



Smart Lock

A Cloud-Based Key

Group 5

Names

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0.1 Front Matter

0.1.1 Executive Summary

Executive Summary Here

0.1.2 Ethics Statement for Smart Lock Project

Our Smart Lock is designed to enhance security and convenience for users while upholding ethical standards in privacy, safety, and accessibility. We recognize our responsibility to develop and deploy technology that prioritizes ethical considerations in the following ways:

Privacy and Data Protection

We are committed to safeguarding user privacy by:

- Minimizing data collection to only essential information required for functionality.
- Implementing encryption and secure authentication methods to prevent unauthorized access.
- Ensuring that user data is never shared or sold to third parties without explicit consent.

Security and Reliability

To maintain the integrity of the smart lock system, we will:

- Use cybersecurity measures to prevent hacking and tampering.
- Regularly update software and firmware to address potential vulnerabilities.
- Ensure the lock functions reliably under various conditions to prevent accidental lockouts or failures.

User Safety and Accessibility

We aim to create a system that is safe and inclusive by:

- Designing intuitive user interfaces for easy access by individuals with different levels of technical proficiency.
- Ensuring compliance with accessibility standards for individuals with disabilities.

Ethical Use and Non-Discrimination

The smart lock must be used ethically and responsibly by:

- Preventing misuse that could lead to unauthorized surveillance or discrimination.
- Avoiding biases in authentication methods that may disadvantage certain user demographics.

Transparency and Accountability

To uphold ethical standards, we will:

- Clearly communicate to users how their data is handled and stored.
- Provide documentation on security features, risks, and best practices.
- Accept feedback and take responsibility for any ethical concerns that may arise during development and deployment.

By adhering to these ethical principles, we ensure that our Smart Lock product aligns with values of privacy, security, fairness, and social responsibility.

Table of Contents

0.1	Front Matter	1
0.1.1	Executive Summary	1
0.1.2	Ethics Statement for Smart Lock Project	1
0.2	Body	4
0.2.1	Background	4
0.2.2	Problem Definition	4
0.2.3	Concepts Considered	4
0.2.4	Concept Selection	4
0.2.5	Detail of Design	4
0.2.6	Economic Analysis	4
0.2.7	Outstanding Issues	4
0.3	Appendices	4
0.3.1	Models and Simulations	4
0.3.2	Decision Table Inputs	4
0.3.3	Test Plan	4
0.3.4	Results	4

0.2 Body

0.2.1 Background

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0.2.4 Concept Selection

0.2.5 Detail of Design

0.2.6 Economic Analysis

0.2.7 Outstanding Issues

0.3 Appendices

0.3.1 Models and Simulations

0.3.2 Decision Table Inputs

0.3.3 Test Plan

0.3.4 Results