Vision Documentation

Title of Project: Interactive House Project

Revision History

Date	Version	Description	Author
2026-02-10	1.0	Initial Vision document adapted to course template	Ali Daoud

Project Background

The Interactive House Project is part of the course DA330B at Kristianstad University. The goal of the project is to explore how connected home systems can be designed in a way that helps people control devices in their homes more easily. A special focus is placed on people with disabilities and on increasing independence in everyday life. Many smart home systems today are spread across different applications and devices. This can make them difficult to use and hard to understand, especially for users who need clear and simple interaction methods. Because of this, the project will study how a central system together with simple user interfaces can improve the overall experience.

Problem Statement

Current smart home solutions are often complex and not always built with accessibility in mind. Users may need to switch between several systems to control lights, alarms, or temperature. There is a need for a more unified and user friendly approach that also allows testing of new interaction ideas.

Vision Statement

Our vision is to build an interactive home system that makes it easier for people, especially users with disabilities, to control household devices through clear interfaces and new ways of interaction such as voice or gestures.

Project Goals

The project aims to create a central server that connects users and devices. It should offer web and mobile style interfaces for control. It will simulate a realistic home environment. It will support new and creative interaction methods. It will follow an iterative software development process. It will focus on accessibility and inclusion.

Stakeholders

The main stakeholders are end users with accessibility needs, teachers and course examiners, and the student project group. Other stakeholders include researchers in smart home systems and future student groups.

Scope of the Vision

The Interactive House will be developed as a virtual smart home environment. It will include a central server, simulated devices, and user interfaces that run in a browser or mobile like applications. The system is built as a course project and experimental prototype, not as a finished commercial product.

Future Outlook

In the future, the platform could be extended with physical devices, smarter automation, and more accessibility tools. It may also be reused in later courses or research projects.

Summary

The Interactive House Project aims to show how a connected home can be designed with people in mind, focusing on accessibility, usability, and good software engineering practices.