

Lab 3a: Line Following Grading Sheet

Team: _____

Final score: _____

Members: _____

First try:

Grading Standard	Points	Out of
Robot seems to follow the line		20
Reached half-way check point (via checkpoint 1)		40
Reached finish (via checkpoint 2) in under 45 seconds		40
In over 45 seconds : 30 points		
Total		100

Second try:

Grading Standard	Points	Out of
Robot seems to follow the line		20
Reached half-way check point (via checkpoint 1)		40
Reached finish (via checkpoint 2) in under 45 seconds		40
In over 45 seconds : 30 points		
Total		100

Third try:

Grading Standard	Points	Out of
Robot seems to follow the line		20
Reached half-way check point (via checkpoint 1)		40
Reached finish (via checkpoint 2) in under 45 seconds		40
In over 45 seconds : 30 points		
Total		100

Lab 3b: Dead Reckoning Grading Sheet

Team: _____

Final score: _____

Members: _____

First try:

Velocity for the first 5 seconds		Velocity for the next 5 seconds		Velocity for the last 5 seconds	
Left:	Right:	Left:	Right:	Left:	Right:
Reported Position in cm (r)				Reported Orientation in degrees (r)	
Measured Position in cm (m)				Measured Orientation in degrees (m)	
Error in position estimate in cm ($ r - m $)				Error in orientation estimate in degrees ($ r - m $)	
Grading Standard				Points	Out of
Error in position estimate ≤ 5cm					70
Error in position estimate > 5 cm : -10 points/cm					
Error in orientation estimate ≤ 10 degrees					30
Error in orientation estimate > 10 degrees: -5 points/degree					
Total					100

Second try:

Velocity for the first 5 seconds		Velocity for the next 5 seconds		Velocity for the last 5 seconds	
Left:	Right:	Left:	Right:	Left:	Right:
Reported Position in cm (r)				Reported Orientation in degrees (r)	
Measured Position in cm (m)				Measured Orientation in degrees (m)	
Error in position estimate in cm ($ r - m $)				Error in orientation estimate in degrees ($ r - m $)	
Grading Standard				Points	Out of
Error in position estimate ≤ 5cm					70
Error in position estimate > 5 cm : -10 points/cm					
Error in orientation estimate ≤ 10 degrees					30
Error in orientation estimate > 10 degrees : -5 points/degree					
Easier velocity request					-10
Total					100

Third try:

Velocity for the first 5 seconds		Velocity for the next 5 seconds		Velocity for the last 5 seconds	
Left:	Right:	Left:	Right:	Left:	Right:
Reported Position in cm (r)				Reported Orientation in degrees (r)	
Measured Position in cm (m)				Measured Orientation in degrees (m)	
Error in position estimate in cm ($ r - m $)				Error in orientation estimate in degrees ($ r - m $)	
Grading Standard				Points	Out of
Error in position estimate $\leq 5\text{cm}$					70
Error in position estimate $> 5\text{cm}$: -10 points/cm					
Error in orientation estimate ≤ 10 degrees					30
Error in orientation estimate > 10 degrees : -5 points/degree					
Easier velocity request					-20
Total					100