

## Evaluation

### Meeting the Success Criteria

The client feedback (See Appendix 1) clarifies that this program meets all the success criteria. Furthermore, this application strongly resembles the planned GUI designs that the client approved. Through the third client meeting and feedback (See Appendix 1), the client requested amendments have already been done. Hence, the client gave positive feedback on the GUI and the program's functionalities. Before fixing and amending the program in relation to the client's requests, I faced some errors. These errors and the recommendations by the client mainly concerned the GUI of the program and improving the users' experience. All these problems have been solved with the techniques and data structures used in the program.

The following table shows that each element of the success criteria has been controlled. These controls have all been fulfilled to an appropriate level as specified by the client.

Success Criterion	Controlled	Fulfilled	Comment
1	Yes	Yes	-
2	Yes	Yes	-
3	Yes	Yes	-
4	Yes	Yes	-
5	Yes	Yes	Other than the in-app warnings when the program is opened, the alerts can be sent outside the app when it is not actively running.
6	Yes	Yes	Although the e-mails are correctly sent, the amount of e-mail addresses could be increased dynamically instead of a static one.
7	Yes	Yes	-
8	Yes	Yes	-
9	Yes	Yes	Works properly - still can be expanded by sorting the features in tables.
10	Yes	Yes	-
11	Yes	Yes	This could be improved further to add more than ten serial numbers and devices simultaneously by providing a dynamic list on the GUI.
12	Yes	Yes	-

13	Yes	Yes	-
14	Yes	Yes	-
15	Yes	Yes	-
16	Yes	Yes	It works very well – but other types of files like PDF can be added in future development.
17	Yes	Yes	-
18	Yes	Yes	-
19	Yes	Yes	-

### Recommendations for Future Improvement

- Currently, the program allows the user to add just up to 10 devices due to space constraints for serial number text fields. This can be changed to more than ten in future improvement by replacing the text fields with a list, a text field and a save button. This list can contain more than ten serial numbers dynamically. Since the user might need to add more than ten devices, currently, the program allows users to add devices with the same name in different sessions. Furthermore, the current search and filter method used in tables has just a search bar and fixed filter combo boxes. As the client suggested, an additional sorting filter, such as sorting in ascending or descending order, can be added (See Appendix 1).
- An additional improvement suggested by the client in development but left out due to compatibility of special characters from a language was to develop a method allowing the user to export the data as a PDF (See Appendix 1). Most of the libraries used to generate PDFs uses charsets. However, although the charset supports it, the libraries are not generally compatible with all languages and special characters. However, this can be solved by finding a library that supports the language used in this program or creating a charset.
- Another improvement which the client also recommended for future improvement was to create a method to add more than one e-mail address that will be used to send the verification e-mails (See Appendix 1), allowing multiple main admins to use their e-mail addresses if the registered address' main admin cannot reach his mail or anything happens to him. This would be implemented by developing a method that gets the e-mail address from a window and saves it into the database.
- The final improvement suggested by the client for future development was to generate external warnings about the remaining warranty outside of the program (See Appendix 1). This one could be implemented since java awt has a TrayIcon class that provides this feature.