

## **ABSTRACT:-**

Transportation has become an essential medium in today's life, it has become a daily routine of many people. One among those transportation medium is railways, this project mainly focuses on the automation in the field of railways, and i.e. the automatic railway gate control using Arduino Nano, Buzzer, LED, IR Sensor etc. As the need for transportation increases accidents are also increasing day by day, this project helps in eradicating the railway accidents gradually. An arduino is used to feed a program that works according to the desire of our project. Main purpose of this project is to make sure that the accident rate is decreased while crossing a railway gate. This project can also be implemented in real world with some upgraded equipment but the working principle of this project always remain the same. This project aims to provide an automatic railway gate control at the level crossing replacing the manual gate control. The railway gate is to be closed automatically when a train is done by using two IR sensors. The opening and closing of the gate is to be done using servomotors and this servomotor is controlled by Arduino. This insures more protection from the accident. LCD and alarm are used to indicate the closing of gate for the people who are trying to cross the gate. IR sensor are used for the proper closing of the gate. This system efficiently avoid the accidents at level crossing. Programming is done by Arduino C to operate hardware.