

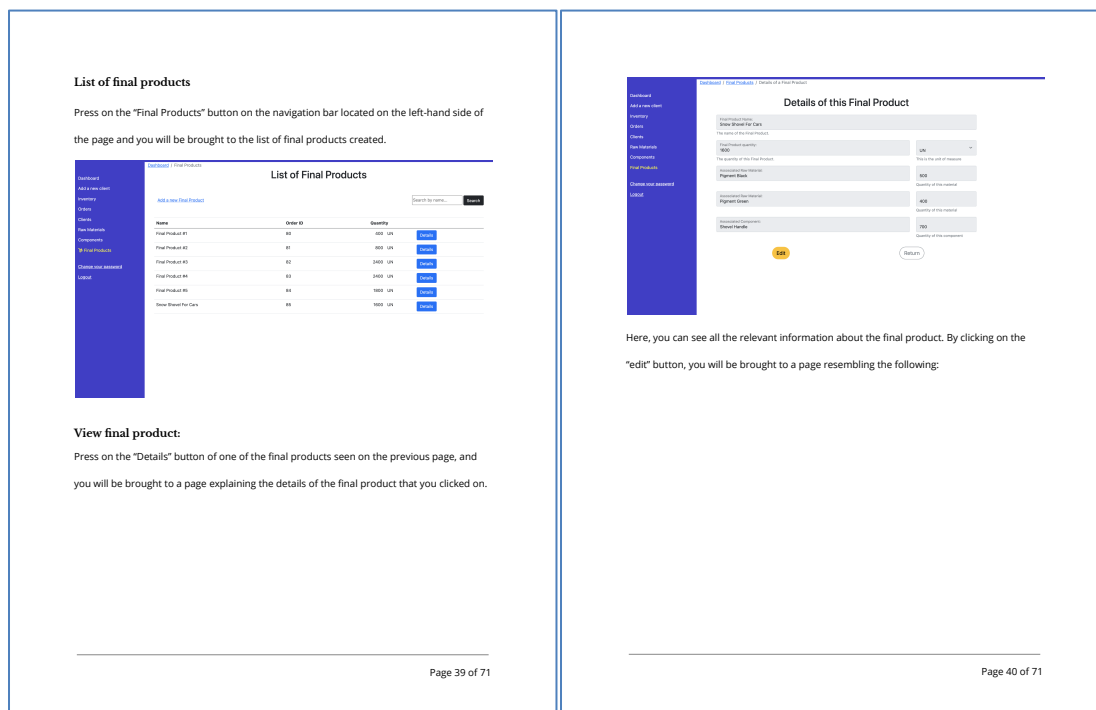
7th Deliverable – Implementation and client comments (76 marks)

After you have taken into account the various comments of the client to the previous prototypes, you will present the client with an implementation. **In consultation with the instructor**, you will determine which parts of your database design (that is, which tables and which functions) you will implement. Your implementation must allow the user to do at least the following (note that some of these actions are required by the instructor):

- Perform input error checking.
- Search for an item, or a group of items, in the database.
- Add data to the database.
- Retrieve data from the database and display it on screen and print it directly to a printer.
- Change (update) data in the database.
- Delete data in the database.
- Produce at least one nicely formatted summary report of the database contents.
- As per Deliverable 5 there will be at least five screens in the user interface.

As part of the implementation, you will provide the client with a user guide. This guide explains in detail how the different users can use the system to accomplish their tasks.

Here is an example of part of a User Guide:



As you present the implementation to the client, you will collect the client's reactions and comments on the implementation. These comments will form part of the present deliverable.

This deliverable should contain the following information:

- (3 marks) Front matter (see 1st deliverable)
- (4 marks) Executive Overview (see above for a description).
- (5 marks) Summary description of the client, including the final business problem addressed.
- (3 marks) Revised summary narrative description of the system.
- (5 marks) Client's comments
- (5 marks) Discuss the various decisions you made regarding both the **design and implementation** of the system, including both visual design and software design, including choice of programming environment. For example (from previous student work),

... For the design and implementation of the system, we had decided to keep the functionality and looks consistent with the prototypes that we had previously created. As the client had designed the look of the database, we wanted to satisfy his requests while also providing the functionality that he wanted.

In regard to the design aspect of the system, there were some slight changes we had to make due to the limitations of C# programming. In C#, if you are creating a form application which is what our database is using, there will be buttons at the top of the screen in the form of icons. By pressing the icons, they perform various tasks such as deleting, creating, saving, etc. Even though this is not what we initially planned to have in the system, we decided to continue using C# as this is a minor inconvenience for the overall aesthetic of the application. ...

- (5 marks) Description of current security measures
- (16 marks) Future work (what needs to be done to complete the project). Include pictures of the story map to show what was done and what was not done. Note that what was removed from the system entirely should not appear in the story map.
 - (3 marks) User interface improvements
 - (3 marks) Unimplemented user stories and functions
 - (5 marks) Recommendations regarding future security measures to be taken.
 - (2 marks) Recommendations regarding unit and integration test strategies to be used.
 - (3 marks) An acceptance test plan. Here is an example:

Test strategy recommendations

Purpose

The following is a set of recommendations that our team suggests in regards to testing the application. The purpose of these recommendations is to be able to verify that the application conforms to the initial exceptions of the project and to ensure that everything is working as expected.

Who will be testing the application

The person testing the application will be the only user of it, which is our client Alex.

Testing environment

The environment in which the testing will take place will primarily be on the software itself.

Additionally, the use of a physical printer will be required for one of the functionalities (printing the Bill of Materials).

What type of testing do we recommend?

User Acceptance Tests (UATs)

Why UATs?

We suggest our client use user acceptance tests because it is very easy to do so for non-technical people. Also, the only thing that our client needs to perform UAT testing is access to the web application. This means that the hardware and software requirements for UATs are;

- A computer
- Access to the internet
- A web browser
- A physical printer (as mentioned above).

What do UATs look like?

The reason why UATs are easy to do is that our client needs only to go through the normal flow of the application, and verify if everything is working as expected.

UATs are verified in the following format:

- First, the user story that is being tested should be identified as such:
 - "As a PM, I would like to update raw materials to reflect the changes to my inventory into the system."
- Then, different scenarios are provided for this user story:
 - **Scenario 1:** Verify that the user can modify the name of raw materials, and, afterward, is displayed in the list of raw materials.
 - **Scenario 2:** Verify that the user can modify the number of raw materials, and, afterward, is displayed the list of raw materials.
- Lastly, this is the flow that the user story should follow to pass the UAT:
 - **Scenario 1:** Verify that the user can modify the name of raw materials, and, afterward, is displayed in the list of raw materials.
Given [that the user has created at least 1 raw material]
And [the user has pressed the update button on the detail page of that raw material]
And [the user has modified the name of the concerned raw material]
When [the user presses the submit button]
Then [the name of the raw material will be updated]
And [the user will be brought back to the list of raw materials]

- (5 marks) Appendix 1 – Revised user interface – indicate what changed from the prototype to the implementation, and why. Use printed screen images to highlight the changes.
- (10 marks) Appendix 2 – Printed version of the user guide. This should be written from the user's point of view; that is, start with the task that the user wishes to perform, and then explain how to do it.
- (10 marks) Appendix 3 – List with screen images showing which parts of the interface implement which User stories.
- (2 marks) References/Bibliography/Works cited (APA Style)
- (3 marks) Spelling, grammar and formatting