**Input:** ***CreateTrucks (CreateTruck, params:0) - Alex***

**Output**:

Truck ID: 1001 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

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Truck ID: 1002 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1003 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

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Truck ID: 1004 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1005 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1006 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1007 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1008 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1009 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1010 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1011 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1012 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1013 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1014 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1015 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1016 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1017 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1018 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1019 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1020 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1021 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1022 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1023 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1024 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1025 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1026 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1027 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1028 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1029 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1030 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1031 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1032 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

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Truck ID: 1033 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

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Truck ID: 1034 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

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Truck ID: 1035 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1036 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

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Truck ID: 1037 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1038 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1039 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1040 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

**Input:** ***CreateRoute AliceSprings Adelaide Melbourne Sydney Bristbane (CreateRoute, params: n) - Elena***

**Output**: Route with ID: 1 has been created!

**Input:** ***InfoRoute RouteId (ViewRoute, params: 1) - Elena***

**Output**:

RouteID: 1

Route status: **open - >** **default message – changes when packages assigned to route, and depends on the current date**

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

Route distance: 4041 km

Route capacity: **Capacity is still uncalculated. - >** **default message – changes when packages assigned to route from hub**

Route start date: 10/02 Saturday @ 06:00

Route final ETA: 13/02 Tuesday @ 14:00

PackageID: **Package is still unassigned. - >** **default message – changes when packages assigned to route from hub**

TruckID: **Truck is still unassigned. - >** **default message – changes validation passes route capacity < truck capacity; route distance < truck max range, truck availability between route start date and route final ETA**

**Input:** ***FindTruck (FindTruck, params: 0) - Alex***

**Output**:

Available trucks: Truck ID: 1001 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1002 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1003 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1004 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1005 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1006 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1007 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1008 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1009 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1010 --- Brand: Scania --- Status: Free,

Capacity: 42000

Range: 8000

=====================================================

Truck ID: 1011 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1012 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1013 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1014 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1015 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1016 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1017 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

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Truck ID: 1018 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1019 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1020 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1021 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1022 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1023 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1024 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1025 --- Brand: Man --- Status: Free,

Capacity: 37000

Range: 10000

=====================================================

Truck ID: 1026 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1027 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1028 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1029 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1030 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1031 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1032 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1033 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1034 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1035 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1036 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1037 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1038 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1039 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

Truck ID: 1040 --- Brand: Actros --- Status: Free,

Capacity: 26000

Range: 13000

=====================================================

**Input:** ***AddTruckToRoute RouteId TruckId (AddTruckToRoute, params: 2) - Elena***

**Output:** Truck with ID: 1001 has been added to route with ID: 1!

**Input:** ***InfoRoute RouteId (InfoRoute, params: 1) - Elena***

**Output**:

RouteID: 1

Route status: **open**

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

Route distance: 4041 km

Route capacity: **Capacity is still uncalculated.**

Route start date: 10/02 Saturday @ 06:00

Route final ETA: 13/02 Tuesday @ 14:00

PackageID: **Package is still unassigned.**

TruckID: **1001**

**Input:** ***UpdateTruck TruckID (UpdateTruck, params: 1) - Alex***

**Output**: Truck 1001 updated to busy.

**Input:** ***InfoTruck TruckId (InfoTruck, params: 1) - Alex***

**Output**:

Information for Truck 1001:

Status: Free | Capacity: 42000 | Range: 8000

**Input:** ***RegisterUser steven1*** [***steven\_jones1@gmail.com***](mailto:steven_jones1@gmail.com) ***steven jones (RegisterUser , params: 4) - Vladi***

**Output:** User Steven Jones registered successfully.

**Input:** createpackage AliceSprings Sydney 85 rgervais ***- Vladi***

**Output:** Package 1 from AliceSprings to Sydney of the rgervais, 85 kg accepted in AliceSprings Hub.

**Input:** ***InfoPackage IdPackage (ViewPackage, params: 1) - Vladi*** infopackage 7

**Output:** PackageID: 7

Package weight: 85 kg

Package start location: Perth

Package end location: Sydney

Package entry date: 19/02 Monday @ 17:13

Package final ETA:

