Navigation

NewTargetDest && TargetDistance is 0
Map the CurrentTarget and CurrentLocation to coordinates
Set TargetRPM
Calculate TargetAngle and TargetDistance
Post StopDriving to MotorSM
Clear Odometer
Post TargetSquareReached to MasterSM

TargetSquareReached
Post StopDriving to MotorSM
Clear Odometer
Post TargetSquareREached to MasterSM

NewTargetDest && TargetDistance != 0
Map the CurrentTarget and CurrentLocation to coordinates
Set TargetRPM
Calculate TargetAngle and TargetDistance
Init ACC_WAIT_TIMER

Waiting4Target

UnFrontOofComplete
Post NewTargetDest with
CurrentTarget as EventParam to
NavigationSM

Moving

EncoderCountReached && CurrentLocation != TargetLocation
Post NewTargetDest with CurrentTarget as EventParam to
NavigationSM

EncoderCountReached && CurrentLocation == TargetLocation
Post StopDriving to MotorSM
Clear Odometer
Post TargetSquareReached to MasterSM

Wait4Acc

Aligning

EncoderCountReached
Post StopDriving to MotorSM
Set the desired color
Set the Odometer to TargetDistance
Adjust TargetRPM
Post DriveForward to MotorSM

ACC_WAIT_TIMER TIMEOUT
Query CurrentAngle from Accelerometer
Set Odometer to TargetAngle
Post the rotation to MotorSM