

Chapter 1

1

|   |                     |      |  |
|---|---------------------|------|--|
| existsAvailableTaxiDriver(request, zone): | ciao                | ciao |  |
|   | ciao ciao ciao ciao | ciao |  |
|   | ciao                | ciao |  |
|   | ciao                | ciao |  |
| existsAvailableTaxiDriver(request, zone): | ciao                | ciao |  |
|   | ciao                | ciao |  |

asdoabdso asdonadon aosndaond

|  |                     |              |  |
|--|---------------------|--------------|--|
| <div>Chapter 2</div> <div>2</div>                                |                     |              |  |
| existsAvailableTaxiDriver(request, zone):                        | ciao                | ciao         |  |
|  | ciao ciao ciao ciao | ciao         |  |
|  | ciao                | ciao         |  |
|  | ciao                | ciao         |  |
| existsAvailableTaxiDriver(request, zone):                        | ciao<br>ciao        | ciao<br>ciao |  |
| Table 2.1: R, C ripple size<br><br>asdoabdso asdonadon aosndaond |                     |              |  |

# Chapter 3

## 3

|  |  |
|--|--|
| existsAvailableTaxiDriver(request, zone) |  |
| I: an array of zones                     | O: the zone are inserted in the database |
| ciao ciao ciao ciao ciao                 | ciao                                     |
| existsAvailableTaxiDriver(request, zone) |  |
| I: an array of zones                     | O: the zone are inserted in the database |
| ciao ciao ciao ciao ciao                 | ciao                                     |

Table 3.1: R, C ripple size

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## Chapter 4

# Taxi Management System

(Caller, Called)

### 4.1 Request Management, Data Access Utilities

|                       |  |
|-----------------------|--|
| insertRequest()       |  |
| null reservations     |  |
| updateReservationList |  |

### 4.2 Reservation Management, Data Access Utilities

|   |  |
|---|--|
| insertReservation(passengerId, origin, destination, date, time) |  |
| a null parameter  | NullPointerException                         |
| valid arguments   | the reservation is inserted in the databases |
| updateReservationList   |  |
| null  | NullPointerException                         |
| valid   | inserted in DB                               |

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### 4.3 Taxi Management, Data Access Utilities Management

| updateQueues   |                      |
|--|----------------------|
| a null parameter   | NullPointerException |
| an array containing some null values                     | exception            |
| array of queues, with some queues containing null values | NullPointerException |
| valid arguments  | ok                   |
| updateLocation   |                      |
| null   | NullPointerException |
| valid  | inserted in DB       |
| updateTaxiStatus   |                      |
| null   | NullPointerException |
| valid  | inserted in DB       |

### 4.4 Taxi Management, Location Management

| isLocationInsideCity(location)                        |                      |
|---|----------------------|
| a null parameter                                      | NullPointerException |
| an invalid location (can a location be non existing?) | error                |
| location outside city                                 | false                |
| location inside city                                  | true                 |
| getZone(location)                                     |                      |
| null  | NullPointerException |
| an invalid location                                   | error                |
| a location outside the city                           | error                |
| a location inside the city                            | ok                   |

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## 4.5 Reservation Management, Location Management

| getZone(location)                                      |                      |
|--|----------------------|
| null   | NullPointerException |
| an invalid location                                    | error                |
| a location outside the city                            | error                |
| a location inside the city                             | ok                   |
| checkTaxiDriverLocation(currentLocation, meetingPoint) |                      |
| null   | NullPointerException |
| an invalid location                                    | error                |
| a location outside the city                            | error                |
| a location inside the city                             | ok                   |

## 4.6 Reservation Management, Request Management

| requestTaxi(passengerId, passengerLocation, destination) |                      |
|--|----------------------|
| null   | NullPointerException |
| invalid format for passengerId                           | error                |
| invalid format for passenger-Location                    | error                |
| invalid format for destination                           | error                |
| invalid values (?)                                       | error                |
| passengerLocation outside city                           | error                |
| valid values   | ok                   |

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## 4.7 Request Management, Taxi Management

|  |                      |
|--|----------------------|
| existsAvailableTaxiDriver(request, zone) |                      |
| null                                     | NullPointerException |
| invalid fields of request (???)          | error                |
| invalid format for passenger-Location    | error                |
| invalid format for destination           | error                |
| invalid values (?)                       | error                |
| passengerLocation outside city           | error                |
| valid values                             | ok                   |
| getETA                                   |                      |
| invalid values (?)                       | error                |
| taxiDriverDropped                        |                      |
| invalid values (?)                       | error                |
| sendCurrentLocation(taxiId, location)    |                      |

