# Connected Comfort: Industrial-Style Home Improvement Project

## Project Description

The Connected Comfort project aims to transform three key areas—home studio, living room, and main bedroom—into modern, functional, and aesthetically pleasing spaces, integrating smart technology for automation and control. The project seeks to address limitations in the current layout, such as insufficient workspace, inadequate lighting, and limited appliance control, with a focus on enhancing both comfort and productivity.

Each room will follow an industrial design theme, blending black metal with wood, providing a cohesive, stylish aesthetic. The use of IoT technology will allow automation of lighting, temperature, and appliances, creating a seamless, energy-efficient environment. Completion by December 31, 2024 ensures that the upgrades are ready for use before the start of the new year.

This project is driven by the homeowner’s goal of achieving a high-functioning and visually appealing home, suited for work, leisure, and daily activities, with minimal disruption to the existing structure. The emphasis on eco-friendly solutions (e.g., indoor plants, natural light) further enhances the living environment.

## Project Purpose

The purpose of this project is to enhance the overall comfort, usability, and style of the home by upgrading the home studio, living room, and main bedroom. The need arises from the limitations of the current setup:

Home Studio: Limited desk space, outdated computer setup, and poor lighting.

Living Room: Inefficient furniture layout, lack of smart appliances, and insufficient greenery.

Main Bedroom: Outdated furniture, poor lighting, and no automation for appliances and windows.

The renovation will introduce IoT-based automation to control lighting, temperature, and appliances across all rooms, improving energy efficiency and convenience. The unified industrial style will create a sleek, modern aesthetic, ensuring the design aligns with the homeowner’s vision.

## Project Objectives (SMART)

Upgrade functional spaces: Enhance the home studio, living room, and main bedroom to improve usability and aesthetics by December 31, 2024.

IoT integration: Implement smart control systems (lighting, temperature, and appliances) across all three spaces, achieving full automation by December 15, 2024.

Design consistency: Furnish all spaces with industrial-style furniture made of black metal and wood elements, ensuring cohesive aesthetics by December 10, 2024.

## Project Scope/Deliverables

### Scope Statement

This project will upgrade three key areas to improve functionality, comfort, and aesthetics:

* Home Studio: Install new desk and computer setup, smart lights, window treatments, plants, audio equipment, and organize the library.
* Living Room: Introduce new furniture and smart appliances, improve lighting, and add plants for aesthetics and air quality.
* Main Room: Replace furniture, improve lighting and window treatments, and integrate IoT devices for temperature and appliance control.

### What’s in Scope?

Purchase and installation of industrial-style furniture (black metal and wood).

Setup of IoT devices for smart control of lighting, temperature, and appliances.

Enhancements with plants, lighting upgrades, and window improvements.

### What’s out of Scope?

Major structural renovations (e.g., window resizing or wall changes).

Modifications to outdoor areas or rooms not listed in the scope.

## Project Constraints

* Schedule Constraint: The project must be completed by December 31, 2024 to ensure readiness before the new year.
* Cost Constraint: The total project budget is $20,000, covering all furniture, appliances, and IoT setups.
* Quality Constraint: Furniture must adhere to the industrial design theme (black metal and wood) to maintain aesthetic consistency.
* Resource Constraint: Availability of specific furniture and IoT devices may impact timelines.

## Project Milestones

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| **Milestone Description** | **Due Date** |
| Project Start | 11/01/2024 |
| Home Studio Setup Completed | 11/30/2024 |
| Living Room Setup Completed | 12/10/2024 |
| Main Room Setup Completed | 12/20/2024 |
| Project Completion | 12/31/2024 |

## Project Cost Estimate

### Preliminary Budget Estimate

Home Studio Upgrades: $5,000

* Desk and Computer Setup: Allocate around $1,500 for a quality desk and ergonomic computer setup, including a monitor, keyboard, and mouse.
* Library: Budget approximately $500 for shelving and storage solutions.
* Audio Equipment: Set aside $1,500 for microphones, speakers, and soundproofing materials.
* Smart Lights: Estimate $500 for smart lighting solutions that can be controlled via apps or voice commands.
* Plants: Consider $200 for decorative plants to enhance the studio environment.

#### Living Room Renovations: $8,000

* Furniture: Plan for $3,000 to $4,000 for a sofa, coffee table, and other essential furniture pieces.
* Appliances: Allocate $2,000 for new or upgraded appliances, such as a television or sound system.
* Lighting: Budget $1,000 for modern lighting fixtures.
* Plants: Set aside $200 for indoor plants to improve aesthetics and air quality.

#### Main Room Enhancements: $6,000

* Furniture: Estimate $3,000 for essential furniture like a bed, dresser, and seating.
* Lighting: Allocate $1,000 for ambient and task lighting.
* Window Treatments: Plan for $1,000 to $2,000 for curtains, blinds, or shades.

#### IoT Devices: $1,000

* Smart Hubs: Budget $300 for a central hub to control smart devices.
* Sensors and Controllers: Allocate $700 for various sensors (e.g., temperature, motion) and controllers to automate home functions.
* The estimates are based on market research, vendor quotes, and similar past projects, with an allowance for unexpected costs.

## Project Stakeholders

Customer (Homeowner) – The primary decision-maker with vested interest in the success of the project. Defines the project’s vision, approves key deliverables, and ensures it aligns with personal goals and needs.

Project Sponsor – Provides financial and strategic support for the project, ensures alignment with high-level objectives, and removes obstacles to the project’s success.

Project Manager – Responsible for planning, executing, and monitoring the project to ensure it stays within scope, budget, and timeline. Coordinates all activities, including vendor management, resource allocation, and stakeholder communication.

## Approval Signatures

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|  |  |  |  |  |
| Customer |  | Project Manager |  | Project Sponsor |