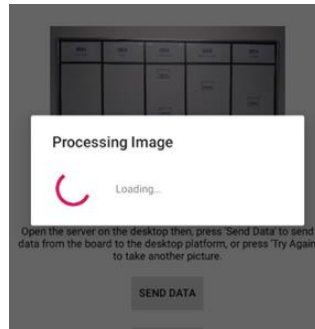# Agile Board Tracker

**By:** Caution Dalley, William Hitchcock, Joseph Holland
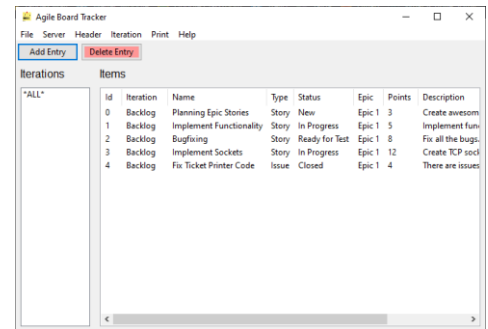
**Supervisor:** Waqar Khan     **Client:** Dave Holland

Agile Board



Mobile Application



Desktop Application

## INTRODUCTION

Agile story boards can exist with both physical and digital representations. The synchronisation between the two often serves as unnecessary and unproductive work; time better spent elsewhere. The Agile Board Tracker sought to bridge that gap by providing a quick and easy means of updating the digital, while keeping the physical as the source of truth.

The Agile Board Tracker is a mobile and desktop application designed to capture the changes made on a physical board and update a database. The desktop application contains the ability to create and manage user stories and produce labels, which populate the physical board. When changes are made on the board, the user captures an image with the mobile application, the changes processed and sent to the desktop where the database is updated.

## DEVELOPMENT

The team began with a meeting with the client. The client demonstrated the process to the team and introduced them to the problem domain. From here, requirements were gathered, which enabled the team to develop a picture of how the system will potentially work.

From here, the team engaged with the system analysis and design process to understand the infrastructure of the system, and how the various subsystems, mobile, desktop, and database, would interact with each other. This part also consisted of research to establish the tools and techniques that were needed.

The team used Agile Scrum to develop the system. The development was organised into one-week sprints, which consisted in total of ten sprints. Two members of the team worked on image processing, barcode recognition, and the mobile application, whilst the third member worked on the desktop application, database, and socket data transfer.

Testing was performed using a variety of automated unit, integration, GUI, and system testing. User acceptance testing was performed throughout the project, with frequent client meetings to ensure the product was on the right track.

In the late stages of development, various user manuals and design documentation were produced. A final client meeting and interactive demonstration saw the client personally operating the product.

## CONCLUSION

The project was completed on time, and the minimum viable product was met. The client was pleased with the results produced, even returning during the demonstration to have another go.

This project was a difficult and complex effort, highlighting the magnitude that goes into development. The team was immensely satisfied with the results achieved and the new skills to bring to future projects.