GROUP REQUIREMENT ENGINEERING

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Electric Vehicle Charging Stations

Electric vehicle charging stations are equipped with charging points or units that supply electric power to charge connected vehicles. An embedded system resides in the charging station to provide processing for graphics displays, report any issues with the device and alert technicians when maintenance is required. This embedded solution provides an easy and cost-effective approach to monitoring and maintaining the charging infrastructure.

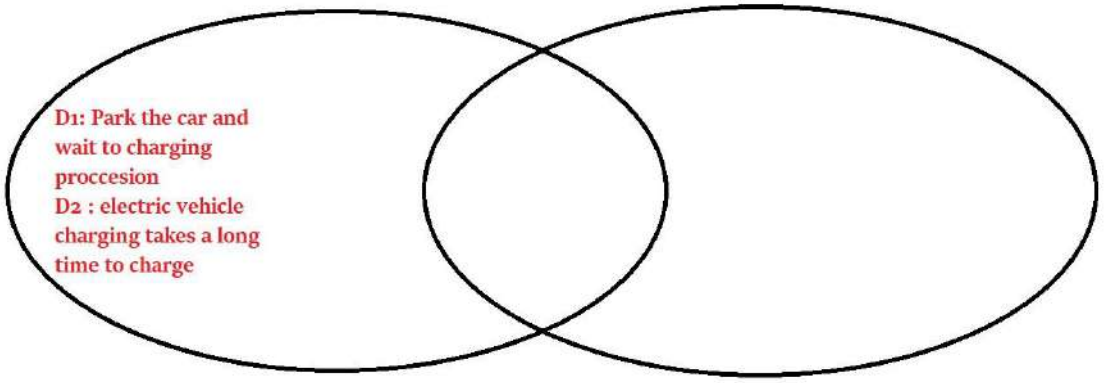
Some of the common uses of electric vehicle charging stations include:

- Charging vehicles
- Swapping batteries ● Parking vehicles

WRSPM

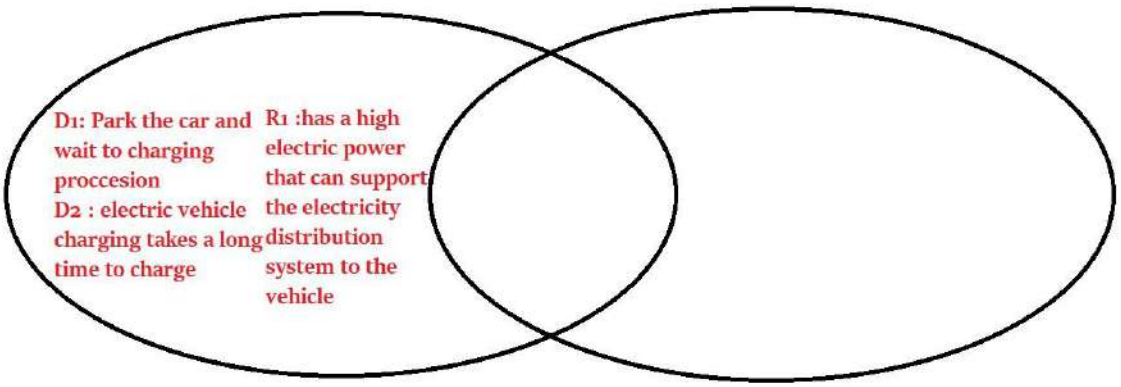
W (World)

The assumption are made to this topic are, we can use this technology everytime, and the fee is cheaper than if we use gasoline (with the same engine capacity specifications)



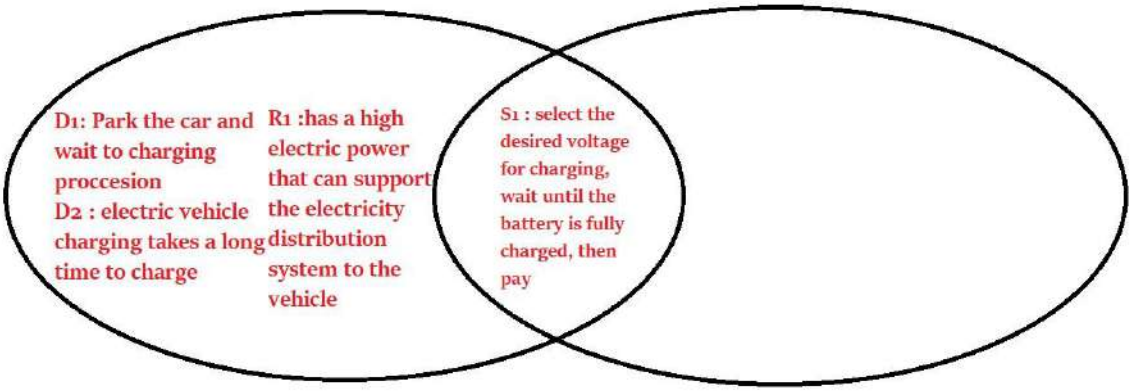
R (Requirements)

