

Step 5 – Plan : Word Code & flow chart

Word code

1. Start
 2. Continuously monitor inputs: train approach, track occupancy, vehicle presence, gate positions, emergency stop
 3. If sensor fault or an emergency occurs → initiate fail safe : gates down + warning on
 4. If no fault or emergency occurs check train approaching sensor
 5. If train is approaching → lower gates and activate warning signals for cars approaching crossing
 6. Once gates are down If sensors show that there is a car stuck on the tracks → Keep gates down + Warnings on + raise alert to operator (train can't pass, obstruction on track - emergency train stop)
 7. If sensors dont show car stuck on track keep gates down and warning wait 5s and re-check train approaching sensor
 8. Wait 1 minute for train to pass
 9. Re check crossing sensor to check if train has passed and track has cleared
 10. If track is clear raise gates → wait 5s then turn off warning lights and bells
 11. End : system runs continuously
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Flow chart





