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Risk Analysis Table for Smart Mailbox Sorter: Automated Residential Mail Management System SSM-ARMS Project

Submitted by: Groupe n°2

Aya Chatiou 300203768
Mayssa Tebourbi 300145817
Esdras Sumaili 300210658
Nujhat Fatima 300130310
Sultan Oloyede 300076997
Decaho Gbegbe 300094197

Submitted to Professor: Dan Ionescu

Tas: Hassanein Ahmed
Hamideh Ghanadeh

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Introduction

As we embark on this innovative journey to automate residential mail management, it's crucial to consider potential roadblocks that might hinder our progress. We'll delve into a detailed risk analysis, identifying the probability of risks and their impact. We will also explore possible solutions to risks identified. The priority of our risks will be maintained by 3 levels; 3 being the highest priority while 1 being the lowest priority. By proactively addressing these risks, we can pave the way for a smooth and successful project experience.

Risk Analysis Table

Risk	Type	Probability	Impact	Mitigation/Solution	Priority	Responsibility
Caméra malfunction	Internal	Low	High	Backup Camera	3	HD and SW team
Sensor Malfunction	Internal	Low	High	Higher quality sensor	3	HD and SW team
Motor Malfunction	Internal	Low	High	Select motor with larger frame for increased stability	3	HD and SW team
Poor Connection to AI Cloud	Internal	Moderate	High	On chip software solution as backup (Tesseract)	3	HD and SW team
Cybersecurity attack	External	Low	Medium	Data Backup and Recovery	1	SW team
Motor Oil Leakage	Internal	Low	High	Maintenance to the motor + Motor enclosure	1	HD team
UI Malfunction	Internal	Moderate	Medium	Maintenance	2	SW team
Mailbox Lock Malfunction	External	Low	Medium	Maintenance + High Quality Lock	2	HD team
Asynchronous Execution	Internal	Low	High	Use of threads to have delay operations	3	SW team
Light Malfunction	Internal	Low	High	Luminance sensor + maintenance	3	HD team

Conclusion

By proactively identifying and mitigating potential risks, we can increase the chances of success for the SSM-ARMS project. This project is an ongoing process and we must continuously monitor and adapt our mitigation strategies as the project progresses.