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Project Proposal[1] : *GotoGre MRM*

Quality Management

In the context of the "*GotoGre MRM*" project, I believe quality software is important as it ensures that the users get reliable software in terms of all of its functionality (like in adding members, updating sales records, and other functionalities listed in product backlog for the entire project) and one that is always available for them to use for their own business purpose (which is keeping record of their member details and analysing their sales records).

Furthermore, it should also follow well-known, standard, popular design principles/patterns (like command patterns for adding, updating membership functionality), alongside a complete set of automated Nunit tests, for each individual functionality listed in product backlog (to ensure it will be readily understandable/transparent to developers in either scaling it later on or swapping modules/parts for better suitability).

These qualities can be maintained by following certain guidelines from the ISO 25010 model:

Functional suitability: (Functional Completeness). To achieve completeness, the set of functions specified in backlog features (new member, add item, edit/manage item, add sales record, edit/manage sales record, edit/manage member and sales queries based on time stamps and members) should be more than 95% completed and total number of errors per KLOC <=5.

- Performance efficiency: (Time Behaviour) The response time for error message/ acceptance message for the employee when checking the "Add New User" functionality should take less than 5 seconds to load, once the software has been fully developed and deployed

- Performance efficiency: (Resource Utilization) The amount of memory taken by the backlog features (the GUI aspect, adding and updating members, updating sales record and all other functionality in the sprint backlog for the entire project) should not exceed 10mb for at least 90% of the features.

- Usability: (User Interface Aesthetics) The software's menu interface for accessing the "add user", "modify user", "sales record for user", etc (present in sprint 1 backlog) should be simple or self-explanatory enough for the users to easily understand and use (without any further training for it). Let the user, product owner and system testers test the system. If the overall satisfaction of the users demonstrated is more than 90 % then the user interface has been achieved.

- Usability: (User Error Protection) If the failed user operation for the system (ie either a failed input for any of the functionality, like "add members", "update members", etc, or a cancelled operation) is noted to be less than 5% by the time it has been deployed, the software can be thought to have fulfilled the User Error Protection

- Security: (Confidentiality) The System is protected by username and password pair and only authenticated user can access it after waiting less than 5 seconds (for login time). This can be tested by using a set of username and password pairs and seeing whether more than 95% of the username and password pair can gain access to the system, within 5 seconds of login time.

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[1] This document is by no means a "full project proposal". It has been simplified and customized for the purposes of SWE30010 teaching. The full project proposal includes many other sections which have not been discussed during the first few weeks of SWE30010 teaching.