | | |

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| Use Case ID: | 3 |
| Use Case Name: | Display Route |
| Created By: | Shahzaib Ali Jamal |
| Date Created: | February 28, 2013 |
| Actors: | User |
| Description: | The route received by the application is processed to show the current and target destination. |
| Preconditions: | • User must send the target destination |
| Post conditions: | • Best possible route(s) displayed |
| Normal Flow: | **1.0 Proceed to choose route**<br>• Best possible route(s) displayed<br>**1.1 Display Route on Map**<br>• The route is processed and inserted with the markers for the two required destination and then is shown on a new activity. |
| Alternative Flows: | **1.1 N/A** |
| Exceptions: | **1.0.E.1 Database Error**<br>• Error generated due to absence of such name in database of server<br>**1.0.E.2 Server timeout**<br>• Server takes too long to process the query<br>**1.0.E.3 Hardware error**<br>• Data not enabled.<br>• Wi-Fi module turned off. |
| Includes: | None |
| Priority: | High |
| Frequency of Use: | Once per activity |
| Business Rules: | N/A |
| Special Requirements: | • User shall be able to view the different routes generated by the server |
| Assumptions: | • Assume that data is enabled. |
| Notes and Issues: | |

Additional header cells:

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|---|---|
| Last Updated By: | Rao Fawad Qamar |
| Date Last Updated: | May 02, 2013 |