

Code

```
def reward_function(params) :  
  
    reward = 1e-3  
  
    track_width = params['track_width']  
    distance_from_center = params['distance_from_center']  
    steering = params['steering_angle']  
    speed = params['speed']  
    all_wheels_on_track = params['all_wheels_on_track']  
  
    if distance_from_center >= 0.0 and distance_from_center <= 0.03 :  
        reward = 1.0  
  
    if not all_wheels_on_track :  
        reward = reward - 1  
    else :  
        reward = reward + (params['progress'])  
  
    if speed < 2.68 :  
        reward *= 0.80  
    elif speed >= 2.68 and speed <= 5.33 :  
        reward += speed  
    else :  
        reward = speed * speed + reward  
  
    return float(reward)
```