Requirements:

1. Software shall track clinic names and IDs for all clinics
2. Software shall generate a unique clinic ID if one is not given.
3. Software shall save reading, patient, and clinic info to default JSON file(s) when the program is closed or saved.
4. A reading shall at a minimum contain a valid type, value, patient ID to be considered valid.
5. Software shall generate a unique reading ID if one is not given
6. Software shall parse xml files, validate and store valid readings from those XML files.
7. Software shall throw away all invalid/incomplete readings, patients, and clinics when reading any sort of file.
8. Software shall reject all readings that are manually added that have invalid reading info.
9. Software shall allow the user to upload a readings JSON or XML fIle and save clinical trial results to a file.
10. Software shall allow the user to add a clinic, add a patient, and add a reading.
11. Software shall allow the user to resume a patient’s trials, end a patient’s trials, and display readings for a patient.
12. Software shall open the main menu when started.
13. The main menu shall allow readings, clinics and patients to be added to the trial.
14. Readings added from the GUI will receive a unique reading ID from the system.
15. The patient info screen shall allow the user to activate and deactivate any patient in the trial.
16. The patient info screen shall display all readings stored for that patient.
17. The patient info screen shall allow the user to choose a patient in the trial from their patient ID.
18. The system settings screen shall allow the user to Format how the date is displayed throughout the program.
19. The system settings screen shall allow the user to choose if unknown clinics and readings from those clinics are added to the trial when importing files.
20. The system setting screen shall allow the user to choose if unknown patients are added to the trial when importing from JSON files.
21. The system setting screen shall allow the user to choose to activate unknown patients and add their readings if the patient is added from a JSON file.
22. The system setting screen shall allow the user to choose if unknown patients are added to the trial when importing from XML files.
23. The system setting screen shall allow the user to choose to activate unknown patients and add their readings if the patient is added from a XML file.