Project Proposal: Sales Reporting and Prediction System (PHP-SRePS)

Quality Management

Definition of Done (DOD)

Functional Suitability:

• At least 95% of the functions are appropriate to be used at all times.
- This is because the remaining 5% of the functions are not appropriate to be used in some circumstances. Why 5%, is because some functions require specific circumstances and requirements to be used. Such as the restoration system, it only activates and restores the data when the data or system has been corrupted or during a blackout. As you can see, this is a very specific situation, and that is why the remaining 5% is listed as not appropriate to be used at all times.

• At least 85% of the functions are completed.
- While the remaining 15% of the functions might not be functionable due to bugs and errors. Why 15%, is because of the possibility of having errors and bugs found during the development face. We cannot guarantee a 100% completion as we are just humans and errors, and mistakes are bound to happen. Therefore, we have estimated a 15% of uncompleted functions to be found.

• Maximum of 4 defects per KLOC (Thousand lines of codes).
- This is because, with a maximum of 4 defects per KLOC, we can create more quality systems. This is just an estimated maximum number of defects we will allow our system to have. Since the number of defects per KLOC is lower than 5, this is regarded as a quality system, why? This is because within thousands of lines of codes, we have concluded that the defect density is only 4.

Performance Efficiency:

• At least 95% of the functions within the response time is accurate and on time.
- We will try to reduce the response time of our system as much as possible to reduce latency and delays. This is to prevent as sudden pause in the workflow and prevent a sudden decrease in the time needed to complete a task. Why 95%, is because we cannot guarantee a 100% due to the fact of some unforeseen matters, such as the Wi-Fi having latency, device latency, weak connections etc.

• At least 2GB of the allocated memory space will be used.
- This is to store all the data required to operate the system and data given by the user. The memory space used, may vary as time goes on. This is because the data stored will increase as time goes on, as there will be more data to be stored and more data is required to be used to produce stock reports.

• **The system will be able to produce sales reports based on daily, weekly, monthly, and yearly data, as well as predict the items that are in trend.**
- These are the functions requested by the client that must be implemented into the system. To improve accuracy and persistency in the company's profit margin, and in their reputation in the market, they must be able to produce quality and accurate sales reports. This allows them to measure and predict possibilities to increase their stocks and profits.

Usability:

• **Easy and user-friendly interface.**
- This will help the user to navigate around the system easier. To prevent a headache and a decrease in workflow, our system must have an easy to use and user-friendly interface to allow users to navigate around the system easier.

• **User Manual.**
- To guide users on how to operate the system. To allow the user to understand our system fully, we must provide a user manual that teaches and guides them on how to use our system to its fullest potential.

• **Double confirmation feature to prevent users from making errors.**
- This allows the user to confirm their actions before confirmation. This is just an extra security measure to confirm the act of a user before doing so, this is to prevent errors and mistakes of users by accidentally selecting something by mistake.

• **Device compatibility**
- The system will be compatible with different devices to allow users to have easier access. Since our system is web-based, it has the capabilities of being compatible with most devices, since the NO.1 requirement needed to access the system is a browser and WI-FI.

Reliability:

• **80% of the database is reliable under normal operations.**
- The required data used to operate the system is regarding the information of the items stored as well as the information keyed in by the users. Why 80%, is because the 20% may be stored as cache or junk data from other uses and we cannot guarantee a 100% reliability due to the fact that it is uncontrollable.

Maintainability:

• **Functional testing passed**
- To determine and test the functionality of the system. This is to determine and test the system based on its functions to ensure that it is in the best condition and to ensure that all features and functions are capable of doing what it is told with accuracy and precision.

• **The system can be modified without interrupting the existing system**
- System codes can be modified and updated while in use, without interrupting the existing system. This is to ensure that no interruptions will be made during working hours.

Tutor
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Team Members
• Henry Sim Chin Wei (Software Development) – 103541939 (Team Leader)
• Choo Chun Hang (Data Science) – 103542314
• Ong Sheng Yang (Data Science) – 103542466
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Comments
• **Group**
Our group has finalised our definition of done with accurate and realistic goals and functions. As a group, we have agreed our decisions on selecting these points as they are important for the development as well as finalising the system.

• Henry Sim Chin Wei
I agree with the fact that we as a group have chosen these points to be included in our definition of done, as they seem realistic and important in the development of the project, this also provides us with a baseline and a starting point which makes it easier for us to plan our development as well as prepare for what is needed during the proposal of the project.

• Choo Chun Hang
After our discussions, I have come to terms and agree with the definition of done that we have chosen and stated in the quality management proposal. All the software product quality were stated clearly with its own calculations and explanations on why it is regarded as such, thus given reasons on why we have chosen the particular software product qualities.

• Ong Sheng Yang
I agree with the team's final decision of our Definition of Done (DoD) for the fact that the conditions and criteria of our software are stated clearly. I believe our definition of done will be able to ensure quality while being able to prevent features that don't meet the definition from being provided to users.

• Thulasitharan rao vemkitaramana
I agree with the facts that we have included in our quality management in our definition of done. It is all important to our project development and we have clearly stated on the quality of the software qualities.