Akriveia Beacon Reference Checklist (Hardware)		
Feature	**Description**	**Status**
Low Tracking Latency	Delay between real position and rendered tracking position must not exceed 5 seconds.	**Complete**
High Tracking Accuracy	Tracking must have ranging error less than 0.25cm	**Complete**
Multi-Tag Tracking	System must be able to track more than 1 ID Tag	**Complete**
Tracking using Trilateration	Location is calculation using intersection of 3 circles derived from ranging values between beacon and Tag	**Complete**
Minimal UWB Interference	UWB ranging must not interfere with existing Wi-Fi or Cellular signals	**Complete**
Wearable Tracking ID Tags	ID Tags are small and light enough to be wearable	**Complete**
Wireless Beacon-to-Server UDP communication	Beacon must communicate with server using UDP (User Datagram Protocol) to send and listen for messages	**Complete**
Use of Private Wi-Fi Network	Beacon and Server must use private network with no public internet access with DHCP for IP management	**Complete**
Beacon Host IP Configuration	Server Host IP can be configured and saved on Beacons	**Complete**
Beacon Start/End Commands	Server can initiate start/end tracking on Beacons	**Complete**
Beacon Reboot Command	Server can initiate hardware reboot on Beacons	**Complete**
Backup Power for Beacons	Beacons are backed with 5V 10000mAH rechargeable battery	**Complete**
First Responders Tag Support	Additional UI element for first respond tags	Not Added
Beacon Position Detection	Server can detect change in beacon position	Not Added
Trilateration improvements	Improve trilateration to include different intersection cases	Not Added
Beacon Auto Calibration	Beacons auto calibrate antenna delay and stationary distance	Not Added
Akriveia Web Server (Software)		
Show User/Beacon location on floor plan/map	User and beacon locations are displayed as icons on a map UI hosted on the web server	**Complete**
Last seen user location	If tag failure during transmission the last known position of the user is recorded and shown on map	**Complete**
Beacon Failure Detection	Server can detect if beacon is unreachable via Wi-Fi and status will be updated accordingly	**Complete**
Map Add/Edit Configuration UI	User can add/edit floor plans and additional related information for maps using UI on web server	**Complete**
Beacon Add/Edit Configuration UI	User can add/edit beacons and additional info using UI on web server	**Complete**
User Add/Edit Configuration UI	User can add/edit users and additional information using UI on web server	**Complete**
Network Configuration UI	User can configure network interface, set host IP, and join AP using UI hosted on web server	Not Added
Network Diagnostic UI	User can perform network diagnostic commands such as ping, tcpdump, netcat, netstat using UI hosted on web server	Not Added