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| Accidents | System-Level Hazards | Safety Constraints |
| 1. Loss of life on serious injuries 2. Catastrophic damage to the vehicle or other property | Delay in the surrounding object Detection.  Incorrect message passing from speed sensor to proximity sensor. | The system must sample its surrounding for every new object on 0.1 secs interval.   Proximity sensor should get updated with its old value getting from the speed sensor. |
| The backyard proximity sensing for 270 degree are not in sync with forward 90 degree | All proximity sensors should get in sync and act accordingly with the speed sensors. |
|  | Incorrect information shown to the driver | Speed controller and accelerator and break should be in sync, controller display section should be checked within 1 sec interval |
|  | The proximity sensor will not working also when the car is in static. | The proximity sensor should get on as the system controller and the engine gets on. |
| Chances for getting theft for the vehicle. | The proximity sensor is not working at night. | The proximity sensor will be attached with GPS system which have a clock which 24 hours online. |
|  | Speed sensor attached with the brake is not acting immediately | The speed controller will control the speed sensor and the brake. The speed controller only controlled by the signal coming from proximity sensor, GPS and the old values. |
|  | Proximity sensor will still send an alert when the object is away. | Speed sensor will update the value to the speed controller which will tell the proximity sensor to update its new value along with GPS. |

**Pic: Hazard Analysis on Speed Regulation control system with proximity sensor.**