INSTRUCTIONS:
Fill out the hazard analysis and risk assessment below.
HA-001 should be for the lane departure warning function as discusse
HA-002 should be for the lane keeping assistance function as discuss
Then come up with your own situations and hazards for the lane assi
When finished, export your spreadsheet as a pdf file so that a review

Hazard ID			
	Operational Mode	**Operational Scenario**	**Environmental Details**
HA-001	OM03 - Normal driving	OS04 - Highway	EN06 - Rain (slippery
HA-002	OM03 - Normal driving	OS03 - Country Road	EN01 - Normal conditi
HA-003	OM03 - Normal driving	OS03 - Country Road	EN04 - Snowfall
HA-004	OM03 - Normal driving	OS09 - Road tunnel	EN09 - N/A

ed in the lecture.
sed in the lecture.
stance system. Fill in the HA-003 and HA-004 rows.
er can easily see your work.

Situational Analysis			
Situation Details	**Other Details (optional)**	**Item Usage (function)**	**Situation Description**
SD02 - High speed		IU01 - Correctly use	Normal driving on a rainy day on a
SD02 - High speed		IU02 - Incorrectly us	Normal driving on country roads during nor
SD02 - High speed		IU01 - Correctly use	Normal driving while snowfall with high
SD02 - High speed		IU01 - Correctly use	Normal driving in a tunnel without lane

Function	Deviation	Deviation Details	Hazard Identification
			Hazardous Event (resulting effect)
Lane Departure	DV04 - Actor eff	The vibration of the	EV03 - Car spins out of
Lane Keeping	DV03 - Function	Driver could take off both	EV-01 - Side collision v
Lane Departure	DV13 - Sensor	Due to limited view and	EV04 - Car comes off
Lane Keeping	DV01 -	Due to tunnel (bad lights)	EV-06 - Front collision

Event Details	Hazardous Event Description	Exposure (of situation)
By strong vibration the driver	To strong feedback from	E3 - Medium
Because hands aren't on the	misuse of function for	E2 - Low
The lane departure isn't working	Not detected lane departure	E2 - Low
Lane keeping isn't working, car is	No detection of lanes	E1 - Very low

Hazardous Event Classification			
Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)
Driving on a highway on a rainy	S3 - Life-threatening or	High speed on a	C1 - Simply controllable
The combination of driving on a	S3 - Life-threatening or	High speed on a	C3 - Difficult to control or
Driving with high speed during	S3 - Life-threatening or	High speed on a	C2 - Normally
There aren't that much tunnels	S3 - Life-threatening or	High speed on a	C2 - Normally

	Determination of ASIL and Safety Goals	
Rationale **(for controllability)**	**ASIL** **Determination**	**Safety Goal**
Hands are on the wheel. Rain already causes	A	The lane departure warning feedback -
Because hands aren't on the wheel at high	B	The lane keeping assisteance funciton
The driver is in general aware that he's leaving	A	If possible, the sensor sensity must be
The driver is in general aware that he's leaving	QM	Quality managed