

## **List of Requirements**

1. The software shall use a GUI with the options “Start Data Collection”, “Add Reading”, “End Data Collection”, “View Data Log”, “Import File”, and “Export File.”
2. The software shall use JFileChooser to allow the user to select either a JSON or XML file when “Import File” is selected.
3. The software shall use a GUI to prompt the user for the Site Id number. The Site Id is now considered to be collecting data. If the Site Id already has data present, an error message will appear telling user that the Site Id entered cannot collect data.
4. The software shall use a GUI to prompt the user for the Site Id, Reading Type, Reading Id, Reading Value, Reading Date, Study Name, and Study ID. If the Site Id is not currently collecting data, an error message will appear asking the user to first start data collection on the site.
5. The software shall have a message appear informing the user that the reading has been added to the collection if the Site Id is currently collecting data.
6. The software shall use a GUI to prompt the user for the Site ID number when “End Data Collection” is selected. Data can no longer be collected for the Site Id that the user enters
7. The software shall use a GUI to prompt the user for a Site ID and display the data associated with that site when “View Data Log” is selected.
8. The software shall save data results in a JSON file in the project directory when “Export to File” is selected.
9. The software shall save the state of the readings when the GUI is closed and opened.
10. The software shall be provided with JUnit tests.