Risk Number					Risk Analysis								
Risk Number	Identify By	Category	Risk Owner	Trigger	Qualitatitive Analysis				Quantitative Analysis				Risk Action
					(The Risk of)	Reasoning (Caused by)	Resulting in	Impact	Risk Score= Impact*Likelihood	Impact	Probability	EMV Cost(USD)= Cost*Probability	
R001	Urvashi Burman, Urvi Tank	Software Development (Negative Risk)	Software Engineer	Software integration failure	Integration of software along with the hardware in the development	software code bugs and wireframes design errors	Increase in the timeline in the development phase and longer testing phase in the project	**High Impact:** A delay in the final approval by 30 days and an additional cost of 450,000 USD will be incurred.	56	8	7	70% of 450,000 = $315,000	Establishing a stringent approach for quality control that involves routinely testing and validating hardware and software components. Additionally, creating a thorough budget for the project that accounts for all expenses related to the integration of hardware and software. Spending should be regularly monitored, and the budget should be adjusted as needed to prevent cost overruns.
R002	Yasaswi Madala, Himanshu Mandloi	Testing (Negative Risk)	Tester	Object detection failure	Auto pilot feature not detecting an object	Because of software system failure	This will affect the functionality of the system leading to performance issues.	**Moderate Impact:** Releasing of the product will get delayed by 20 days with an additional cost of 250,000 USD.	27	4	3	30% of 250,000 = $75,000	By performing testing with real data, different items, and unexpected events.Working on system modifications, performing rigorous regression testing and evaluating the system's ability.Working closely with the programmers to make sure that the system is made to correctly identify objects and take care of any problems that are found during testing.
R003	Sowmiya Mankala, Kuldeep Owalekar	Research (Positive Risk)	Research & Development Team	Extensive Research	Conducting extensive research with better competetive analysis	performing a detailed analysis with a good Research & development team.	The reduction in project timeline and schedule along with the sustaining the brand name with improved quality.	**Somewhat Low Impact:** Building a better product which will result in early finish of the project by 10 days with a cost reduction of 110,000USD	6	2	3	30% of 110,000 = $33,000	By carrying out detailed research and doing an excellent competitive analysis, businesses may discover new competitors or emerging industry trends. While extensive research and competition analysis can be helpful for discovering opportunities and boosting business performance, they can also lead to a focus on present rivals and trends rather than on innovation or chasing new markets.

Risk Response Plan										Risk Monitoring and Controlling
Risk Response	Detail of Response	Integration with Project Plan	Cost of Response	Reassessment of Risk		Contingency Plan	Secondary Risk	Secondary Risk Analysis	Secondary Risk Response	Risk Status
				Probablity	Impact					
Mitigate	1. Test the software thoroughly before integration to identify and fix any bugs and design errors. 2. Finalize software objectives prior to development and conduct regular code reviews to identify any potential errors in the software code and address. 3. Ensure that communication and is clear between the hardware and software development teams and strategize a backup plan.	Add work to schedule	$315,000	5	6	1. Develop a backup plan to ensure that the project can continue to move forward even if there are delays or issues in the development process. 2. Conduct regular code reviews to identify and address any issues before they become major problems. 3. Use version control software to track changes to the code and ensure that all changes are properly documented.	The risk of the software developer taking sick leaves before the software development phase is complete.	Probability - 5 Impact - 6	1. Consider remote work opportunities with the software developer. 2. Hire a backup software developer to fill in the days of absence.	OPEN
Mitigate	1. Appropriate environment checking prior to the start of testing phase to avoid external errors. 2. Cautiously checking the algorithm to avoid lack of diverse and representative training data. 3. Conducting adequate testing to discover hidden bugs and glitches that may affect the functionality of the Autopilot feature.	Add work to schedule	$75,000	3	4	1. To mitigate the risk of system failure, contingency plans should include backup systems or redundant software that can take over in case of any malfunctions. 2. Proper emergency procedures and protocols should be established in case of any accidents or system failures to ensure the safety of drivers and passengers.	The risk of the tester leaving the before the project completion date.	Probability - 3 Impact - 4	1. Transfer the responsibilities to another available tester. 2. Ensure at least 70% is done before the tester leaves the job.	OPEN
Aggravate	1. Define clear objectives, stakeholder analysis, and scope for the research and development team to ensure it is aligned with the overall project goals. 2. A better competitive analysis can avoid scope creep in software and hardware development and lead to effective testing procedures for better quality. 3. Provide adequate resources and extentive expert support to conduct the research effectively, including funding, personnel, and tools.	Add work to schedule and budget	33,000	3	2	1. If the research and development team encounters unexpected challenges or setbacks, have contingency plans in place that can be activated quickly to address the issues and keep the project on track. 2. In case of delays or roadblocks, identify alternative approaches or solutions that can be implemented to minimize the impact on the project timeline and budget.	The risk of extensive research improving efficiencies and processes in the upcoming phases.	Probability - 3 Impact - 1	Reduction of probability of occurrence of Risk 1 and Risk 3 due to increased performance with clear objectives.	OPEN