**Class and Association Definitions**

**Class Descriptions**

* **Address -** A place or many places that the corporation resides.
* **Certification\_Item -** An association between SkillCertification and MaintenanceItem to keep track of what particular skill is being used for a maintenance item.
* **Corporation -** A company that has signed up in the automotive as a single unit.
* **Customer –** An individual who is going to use the Automotive service
* **Employee -** A person who works at the automotive repair shop.
* **ExistingCustomer –** A customer who has already maintained their vehicle once
* **Individual -** A customer who is a single person that has signed up in the automotive
* **Item -** A tool that is being used to perform a particular maintenance
* **Item\_Skill -** An association between the maintenance item and the skill to represent a particular skill needed to use a particular maintenance item.
* **MaintenanceItem -** A tool used on a particular maintenance order
* **MaintenanceOrder –** A document that lists the costs of the services of the automobile.
* **MaintenancePackage -** A set of maintenance items that are used for a certain task on a vehicle
* **Mechanic -** An employee who is able to work on a specific maintenance order.
* **Mentorship -** a association between a mentor employee and a mentee employee where the mentor teaches a mentee a skill.
* **Notification -** An Email that alerts the customer when their automobile(s) are likely due for some maintenance
* **PremierMember -** A customer who is paying extra for extra advantages
* **ProspectiveMember -** A customer who may become a potential steady or premier customer
* **Referral -** A customer that was recommended to the shop by an existing customer
* **Skill -** an ability that a mechanic needs to perform a maintenance
* **SkillCertification -** a document that tells what skill the mechanic has.
* **SteadyMember -** a regular customer who has signed up for generated email notifications maintenance appointments
* **Technician -** An employee that writes up the maintenance visit order
* **Timecard -** A card that keeps track of the start and end hours of an employee.
* **Vehicle –** The automobile that is being repaired at the auto repair shop

**Associations**

1. An ExistingCustomer can be a SteadyMember
2. Zero or one SteadyMember(s) is an ExistingCustomer
3. An ExistingCustomer can be a PremierMember
4. Zero or one PremierMember(s) is an ExistingCustomer
5. An ExistingCustomer refers one or more ProspectiveMember(s)
6. One or more ProspectiveMember(s) are referred by an ExistingCustomer
7. Zero or one ExistingCustomer(s) is a Customer
8. A Customer can be an ExistingCustomer(s)
9. Zero or one ProspectiveMember(s) is a Customer
10. A Customer can be a ProspectiveMember
11. Zero or one Corporation(s) are a Customer
12. Zero or one Individual(s) are a Customer
13. A Customer can be a Corporation
14. A Customer can be an Individual
15. A Customer receives one or more Notification(s)
16. One or more Notification(s) are received by a Customer
17. A Customer owns one or more Vehicle(s)
18. One or more Vehicle(s) are owned by a Customer
19. A Vehicle is put on one or more MaintenanceOrder(s)
20. One or more MaintenanceOrder(s) contains one and only one Vehicle
21. A MaintenanceOrder uses one or more MaintenanceItem(s)
22. One or more MaintenanceItem(s) is used by a MaintenanceOrder
23. One or more MaintenenceItem(s) is contained by a MaintenancePackage
24. A MaintenancePackage contains one or more MaintenanceItem(s)
25. A Technician writes a MaintenanceOrder
26. A MaintenanceOrder is written by a Technician
27. An Employee can be a Technician
28. A Technician is an Employee
29. An Employee can be a Mechanic
30. A Mechanic is an Employee
31. A Mechanic is mentors in a Mentorship
32. A Mentorship is being taught by a Mechanic
33. A Mechanic is being mentored in a Mentorship
34. A Mentorship teaches a Mechanic
35. A Mechanic has one or many SkillCertification(s)
36. A SkillCertification is owned by one or many Mechanic(s)
37. A SkillCertification is assigned to a MaintenanceItem
38. A SkillCertification acquires a Skill
39. A Skill is acquired by one or many SkillCertification(s)
40. A Skill is required by one or more items
41. An Item requires one or many skills
42. An Item is in a MaintenanceItem
43. A MaintenanceItem has an Item
44. A MaintenanceItem assigns a SkillCertification
45. A MaintanenceItem is assigned by one or more Mechanic(s)
46. A Mechanic is assigned to one or more MaintananceItem(s)
47. An Employee punches by one or more Timecard(s)
48. A Timecard is punched by an Employee
49. Referral is referred by an ExistingCustomer
50. An ExistingCustomers refers one or more Referral(s)
51. Referral refers a ProspectiveMember
52. A ProspectiveMember is referred by one and only one Referral