**Use Case Name**

Request a shared ride

**Participating Actors**

* System
* Authenticated user/s
* Passenger/s
* Taxi driver

**Entry Condition**

* An authenticated user requests a shared ride

**Flow of Events**

* The authenticated user specifies the starting address and the destination address
* The system forwards the request to the first taxi from the queue of the area where the authenticated user is
* The taxi driver confirms the request using the mobile app
* The system informs the authenticated user about the code of the incoming taxi and the waiting time
* The taxi gets to the authenticated user
* The authenticated user gets in the taxi and becomes a passenger
* Other authenticated users who requested a shared ride get in the taxi during the ride
* The passenger gets to his destination
* The system calculates the passenger’s fee

**Exit Condition**

* The passenger pays his part of the fee and gets off the taxi

**Exceptions**

* If there aren’t other users who requested a shared ride, the passenger pays the full fee
* If the authenticated user who requests a shared ride is on the route of another shared ride already in progress, the system doesn’t get the first taxi in the queue and sends that taxi instead
* If the authenticated user gives an invalid address, the system shows an error message and asks for a new address
* If there isn’t any free taxi in the area where the passenger is, the system selects the first taxi from the nearest area
* If there isn’t any free taxi at all, the system doesn’t allow the request and shows an error message
* If the taxi driver doesn’t confirm the request, the system forwards the request to another taxi driver
* If the taxi doesn’t manage to get to the passenger (on time/at all), the system informs the passenger and sends another taxi

**Special Requirements**

* The city is already divided into Taxi Zones (approximately 2 km2 each).
* For each zone there is a queue of taxi (it can be empty if there aren’t any taxies in its zone).
* The Taxi Driver must use a Mobile App for sending his availability.
* Every Taxi and taxi Driver must have an identification code.