

# CprE 492 - sddec21-14

## IT-Adventures

### Report 3

September 28, 2021 - October 11, 2021

Client: IT Adventures

Faculty Advisor: Doug Jacobson

### Team Members:

Dakota Berbrich - Robotics

Nolan Jessen - Robotics

Aaron Goff - Smart-IT

Noah Berkland - Smart-IT

### Past Week Accomplishments

- First PIRM completed!
  - Feedback primarily consisted of changing the SDK/platform (outside of our control) and on feedback for the curriculum
  - Good suggestions for testing and reviewing the curriculum, using feedback from the high schoolers themselves, that the team will consider going forward
- Smart-IT (Aaron and Noah)
  - Sphero RVR lesson plans developed
    - RVR python projects written out
    - Lesson plan outline finished with the exception of challenges
    - Lessons researched and charted
- Robotics (Nolan and Dakota)
  - Progress in December challenge
    - Continuing to work to understand the sensor limitations
    - Finalized some components of December challenge
  - Spring small challenges chosen
    - The previous spring challenges have been partially adapted to the new architecture, including decided which ones are most feasible and will be used

## Pending Issues

- Continuing lack of sensor interface for the RVR from the micro:bit poses challenge in making fully functional robotics challenges
- Attempting to understand how to utilize the built-in infrared and magnetometer sensors for Smart-IT

## Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Dakota Berbrich	Continued to work on lesson plans and final challenges. I particularly looked at the limitation of the Little:Bits to determine the scope of our final challenges for Robotics.	12	46
Nolan Jessen	Continued working on small challenges	11	55
Aaron Goff	Laid out November lesson plan for the Sphero RVR, continued to expand on JSON and Python knowledge.	10	107
Noah Berkland	Nearly finished Module 2 outline, just need to finish challenges, researched python knowledge for future lessons, and charted lesson plans for module 2	12	46

## Plans for Coming Weeks

- **Robotics - Nolan and Dakota**
  - December Challenge creation
  - Finalizing December lessons and publication
  - Start adapting and creating small challenges, both for practice and for competition
- **Smart-IT - Aaron and Noah**
  - Finalize Module 2 outline, lessons, and challenges
  - November and December Challenge Creation

- Continue to create updated Python code relevant to what is needed for driving the RVR inputs and outputs
  - Including step-by-step instructions via video