## Chapter 5

# System Administration

### 5.1 Zone Management, Data Access Utilities

|                                      |  |
|--------------------------------------|--|
| insertZones                          |  |
| I: an array of zones                 | O: the zone are inserted in the database     |
| a null value                         | error  |
| an array containing some null values | exception                                    |
| valid arguments                      | the reservation is inserted in the databases |
| updateZone a zone                    |  |
| null                                 | NullPointerException                         |
| valid                                | inserted in DB                               |
| (?) updateTaxiDriver                 |  |
| null                                 | NullPointerException                         |
| valid                                | inserted in DB                               |
| (?)insertSingleZone                  |  |
| (?) getZoneList                      |  |
| (?) insertNewPassenger               |  |
| (?) updatePassengerData              |  |
| (?) logins                           |  |
| (?) getPassengerPassword             |  |

### 5.2 API Permission Management, Data Access Utilities

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## 5.3 Taxi Driver Management

### 5.3.1 Data Access Utilities

|   |  |
|---|--|
| insertTaxiDrivers                         |  |
| a null parameter                          | NullPointerException                         |
| an array containing some null values      | exception                                    |
| valid arguments                           | the reservation is inserted in the databases |
| (for single taxi driver) insertTaxiDriver |  |
| null                                      | NullPointerException                         |
| valid                                     | inserted in DB                               |
| (?) updateTaxiDriver                      |  |
| null                                      | NullPointerException                         |
| valid                                     | inserted in DB                               |

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## Chapter 6

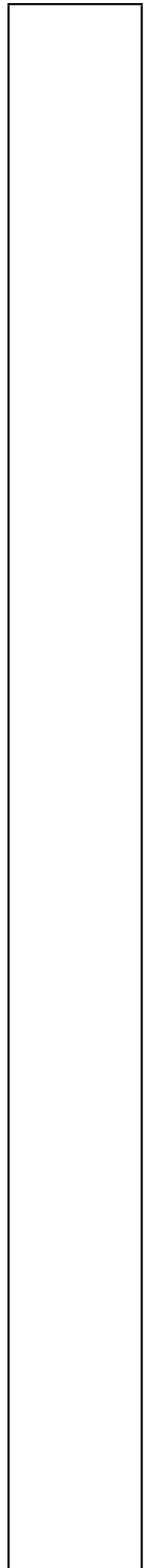
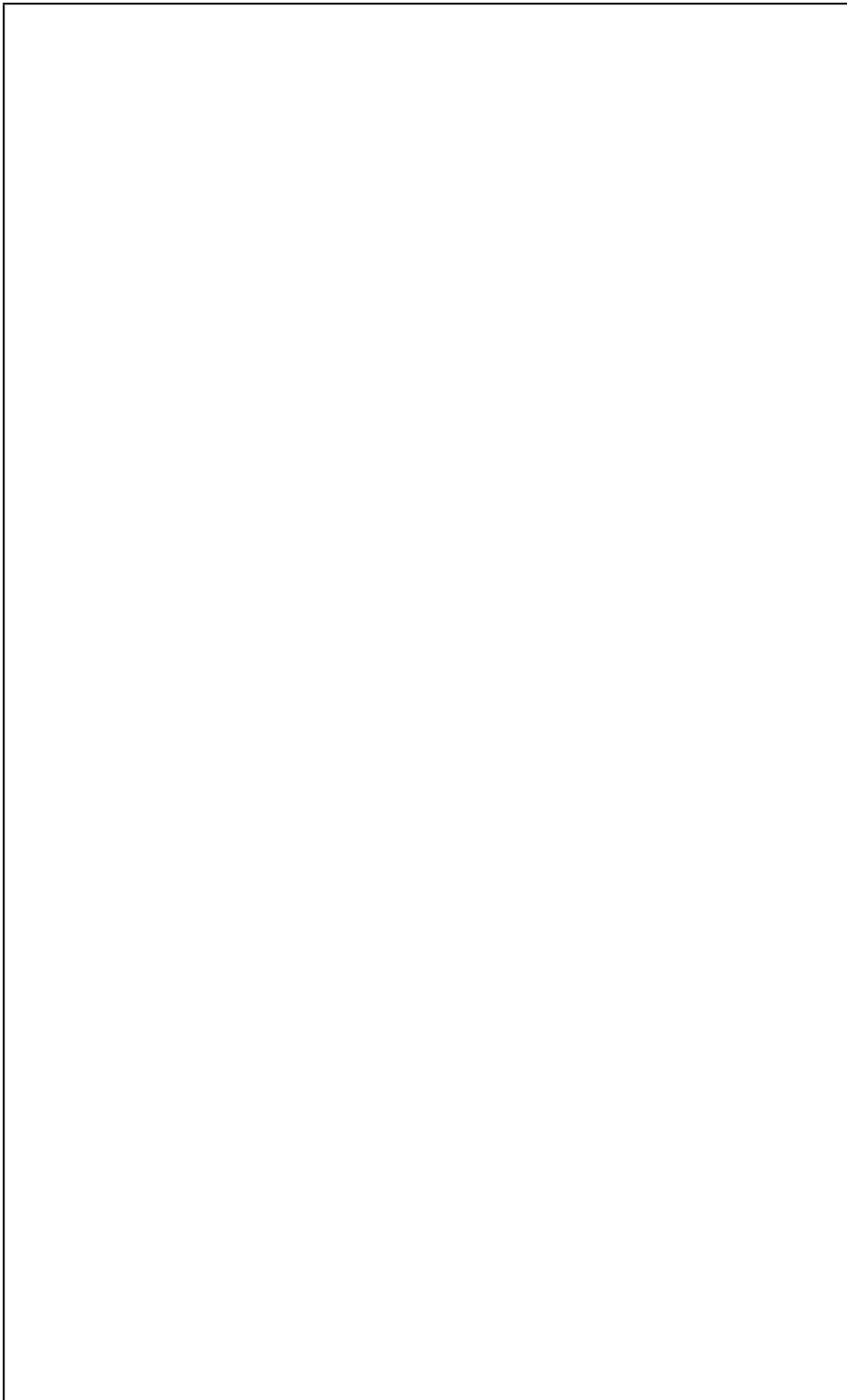
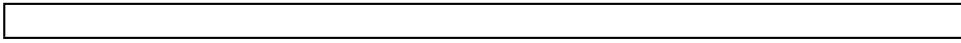
# Account Management

