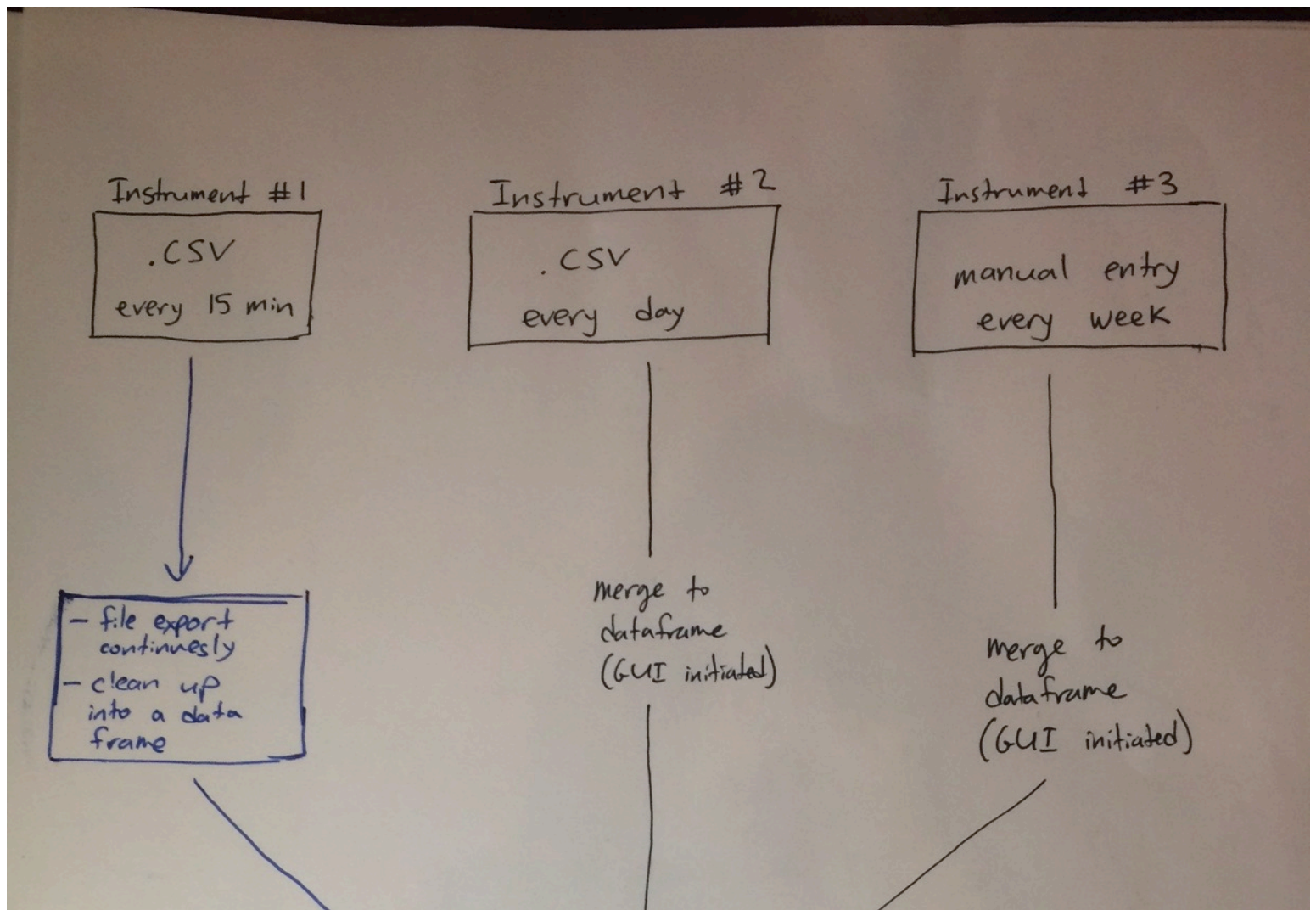# CSE599 Project

Project Summary
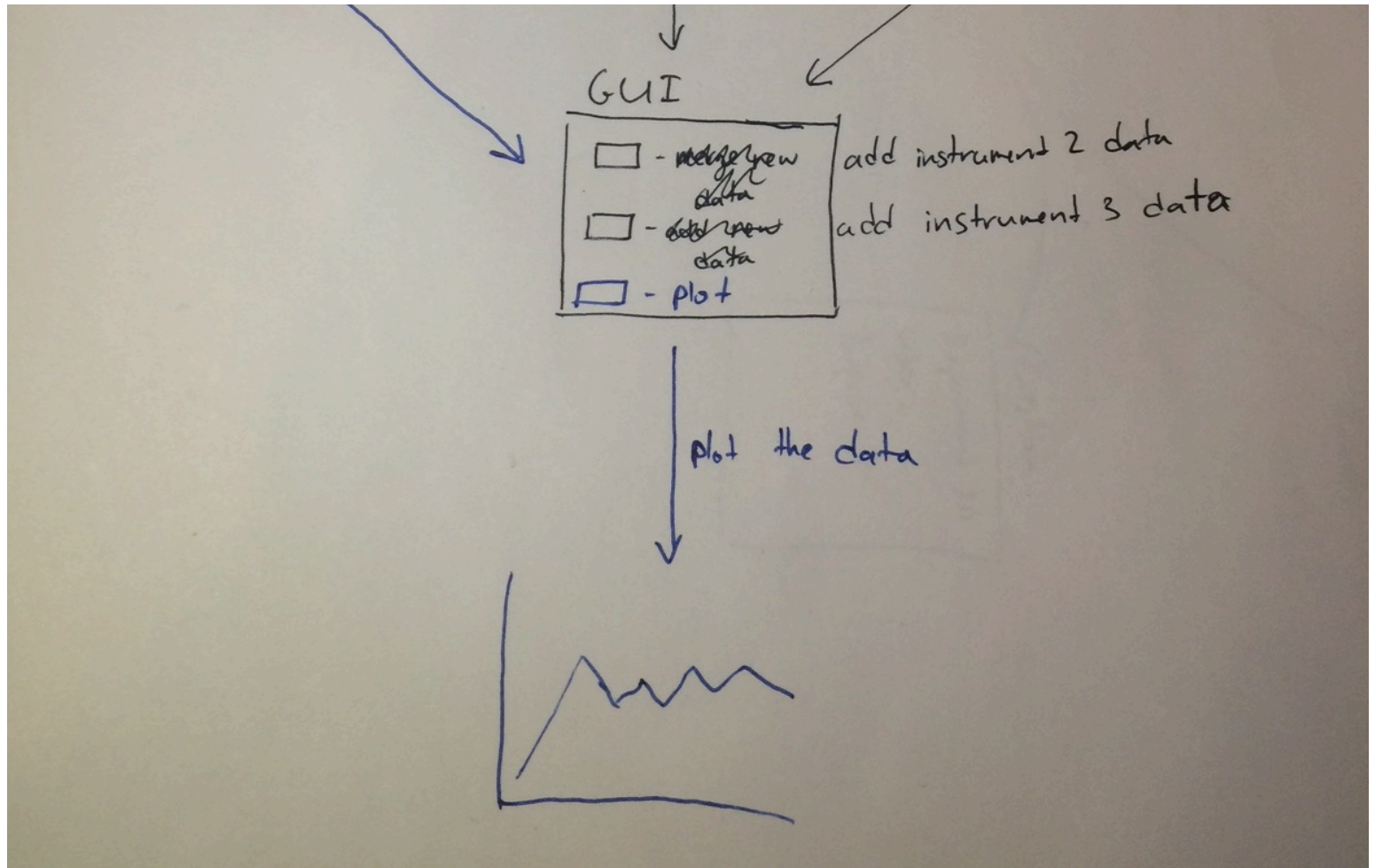
There are three instruments.

Instrument #1 - Bioreactor, output: .csv file, every 15 minutes.

Instrument #2 - Spectrophotometer: .csv file, once per day.

Instrument #3 - Biomass: manual entry value, once per week.

These instruments produce data at different rates and output it to different locations. The objective is to create a system to automatically combine the data from different sources, clean up the data, and represent the data visually by interactive plots. If time permits we will try to display the data on the web so that the user can monitor the experimental progress from comfort of the home.

☐ - Create a script to pull .csv file from instrument #1 to a computer directory backed up by google drive. This script needs to run every 15 minutes and overwrite previous file.

☐ - create a package that will clean up up instrument #1 data and create a dataframe that is ready to be plotted every 15 minutes.

☐ - create a package that will merge data from instrument #2 and instrument #3 (and clean up) onto the main dataframe.

☐ - create a package that will plot the dataframe data interactively (wigets).

☐ - create a GUI that will incorporate these packages into button command clicks.

☐ - If time allows create a website that will plot the data interactively within the browser.