## Vision Documentation

## Title of Project: Interactive House

# Revision History

| Date | Version | Description | Author |
|---|---|---|---|
| 04/02/26 | 1.0 | Initial vision for innovation subgroup | Anitta Antony |
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# 1. Product Overview

## 1.1Vision Statement

The vision of the Interactive House project is to design and explore an innovative smart home system that improves everyday living through automation, usability, and intelligent interaction. The system aims to demonstrate how modern software solutions can be used to control, monitor, and enhance a home environment in a simple and intuitive way.

From an innovative perspective, the project focuses on experimenting with creative ideas, modern technologies, and future-oriented features that could be expanded into a real-world smart home solution. The interactive house should not only function correctly but also provide meaningful and engaging user experience.

## 1.2Stakeholders

The main stakeholders of the project include:

- Course instructors and examiners, who evaluate the system based on software engineering principles
- Students participating in the project, who gain experience in teamwork and system design
- Potential future users, such as homeowners, disabled persons, or tenants interested in smart home solutions

## 1.3System Purpose

The purpose of the Interactive House system is to allow users to interact with various home components, such as lights, devices, and sensors, through software-based interfaces. The system should provide a clear overview of the house status and allow users to control components remotely or automatically.

From an innovative point of view, the system is designed to be flexible and extendable, making it possible to add new features, devices, and intelligent behavior in the future.

# 2. Innovation Focus

The innovation subgroup focuses on ideas that go beyond basic functionality. These include:

- Automation based on user behavior or predefined rules
- Integration with modern platforms such as mobile applications or web dashboards
- Intelligent decision making, such as energy-saving modes or security alerts
- User-friendly interaction with clear feedback and simple controls

The project encourages experimentation with different technologies, programming languages, and architectural ideas to explore what is possible within a smart home context.

# 3. Future Vision

In the future, the Interactive House could be expanded to include advanced features such as:

- AI-assisted automation and recommendations
- Integration with external services(weather data, voice assistants)
- Improved security and monitoring systems
- Support for additional devices and rooms

Although not all features will be implemented during the course, the vision defines a clear direction for future development and innovation.

# 4. Conclusion

The interactive House project aims to combine creativity with structures software engineering. By focusing on innovation, the project explores how smart home technology can evolve and how software systems can be designed with usability, scalability, and future growth in mind