

# **Motion sensor data collection toolkit development**

## **MODULE**

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## Description

Upon completion of this lab, students should be able to:

Design the high-level architecture of a motion sensor data collection toolkit.

Assessed by the tasks and outputs specified in STEP 1.

Interpret the JavaScript code for motion sensor data collection.

Assessed by the tasks and outputs specified in STEP 2.

Develop “malicious” webpages to collect motion sensor data from the client-side and send the collected data back to a website.

Assessed by the tasks and outputs specified in STEPs 3 and 4.

Develop server-side code to save the raw motion sensor data sent from the client-side.

Assessed by the tasks and outputs specified in STEP 5.

Evaluate the correctness of the motion sensor data collection toolkit and the collected data.

Assessed by the tasks and outputs specified in STEP 6.

## Outcomes

### **evaluate and synthesize**

Students will be able to develop server-side code to save the raw motion sensor data sent from the client-side.

### **evaluate and synthesize**

Students will be able to evaluate the correctness of the motion sensor data collection toolkit and the collected data.

### **apply and analyze**

Students will be able to interpret the JavaScript code for motion sensor data collection.

### **evaluate and synthesize**

Students will be able to design the high-level architecture of a motion sensor data collection toolkit.

### **evaluate and synthesize**

Students will be able to develop “malicious” webpages to collect motion sensor data from the client-side and send the collected data back to a website.

## **Content**

### **Notes**

Note that the solution manual and the solution materials are not uploaded to this platform based on the suggestion from Kaza, Siddharth (SKaza@towson.edu).

Please contact Dr. Chuan Yue ([chuanyue@mines.edu](mailto:chuanyue@mines.edu)) at the Colorado School of Mines for the solution manual and the solution materials.

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