

## Vision Documentation

### Homedork – Interactive house

#### Revision History

Date	Version	Description	Author
2021-09-21	1.0	Initial vision layout	Wills Ekanem, Fanny Söderlund

# Product Overview

## 1. Smart house concept

### 1.1 Introduction

The smart house concept is a technical system for everyone, including people who might struggle using normal technical features. The system is, in that sense, accessible for many types of disabilities and will in all stages of production keep in mind the accessibility and ease of use for its users.

## 2. Basic technical features

The smart house project will be filled with numerous features such as:

- Turn on and off your lamp. Unit req doc [R4]
- Set room temperature - Unit req doc [R5]
- Extended alarm clock –Free choice req doc [R5]
- Voice commands, speech-to-text, and text-to-speech U, F [R8], [R2]

## 3. Smart house technicalities

The system consists of a server connected to its units which in their turn control the devices. The server will handle all communication to and from the devices/units. The units will consist of a native app and a web interface. The server is Java based and connected to a SQL database which contains all unit, device, and user information. The devices will be controlled using an Arduino Hub which gets commands from all units via the server.

## 4. Additional features of the smart house

In addition to the basic features of the smart house, it will also have functionalities that are not required for it to function, but for the useability and appeal to its user. Some of those features are:

- Game, a fun game for the user to play, in complete contrast to the “boring” accessibility features F [R7]
- Future compatibility F [S3]