

Senior Design Weekly Status Report; Fall 2022

Team Name: sdmay23-09

Team Members:

- 1) Shayla Lunn
- 2) Erica Hollander
- 3) David Bone
- 4) Hanan Zahid
- 5) Kaili Lawson
- 6) Lakin Jenkins

Report Period: Nov 4th - Nov 9th

Summary of Progress in this Period

- Erica
 - Connected the sample app to the NXP_SR150
 - Demoed the working app to the clients
 - Starting to look into obstacles and connection states
- Shayla
 - Soldered the TriMark board to enable UART 4 connection.
 - Printed "Hello World" to PuTTY using TriMark code.
 - Working on troubleshooting an issue with PuTTY where it brakes after the code runs.
- David
 - Troubleshooting the PuTTY connection to the TriMark code.
 - Printed "Hello World" to PuTTY using TriMark code.
- Hanan
 - Looked into code for connecting to UWB module via bluetooth pairing to phone
- Kaili
 - Tested both MK boards to make sure they work
 - Looked into the MK code and flashed the mobile code to the board
 - Connected the mobile edition code to the sample application and went through this code in the debugger
- Lakin
 - Began work with integrated api calls in a swift application
 - Looked more into implementing basic app interactions
- Entire Team
 - Met with client to update on progress
 - Worked together in Senior Design lab
 - Worked on the Design Doc -Testing

Pending Issues

Current Sprint Board

Backlog Pending In Progress In Verification Done

RL-63 190037 Initial Release 0 / 5

RL-71 MK Anchor/Tag Firmware 10 / 10

- BG-640** (New) ISU: MK Code Enters UART Handler (shayla, kailli, david)
- BG-657** (Pending) ISU: UART Error Handling: Timeout With No ACK/NACK Received (kailli)
- BG-658** (In Progress) ISU: SPIKE: Look into Mobile-To-Anchor Firmware (shayla, kailli, david)
- BG-653** (Pending) ISU: SPIKE: Look into how to initially pair a device with a TriMark I/O module (everyone)
- BG-661** (In Progress) ISU: MK Mobile Code Detects Phone Distance (kailli)
- BG-618** (Closed) ISU: SPIKE: Watch UWB Kit Training Videos (shayla, kailli, david, hanan, erica, lakin)
- BG-649** (Closed) ISU: MK Code Sends UART Message to PuTTY (shayla, kailli, david)
- BG-651** (Closed) ISU: MK Code Detects Tag in Unlock Zone & Sends UART Message (shayla, kailli, david)
- BG-650** (Closed) ISU: MK Code Debugs & Hits Breakpoint (shayla, kailli, david)
- BG-626** (Closed) ISU: Transfer MK Code to GitLab (shayla, kailli, david, hanan, erica, lakin)

Backlog Pending In Progress In Verification Done

RL-69 Mobile Phone App 14 / 14

- BG-645** (On Hold) ISU: Phone display distance via UWB (shayla, kailli, david)
- BG-648** (Pending) ISU: BLE pairing (shayla, kailli, david)
- BG-621** (In Progress) ISU: SPIKE: Look into Swift App Testing (hanan, erica, lakin)
- BG-646** (Pending) ISU: Notify when phone is in BLE range (shayla, kailli, david)
- BG-656** (In Progress) ISU: SPIKE - re-architect mobile app proposal (erica)
- BG-655** (Closed) ISU: SPIKE: Connect Apple Sample App to Board (hanan, erica, blocked)
- BG-623** (New) ISU: Mobile App Clickable Button (hanan, erica, lakin)
- BG-647** (Pending) ISU: UWB connect to MK Eval Board (shayla, kailli, david)
- BG-632** (Closed) ISU: Mobile App Mockup (hanan, erica, lakin)
- BG-614** (Closed) ISU: SPIKE: Look Into Swift for Nearby Interactions (hanan, erica, lakin)
- BG-638** (Closed) ISU: Mobile Application Requirements (hanan, erica, lakin)
- BG-622** (Closed) ISU: Mobile App Displays TriMark Logo (hanan, erica, lakin)
- BG-620** (Closed) ISU: Mobile App Displays "Hello World" (hanan, erica, lakin)

RL-70 IO Module Software 6 / 6

- BG-642** (New) ISU: SPIKE: Look into how digital key will be stored (shayla, kailli, david)
- BG-641** (In Progress) ISU: TriMark Code Receives From UART 4 (shayla, kailli, david)
- BG-612** (In Verifica...) ISU: Print "Hello World" To UWB UART (shayla, kailli, david)
- BG-625** (Closed) ISU: MK PC Shell Running (shayla, kailli, david)
- BG-633** (Closed) ISU: Debug TriMark Code (shayla, kailli, david)
- BG-627** (Closed) ISU: Compile & Push TriMark Code to Git (shayla, kailli, david)

Plans for Upcoming Reporting Period

- Get UARTs sending to and from Mobile Knowledge code