State Machine Diagram - Smart Traffic Light Control System

System starts

PowerOn_Init

After 10s delay

WelcomeScreen

Display "Welcome"

WaitForKey

On '*' key pressed   If password is incorrect

EnterPassword

CheckPassword

If password is correct

ReadTrafficSensors

If Lane 1 has more vehicles

Lane1_Green

After countdown

Lane1_Yellow

Lane1_Red

If Lane 2 has more vehicles

Lane2_Green

After countdown

Lane2_Yellow

Lane2_Red