Package status: Delivered

viewpackage Delivered

**Input:** ***FindRoute AliceSprings Adelaide (FindRoute, params: 2) - Elena***

**Output**:

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

**Input:** ***AddPackageToRoute RouteId PackageId (AddPackageToRoute, params: 2) - Elena***

**Output:** Package with ID: 1 has been added to route with ID: 1!

**Input:** ***UpdatePackage PackageID Assigned Eta(10/02 Saturday @ 20:00) (UpdatePackage, params: 4) - Vladi***

**Output**: Package with ID:7 is on status: Delivered! 19/02 Monday @ 14:00

**Input:** ***InfoRoute RouteId (InfoRoute, params: 1) - Elena***

**Output**:

RouteID: 1

Route status: **open**

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

Route distance: 4041 km

Route capacity: **45**

Route start date: 10/02 Saturday @ 06:00

Route final ETA: 13/02 Tuesday @ 14:00

PackageID: **1**

TruckID: **1001**

**Input:** ***UpdateRoute RouteId (UpdateRoute, params:2) - Elena***

**Output**: Route with ID: 1 has been updated with status: scheduled!

**Input:** ***InfoRoute RouteId (ViewRoute, params: 1) - Elena***

**Output**:

RouteID: 1

Route status: **scheduled**

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

Route distance: 4041 km

Route capacity: **45**

Route start date: 10/02 Saturday @ 06:00

Route final ETA: 13/02 Tuesday @ 14:00

PackageID: **1**

TruckID: **1001**

**Input:** ***ViewRoute Status (ViewRoute, params: 1) - Elena***

**Output:**

RouteID: 1

Route status: scheduled

Route locations: Perth (15/02 Thursday @ 06:00) → Melbourne 16/02 Friday @ 22:00

Route distance: 3509 km

Route capacity: 13 555 kg

Route start date: 15/02 Thursday @ 06:00

Route final ETA: 16/02 Friday @ 22:00

Route current ETA: 16/02 Friday @ 22:00

===============

RouteID: 2

Route status: scheduled

Route locations: Alice Springs (16/02 Friday @ 06:00) → Melbourne 17/02 Saturday @ 07:00

Route distance: 2255 km

Route capacity: 10 139 kg

Route start date: 16/02 Friday @ 06:00

Route final ETA: 17/02 Saturday @ 07:00

Route current ETA: 17/02 Saturday @ 07:00

===============

RouteID: 3

Route status: scheduled

Route locations: Bristbane (17/02 Saturday @ 06:00) → Adelaide 18/02 Sunday @ 04:00

Route distance: 1927 km

Route capacity: 28 744 kg

Route start date: 17/02 Saturday @ 06:00

Route final ETA: 18/02 Sunday @ 04:00

Route current ETA: 18/02 Sunday @ 04:00

===============

**Input:** ***RemovePackageFromRoute RouteId PackageId (RemovePackageFromRoute, params: 2) - Elena***

**Output:** Package with ID: 1 has been removed from route with ID: 1!

**Input:** ***RemoveTruckFromRoute RouteId TruckId (RemoveTruckFromRoute, params: 2) - Elena***

**Output:** Truck with ID: 1001 has been removed from route with ID: 1!

**Input:** ***UpdateRoute RouteId (UpdateRoute, params: 1) - Elena***

**Output**: Route with ID: 25 has been updated with status: cancelled!

**Input:** ***InfoRoute RouteId (ViewRoute, params: 1) - Elena***

**Output**:

RouteID: 1

Route status: **cancelled**

Route locations: Alice Spring (10/02 Saturday @ 06:00) → Adelaide (10/02 Saturday @ 20:00) → Sydney (11/02 Sunday @ 18:00) -> Melbourne (12/02 Monday @ 14:00) -> Brisbane (13/02 Tuesday @ 14:00)

Route distance: 4041 km

Route capacity: **Capacity is still uncalculated.**

Route start date: 10/02 Saturday @ 06:00

Route final ETA: 13/02 Tuesday @ 14:00

PackageID: **Package is still unassigned.**

TruckID: **Truck is still unassigned.**

**Input:** ***CancelRoute RouteId (CancelRoute, params:1) - Elena***

**Output:** Route with ID: 1 has been cancelled!

**Input:** ***UpdateTruck TruckID available (UpdateTruck, params: 2) - Alex***

**Output**: Truck 1001 updated to busy.

**Input:** ***InfoTruck TruckId (ViewTruck, params: 1) - Alex***

**Output**: Information for Truck 1001:

Status: Free | Capacity: 42000 | Range: 8000

**Input:** ***UpdatePackage PackageID - Vladi***

updatepackage 4

**Output**: Package with ID:4 is on status: In progress!

**Input:** ***InfoPackage IdPackage (InfoPackage, params: 1) - Vladi***

**Output:** PackageID: 7

Package weight: 85 kg

Package start location: Perth

Package end location: Sydney

Package entry date: 4 20/02 Monday @ 11:15

Package final ETA: 21/02 Monday @ 14:00

Package status: In progress

viewpackage In progress