EE / CprE / SE 491 – sdmay19-01

Athlete Motion Tracking

Week 1 Report

8/28/18 – 9/6/18
Client: Nathan Johnson
Faculty Advisor: Craig Rupp

Team Members:

Nathan Mazarelo — *Weekly Reporter/Software Developer*
Monte Friestad — *Spokesperson/Software Developer*
Madeline Rogers — *Meeting Facilitator/Hardware* Maintainer
Ryan Hansen – *Scribe/Hardware Maintainer*

Weekly Summary

The team meet with our client, Nathan, in person and discussed the logistics of the project. We were then able to come up with a timeline of the project in which Nathan recommended we have the image capturing part done by the first semester. The team split into two teams to cover the different aspects of the project. We were able to come up two ideas that encapsulate what we needed to do for the first semester, Data Collection vs Data Presentation. For each idea we then created milestones that we could use as a guide throughout the semester.

Past Week Accomplishments

1. First meeting with client, Nathan, to get better understanding of project - Everyone
   a. Discussed what type of equipment would be needed
      i. Cameras, pressure sensors, and accelerometers
   b. Discussed how the data was to be presented
      i. Web application
2. Meeting with team and advisor – Everyone
   a. Split the team into two groups and gave them milestones
      i. Data Collection
         1. Find camera that can support motion tracking
            a. Must support the needed resolution and fps
         2. Find software that can retrieve data from camera for analysis
      ii. Data Presentation
         1. Determine software for data analysis
         2. Be able to test data within 2.5% accuracy
            a. Can compare to testing fixture with known values
         3. Create friendly UI to display data

Pending Issues
- Need to go over budget concerns to anticipate what equipment we can purchase

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Nathan Mazarelo	Decided team roles, created milestones for semester	4	4
Monte Friestad	Decided team roles, created milestones for semester	4	4
Madeline Rogers	Decided team roles, created milestones for semester	4	4
Ryan Hansen	Decided team roles, created milestones for semester	4	4

Plans for Coming Week

Data Collection – Maddie & Ryan
- Research two different options for Data Collection
  - Cameras that support motion tracking
  - Software that can retrieve data from camera

Date Presentation – Monte & Nathan
- Research two different options for Data Presentation
  - Software that can analyze data given by camera
    - Must be able to use in web app

Gitlab Activity Summary

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Action: created, Tue Aug 28 2018
Author: sd
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