# EE/CprE/SE 492 - sdmay18-27

## Data Analytic Tools for Inconsistency Detection in Large Data Sets

#### Week 4 Report

02/24/2018-03/09/2018

Client/Advisor: Kingland Systems, Ying Cai

### Team Members/Role:

Logan Heitz – Project Lead

Christopher Konopka – Communication Lead

Camden Voigt – Technical Lead

Timothy Rogers – Quality Lead

#### **Weekly Summary**

#### Past week accomplishments

- Logan:
  - Fixed issue with unclosed jdbc statement in the storage module
  - Implemented threading module and added into existing modules to achieve multithreading for solution
  - Started work on utilizing AWS for better parallelization of the solution
- Christopher:
  - Updated our usage of tuples storing records so that keys with multiple values are properly utilized
  - Added in command line options that will better allow us to start the program in AWS
  - Started testing performance on AWS
- Camden:
  - Worked with advisor to get AWS instance setup and accessible by

team

- o Finished front end prototype view for reporters
- o Finished REST API to fetch inconsistency information
- Added documentation on getting AWS setup and running to Gitlab wiki
- Timothy:
  - o Started removing SQL dependencies from tests
  - Started work on improving testing for multithreading

### Pending issues

- Logan:
  - Continue parallelization of the solution using AWS
- Christopher:
  - Continue to gather performance metrics on AWS using current solution
- Camden:
  - Deploy rest API to AWS
  - $\circ$   $\,$  Integrate AWS with front end prototype  $\,$
- Timothy:
  - o Continue improvements to testing module
  - Validate the current raw data parser using the XML schema that has been received from Kingland

### Individual contributions

| Team Member         | Weekly Hours | Total Hours |
|---------------------|--------------|-------------|
| Logan Heitz         | 12           | 106         |
| Christopher Konopka | 12           | 90.5        |
| Camden Voigt        | 15           | 99          |
| Timothy Rogers      | 15           | 102         |

### Plan for coming week

- Logan:
  - Continue parallelization of the solution using AWS
- Christopher:
  - Continue to gather performance metrics on AWS using current solution
- Camden:
  - Deploy rest API to AWS
  - Integrate AWS with front end prototype
- Timothy:
  - o Continue improvements to testing module
  - Validate the current raw data parser using the XML schema that has been received from Kingland

## Summary of weekly advisor meeting

#### 03/02/2018 Advisor Meeting

- Worked on getting all team members set up with AWS and ensuring we all can log in and know how to run the project.
- Christopher will begin doing the testing on AWS so we can figure out how AWS will affect our performance.
- Logan will look into how we can take advantage of AWS to better parallelize our solution.