

Criterion A: Initial investigation

Summary of problem

Ms. Maeve (the client), is serving as the MYP/DP teacher & the Head of the Chemistry department in an international school. As mentioned in the face-to-face interview (on 7th February 2021), “She facilitates students conducting experimental internal-assessments & other class-practicals”.

Providing students with the best understanding, she allows them to have an abundant use of hands-on practicals. After delivering plethora of precise & expensive apparatus, throughout the process of distribution and experimentation, they often got lost, misplaced and broken which makes it difficult to monitor if all apparatuses have been returned safely to the storeroom, posing additional costs on the department.

Explanation of inadequacies of current situation

Ms. Maeve stated in the interview: “Primarily, the issue encountered by the department is with the management/distribution of digital, Vernier and analogue instruments.” She mentioned that despite implementing various solutions (including excel-spreadsheet, email-delivery, and paper forms) the problem of insufficient monitoring of the distribution of lab instruments is still persistent.

Considering the possible IT solutions (Google/Microsoft forms, HTML website and an Access Database), she suggested that a database will be the ideal solution in order to avoid redundancy of data, permit only authorized personnel to access the forms and have an aesthetically pleasing and organized interface for staff members. Some specifications mentioned by the client:

- All forms, tables and receipts must be hyperlinked on one home-navigation form.
- Aesthetics – Chemistry-related background, school logo present
- Authorized Access –
 - Full Access – Only Teachers/Lab-technicians
 - Student should only be permitted to open student forms.

Word count: 250