

Group No	Group/System Name
15	Encryption

No	Group Member's Student Number	Group Member's Name & Surname	% Estimated Contribution to M4	Signature
1			20%	
2			20%	
3			20%	
4			20%	
5			20%	

Total 100%

M4 DOCUMENTATION: Project Finalisation Report (PFR)

1. **Name of the system:** Point of Sales system, tracking/stock management system.

2. **Objectives of the system:**

- Front end :

Reduce the amount of paperwork by creating an electronic version of these processes and storing that data in a data store.

Notification system for when stock is low and keeping track of total stock.

- Website :

Process sales.

People interested in getting their artwork showcased on the bottles can upload their designs.

A customer can view all their past purchases and account details.

View the business details.

3. **Success Factors (CSF) related to front end processing:**

- Transaction processing requirements: After a transaction has been processed the customers will receive a printed-out receipt with all the details of their purchase.
- Usability of the system: The front-end system was made with a uniform look and feel. The system uses as less pop up screens and input screens as possible to without sacrificing usability. The system has a dark background for users who struggle to see writing on light backgrounds.
- To reduce errors, validation has been used on all forms. When an error occurs a help feature has been created to guide the user to ensure they don't make the same error again and tell them what they have done wrong and how to correct it.
- To help users learn how to use the system a Help Feature has been created. The website also has a Help page.
- The use of BI tools, Crystal reports and Power BI, were used to create reports that are meaningful and help the owner make data driven decisions instead of relying on trends by showing the owner popular sales items, which areas buy the product and filtering to see how much profit the business made in the certain amount of time.

4. List of front-end errors that were not resolved:

ERROR TYPE	DESCRIPTION	FOLLOW-UP ACTION
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	Entire interface change. All input boxes removed, all selection done via grid view or combo boxes, aspect ratio enlarged and components have an easier flow.
Level 1	Most severe – things that cause the system to “crash”	Validation done for all aspects of the system and each validation error message is customized and try catch statements implemented. Labels have been displayed in certain forms to highlight the areas not filled in.
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	Systems entire navigation has changed so all tab pages are now only visible according to the 3 main buttons on home screen and sale, Supply and Stock options are now separated. Back buttons implemented on every page.
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	All orders can now be printed including orders from supplier. Rich edit removed and it now incorporates a grid view to display the information for printing. Current Date is displayed. Staff member details who is making order is displayed as well. Logo and information of company also displayed

5. CSF related to website processing:

- To ensuring that the website has business processing capacity and is fully integrated with the front-end system, once a customer registers on the website they are automatically saved on a database that is used by the front end system. If they make a purchase and a staff member checks for their details on the front-end system it is already saved because they registered on the website.
- When it comes to usability, our menu system uses as few objects as possible. The homepage is accessible from any page. Easy access to previous pages by using the 'back' buttons on each page. Advertising will be minimal and only used at parts that the user does not have to click on. No pop-up ads. A search box will be accessible at the top of each page and suggest relevant queries. The website will remember pre-filled information for registered users and offer familiar third-party checkout services for new user. Users will be able to use click-to-call links that enables them to make a phone call, send a text and compose emails by clicking a link. The site will be optimized for use on mobile devices. Users can use the site vertically and horizontally on a device. Images, especially the pictures that users will be uploading at the site will be expandable and viewed from at least three point of view. A single window will be used, and all information will be provided at the same window without calls-to-action that launch new windows. All features will keep the user at the same window with just different pages but same browsing window. – Users will be able to access the website on different devices concurrently. Users will be able to share items on social networks.
- To ensure website security we have included a login for users to make use of. You cannot access the website or purchase any products without registering an account. Once you register all your details are captured into our system and we can track all your purchases.
- The BIR in the website will allow the owner to view bottles sold per location as well as view sales reports and stock reports similar the ones used in the front-end system.

6. List of website errors that were not resolved:

ERROR TYPE	DESCRIPTION	FOLLOW-UP ACTION
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	Footer that show business details on all pages of the website to ensure users don’t have to go hunting for the business’s contact details.
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	Organizing information in a neater more exciting way so it is eye catching and not boring to look at.
Level 1	Most severe – things that cause the system to “crash	When registering a password, it has to have 6 characters or more according to the validation. The Validation worked but the system was not accepting passwords with 6 characters.
Level 1	Most severe – things that cause the system to “crash	Cart system not working. Caused system to crash.
Level 4	Minor user interface errors or cosmetic errors; however, interface issues should not be taken “lightly” and could be pivotal in enhancing the prospect of system acceptance.	Art Page not showing when you sign in on a customer account.

7. Response regarding the success of our system from our client:

Greetings Team

Thank you for taking me on a tour of the software you have developed for our business.

First off, I must say, I was very impressed with the level of sophistication and the extent of the capabilities of your applications. They far exceeded my expectations. I'm probably not going to be able to comment on all the functionalities you talked me through this afternoon as they were numerous, but I would like comment generally below.

Being a small business and not having full-time staff means that there are many areas of neglect that we have not been able to address and it was therefore very exciting to see the software that you have developed in these areas.

One such function is the platform you have designed which creates the ability for artists to upload their artworks to a database. Another is the stock control issue and the alert you have created when stock is low - I have just last week tasked one of our part-timers with keeping an eye on stock levels in order to alert me when stock is low.

For this project we discussed only ready-stock, and it would be great - if this software was to be used by our business - to expand this to incorporate component stock levels such as lid, label and box stock as well as levels of ready items.

As I told you in the meeting today, our business has undergone a lot of changes during this year such as changing the name of the business, terminating certain lines and introducing other lines, and these could also be brought into the new software.

Having a personalised order capture and invoicing capability was also very exciting as we use what I find to be a very cumbersome package in Pastel Sage. I would like to find out how the two might be able to communicate with each other or how they could work in tandem.

Our present website has been made using what must be the most user-friendly application and it has suited us well in creating a website with pages designed for visual effect. The drawback is that it is not a sophisticated website building programme and thus we don't have any online ability to place orders or purchases such as you have created. So, I would like to find out how we might be able to run your applications in tandem with our present ones.

Well done, as I have said, I am impressed and feel with more time together, we could incorporate the changes and items I've mentioned above.

Regards

Will (084 622 2246)

17 December 2020

8. Reflections, lessons learnt and areas we feel there could have been improvements:

- Shaylen: Collectively I feel that the team has worked exceptionally well considering the circumstances we are in, I've learnt that time management is everything, and without proper planning you will not achieve the goals you set out to complete.
- Harshil: Teamwork was key to our major project. I believe that we worked well to overcome obstacles and new challenges presented to us such as lockdown. The critical factor of our MP was time management and the division of work.
- Thamsanqa: Collaboration and effective teamwork was integral to both the completion and success of the system development life cycle. I learnt that a team is made of individuals with their own respective strengths and weaknesses and it is important for each member to use their strengths and work on their weaknesses in order to better themselves and effectively complete the task at hand.
- Silondile: Under the worst conditions we really tried working together as a Team, it wasn't easy, but we manage working together. There was not enough time especially that everything was a putting great pressure on us. I have discovered so much about myself being through the experience of teamwork.
- Hannah: As a team I believe we worked well together considering the problems we faced when it came to communication. From this project I understand how important it is to do your own research and extra work to understand concepts better and understand how to apply them.