the waypoints and has not yet reached any turns. The input values range from [0,1]. The expected value of this argument is always close to 1 because the path followed by the vehicle is almost a straight line between the waypoints and combined with the **steering_sensitivity** it can provide a less jerky experience for the vehicle.

## Control (Gazebo):

**max_x**: This is the absolute maximum value of the throttle that the Gazebo simulation can take, signifying the maximum speed of the vehicle in the direction of the vehicle·s heading. This parameter takes the value according to the Gazebo environment mappings. By default it is set to 1.

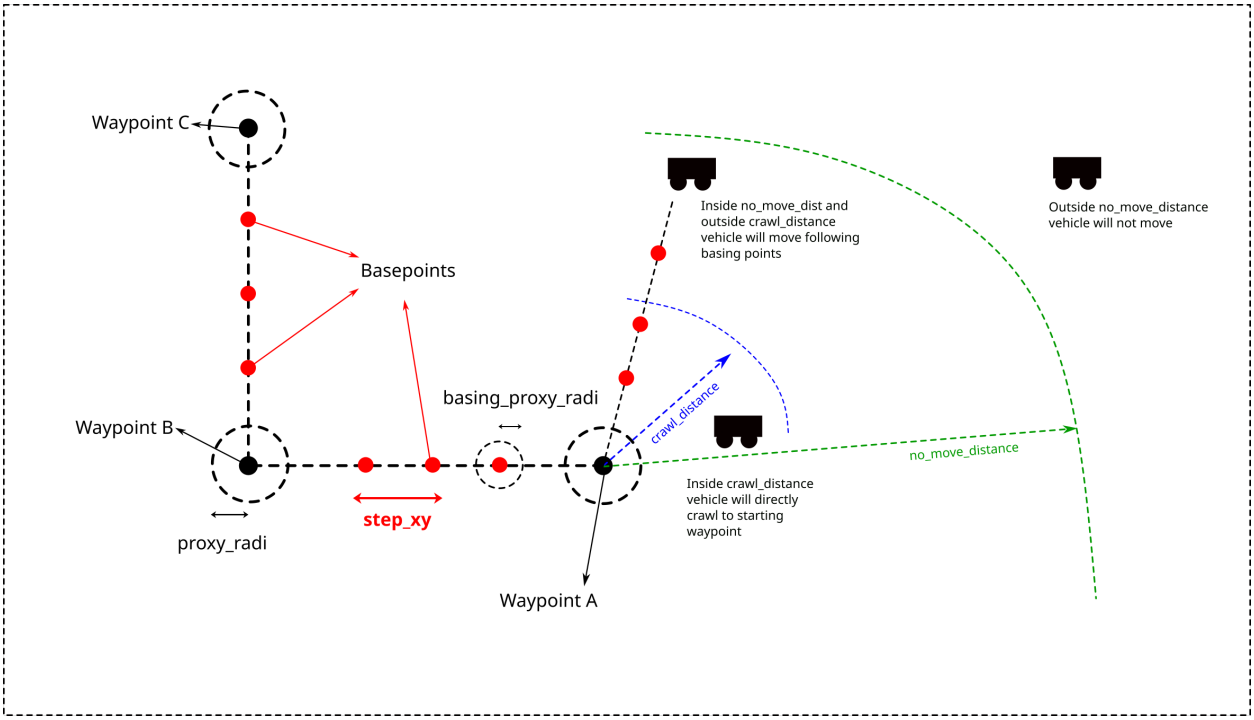
**max_z**: This is the absolute maximum value of the steering that the Gazebo simulation can take, signifying the maximum turn rate (rad/s) of the vehicle in either direction. This parameter takes the value according to the Gazebo environment mappings. By default it is set to 1.

**x_sensitivity**: It defines the sensitivity of the throttle values while the vehicle is following the path between the waypoints and has not yet reached any turns. The input values range from [0,1]. The expected value of this argument is always close to 1 because the path followed by the vehicle is almost a straight line between the waypoints and combined with the **z_sensitivity** it can provide a less jerky experience for the vehicle.

**z_sensitivity**:  It defines the sensitivity of the steering values while the vehicle is following the path between the waypoints and has not yet reached any turns. The input values range from [0,1]. The expected value of this argument is always much less than 1 to prevent any wobble in the vehicle path.

**x_turn_sensitivity**: It defines the sensitivity of the throttle values while the vehicle takes a turn. The input values range from [0,1]. The expected value of this argument is always much less than 1 because this slows down the vehicle at the turn.

**z_turn_sensitivity**: It defines the sensitivity of the steering values while the vehicle takes a turn. The input values range from [0,1]. The expected value of this argument is always close to 1. Since the vehicle slows down due to the parameter **x_turn_sensitivity**, we need to have the steering values as close to the **max_z** as possible to prevent any path deviations in the vehicle at sharper turns.

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