6.1 Passenger Registration, Data Access Utilities

6.2 Login, Data Access Utilities

6.3 Password Retrieval, Data Access Utilities

6.4 Settings Management, Data Access Utilities



## Chapter 7

# Component-Component Integration

### 7.1 Remote Services Interface, Taxi Management System

|  |                      |
|--|----------------------|
| requestTaxi(passengerId, passengerLocation, destination) |                      |
| a null parameter   | NullPointerException |
| a passengerId not conform with the specifics             | exception            |
| a passengerLocation outside the city                     | exception            |
| an passengerLocation whose address doesn't exist         | exception            |
| a destination ...  | ...                  |
| valid arguments  | ok                   |
| endRide(taxiId, currentLocation)                         |                      |
| a null parameter   | NullPointerException |
| invalid taxiId   | error                |
| non existing taxiId                                      | error                |
| non existing currLOc                                     | error                |
| endRide(taxiId, currentLocation)                         |                      |
| null   | error                |
| invalid taxiId   | error                |
| non existing taxiId                                      | error                |
| invalid currLoc  |                      |
| non existing currLOc                                     |                      |
| togglePressed(taxiDriverId)                              |                      |

|              |    |
|--------------|----|
| invalid      |    |
| null         | 12 |
| non existing |    |

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## 7.2 Remote Services Interface, Account Management

(?)insertPassenger

(?)updatePassenger

(?)deletePassenger

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### 7.3 Remote Services Interface, System Administration

|   |  |
|---|--|
| checkPassword(adminId, password)                |  |
| null  |  |
| invalid   |  |
| non-existing adminId                            |  |
|   |  |
| verifyPermission(appId, operation)              |  |
| null  |  |
| invalid   |  |
| non existing appId                              |  |
| operation not existing(???)                     |  |
| permission not given to appId for the operation |  |
| permission granted                              |  |
|   |  |
| sendData(data)                                  |  |
| invalid format                                  |  |
| null  |  |
| wrong data                                      |  |
| insertZones                                     |  |
| invalid format                                  |  |
| null  |  |
| wrong data                                      |  |
| askZoneList                                     |  |
|   |  |
| updateZone                                      |  |
|   |  |
| invalid format                                  |  |
| null  |  |
| wrong data                                      |  |
|   |  |
| insert,   |  |
|   |  |
| invalid format                                  |  |
| null  |  |
| wrong data                                      |  |

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