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Project Proposal¹ : *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)** Ensure more than 85% of the features kept aside for sprint 1 is completed in the sprint itself (like currently from the product backlog I wish to complete any 6 from the add 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) alongside their individual test cases (at least 1 success and 1 fail case test for each functionality) to the state that they can be demonstrated and deployed as expected
- **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 software’s functionality (ie 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. That way users will not need to worry about keeping much space free in their device in order to use the software and hence can smoothly switch from their paper based system to the electronic system we are creating for them without any worry.
- **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). This can be achieved by providing the following 3 parts at the bare minimum: using basic button structure, black and white font, and brief and self-explanatory keywords/symbol on button (so that users instantly know what they do) by the time the software is fully developed and deployed.
- **Usability: (User Error Protection)** The software’s “add members”, “update members” and “update sales record” should send an error message to the user within 2 sec of submission if the user violates any restrictions given on input method (ie phone number greater than 12 characters, sales item not existing, etc) and the input restrictions should be mentioned near the boxes in the form, by the time the software is fully developed and deployed
- **Security: (Confidentiality)** The software’s authentication of users (ie “Username and password” for the company’s user) should only allow the user with proper username and password to access any information stored in it within 5 sec of delay, by the time the software is fully developed and deployed. (this can be verified by the following test condition: users can view “sales record” once their authentication is successful, in less 5 seconds)

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.