Cab Booking Problem

Problem Statement:
We want to build a cab booking platform to allow a rider to book a cab.

Details:
* The location is represented as a (x, y) coordinate.
* Distance between two points (x1, y1) and(x2, y2) is sqrt((x1-x2)^2 + (y1-y2)^2)
* Platform has decided upon the maximum distance a driver has to travel to pickup a rider.
* A cab has only 1 driver.
* Sharing of cab is not allowed between riders
* There is a single type of cab

Please build an application that exposes following features to riders and drivers.
* Register a rider.
* Register a driver/cab
* Update a cab's location
* A driver can switch on/off his availability
* A rider can book a cab
* Fetch history of all rides taken by a rider.
* End the Trip

Expectation from this round
* Code should be extensible.
* Clean professional level code.
* Functional Completeness including good modelling.
* User Identification.

Pickle module in python and storing of data in file