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| 2.10 | ALERRT CENTER Weekly Status Report | | |
|  | Septmeber 09, 2019 | Submitted by: Bo Heyse | |
|  | Course Instructor: Mark Welker  Faculty Advisor: Dr. McClellan  Sponsor: Texas State University | Team Members:  Bo Heyse[PM]  Karina Paz | Matthew Healea |

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| Green | | Current Project Status | | | | | |
| Over the first two weeks of this semester the team has had a massive leap forward in the implementation of the motion capture system. Bo has created an iOS app that creates a connection to the Bluetooth module on the inertial measurement unit. In conjunction with the iOS app, code was created for the arduino that writes raw data values to the Bluetooth serial port and allows for data transfer between the Sensor and iPhone. Matt worked with the firmware on the sensor to improve drift that was seen in our virtual representation. Karina finished iteration one of the enclosure that is in the process of being 3D-printed for verification. Next week is to get file transfer over Bluetooth from the Arduino’s SD card to work and visualized on the iOS app. | | | | | | | |
| Individual Updates (Activities Completed, Activities Planned) | | | | | | | |
| Bo | Created an iOS app that creates a connection to the Bluetooth module on the inertial measurement unit. This connection allows for the sensor to send and receive data from the SD card to a file on the iOS app, where eventually it could be uploaded to a cloud drive. | | | | | | |
| Matt | Worked on new calibration software to implement SD card logging functionality and alternative computation for pitch, yaw, and roll. Worked on separate identifications for each Bluetooth module. | | | | | | |
| Karina | Designed 3D model enclosure for the system. Going to start 3D printing process to output a protype case. | | | | | | |
| Upcoming Deliverables (course and project due in next 2 to 3 weeks) | | | | | | | |
| Deliverable | | | | Due Date | | Status | |
| SD Card File Transfer | | | | 09/13/2019 | | In Progress | |
| Updated Firmware | | | | 09/13/2019 | | In Progress | |
| Sponsor and Faculty Advisor Meetings/Calls Held & Planned | | | | | | | |
| Who | | | Last | | Topic(s) | | Next |
| Dr. McClellan | | | 05/07 | | Discussed plan going into summer | | 09/16 |
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