

I. **Business Rule**

- A vehicle belongs to only one customer.
- An employee can either be a technician or a mechanics but not both.
- Technician must have knowledge of all services provided at Dave's Automotive.
- Technician only need to write services which are not part of vehicle routine services.
- Dave's Automotive will store information related to parts of vehicle.

II. **Class Definition in English**

- **Customer:** people who require or have a possible of requiring service at Dave's Automotive.
- **Current:** customers who come to Dave's Automotive for vehicle service.
- **Prospective:** customers who have potential of requiring vehicle service from Dave's Automotive.
- **PromotionContact:** information associated with date, time, and mode of communication in which Dave's Automotive attempt to entice a prospective customer into a current customer.
- **Premier:** current customers who pay monthly (buy insurance) for service from Dave's Automotive.
- **Steady:** current customers who pay per visit for service from Dave's Automotive.
- **Address:** location or locations in which current customers associate with.
- **PriceIncrease:** the amount and cause of an increase in monthly payment of premier customers.
- **Vehicle:** a machine who purpose to carry people around from place to place at high speed.
- **VehicleFamily:** contains general information about a vehicle.
- **MaintainOrder:** services that require to be perform on a specific vehicle.
- **Employee:** people who work at Dave's Automotive.
- **Technician:** employees of Dave's Automotive who purpose is to diagnose and write extra services required by a vehicle.
- **Mechanics:** employees of Dave's Automotive who purpose are to do maintain or repair of a vehicle.
- **MaintainPackage:** a collection of service.
- **MaintainPackageLine:** shows relationship between MaintainPackage and MaintainOrder.
- **Skillset:** abilities of mechanics to do a specific job.
- **SkillsetLine:** keep track of mystery level of a specific skill for a specific customer.
- **MaintainItem:** a specific service that has been assigned to a specific mechanic.
- **TraniningSkill:** show a history of training relationship between mechanics.
- **ZipLocation:** a place in United States where postal service has assigned a specific identification code.

III. **Normalization:**

- All classes are in third normalization form because we are able to eliminate multivalve and repeated values. In addition, we also able to eliminate sub key through the use of lossless join decomposition especially for class **Address** and **Vehicle**.

