

RTO Management System

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Functional Requirements:

1. User apply for a license; a user can have multiple licenses but a license is associated with a particular user and license cannot exist without User.
2. User can apply for permit; a user can have multiple permits but a permit is assigned to a single user with participation constraint toward permit.
3. If a vehicle needs to be used in whole country it requires a permit and a vehicle can have only one permit associated with it like wise for the permit.
4. A RC book requires a vehicle associated with it, means a RC book cannot exist without a vehicle(complete participation) but a vehicle can exist without RC hence partial participation.
5. User apply for Carnet; user can have multiple catnets but one carnet is associated with one use only with participation constraint.
6. Vehicle requires a License plate to run on roads; a license plate exist when it is associated with a particular vehicle
7. A vehicle requires a carnet to be used on international roads; a vehicle can have only one carnet associated with it and same goes for carnet also with participation constraint that the carnet never exists without a vehicle.
8. Vehicle requires the insurance; a vehicle is one to one associated with the insurance but insurance cannot exist without the vehicle.
9. An Employee works on a particular RTO Branch; employee works on single branch but branch can have multiple employees with participation constraint that the employee cannot without a RTO Branch.
10. A user requires RC in his name as proof of ownership of vehicle; A user can have multiple RC books but a particular RC book is associated with only one user and also cannot exist without the user.
11. Vehicle type should be mentioned on license; license can have multiple vehicle type associated with it but vehicle class can be associated with multiple licenses
12. RTO branch maintains user details; RTO branch can maintain details of multiple users and user can be associated with multiple RTO branches.
13. A RTO branch issues license; RTO branch can issue multiple license but license has only one RTO branch associated with it.
14. A RTO branch issues RC; RTO branch can issue multiple RCs but RC has only one RTO branch associated with it.

15. A RTO branch issues permit; RTO branch can issue multiple permit but permit has only one RTO branch associated with it.
16. A RTO branch issues carnet; RTO branch can issue multiple carnet but carnet has only one RTO branch associated with it.
17. A RTO branch issues international driving license; RTO branch can issue multiple international driving license but international driving license has only one RTO branch associated with it.
18. An employee belongs to department; department can have multiple employees but an employee belongs to only one department. An employee cannot exist in RTO without department.
19. An employee verifies details of license before issuing it; an employee can verify multiple licenses but one license is checked by one employee only.
20. An employee verifies details of RC before issuing it; an employee can verify multiple RCs but one RC is checked by one employee only.
21. An employee verifies details of permit before issuing it; an employee can verify multiple permits but one permit is checked by one employee only.
22. An employee verifies details of carnet before issuing it; an employee can verify multiple carnets but one carnet is checked by one employee only.