**SE 216 – SOFTWARE PROJECT MANAGEMENT**

**SPRING 2024-2025**

**PROJECT PROSPAL**

**SMART HOME LIGHTNING**

**Problem Definition**

Nowadays, many people often misplace their belongings at home, often spending minutes or even hours searching for them. Surprisingly, even when items are in a very visible place, they still can not find it.

This proble becomes more harmful for older people, who may struggle with remembering the place of their important stuff such as their pills. Because they can not find their pills so they may give up about taking them.

**Background Information**

Today, smart home technologies are becoming more popular than ever. However, most existing systems lack features that assist users in everyday challenges, especially when they need help the most. People want easy-to-use, secure solutions and increasingly look for AI-powered devices.

With this project, we aim to develop a system that integrates smart light sources with AI. These lights will not only adapt to their owner's needs but also store the locations of important items. When needed or upon request, the smart light will focus on the stored locations, helping users quickly find their stuff.

**Objectives**

* Develop an easy-to-use mobile application that allows users to control their smart lights to help them find their stuff.
* Integrate AI-powered features so devices can operate based on predefined rules and user habits.
* Provides compatibility with popular smart assistants like Google Assistant and Alexa, as well as other smart home devices.
* Providing data security by implementing encryption and secure cloud storage.
* Improves overall security by motion detection, security cameras, and alert systems for added protection.

**Approval Signatures and GitHub Accounts**

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