The requirements that should be appear in this model is, the power of the electricity, the land of park and the electricity backup

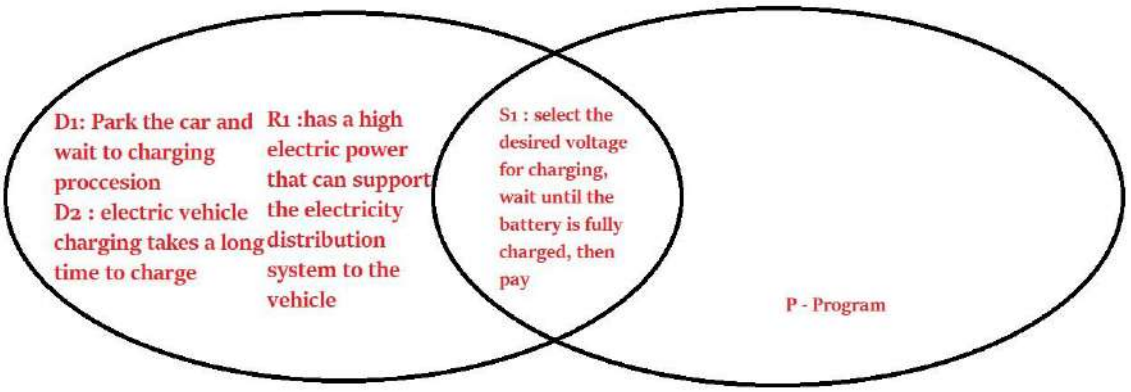


S (System)

when entering the tool that has been prepared, then select the desired mode, the mode is in the form of the available voltage for how fast it is to be charged, the greater the voltage the faster but the fee is more expensive

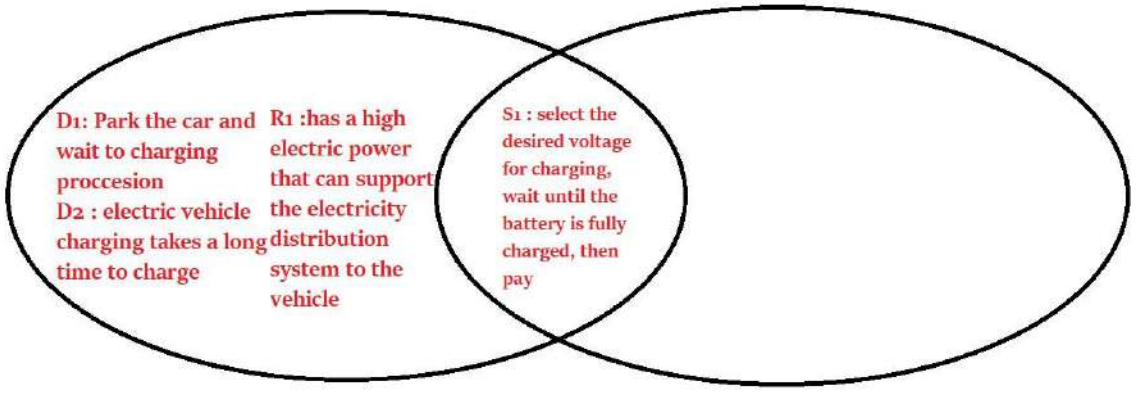


P(Program)



M(Machine)

The power storage system at Electric Vehicle Charging Station consists of three main units: Battery, Power Conversion System, and Software.



A. Functional Requirements

- The program should allow users to search for chargingstations by location, type of charging station, and availability of charging points.
- The program should allow users to view a map of all thecharging stations in the world.
- The program should allow users to access detailedinformation about specific charging stations, including contact information, opening hours, and payment methods.
- The program should allow users to leave reviews andratings for charging stations.
- The program should allow users to share information aboutcharging station locations with friends and family.

B. Non-Functional Requirements

1. Security The program machine electric vehicle chargingstations will have a secure payment system that meets industry standards. The payment system will be encrypted to ensure the safety and security of driver information.

2. Reliability The program machine electric vehicle chargingstations will be reliable and available 24 hours a day. The program machine electric vehicle charging stations will have a system that is designed to provide high levels of uptime and performance.

3. Scalability The program machine electric vehicle chargingstations will be designed to be scalable and easily expandable. The program machine electric vehicle charging

stations will be able to handle an increasing number of users and transactions.

4. Compatibility The program machine electric vehiclecharging stations will be compatible with all major electric vehicle models and charging standards.