Reflection and Traceability Report on SFWRENG 4G06A

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1 Changes in Response to Feedback

This section summarizes the changes we have made in regards to the feedback we got from TAs, supervisor, peer review, supervisor, and during usability testing. The changes made can be found in the below able by clicking on associated issues. In order to ease the traceability we have categorized the issue into milestones such as 'TA Feedback Issues', 'Peer Review', and 'Final Doc Updates' which can be found in Team-25's Capstone Deliverables Project. Associated PRs for issues can be viewed under specific views created for TA feedback, Peer review, and Final documentation updates issues.

1.1 SRS and Hazard Analysis

Changes to SRS and Hazard Analysis along with the feedback, response and associated issues and PRs can be found in the tables below:

Table 1: Changes for SRS Documentation

Feedback Source	Feedback Item	Response	Issue
TA	Document Content: missing revision history; Document Organisation: Incorrect template; LO Ext. Knowledge: No mention of feedback from supervisor; LO Formalisation: Missing formalisation and other sections related to data types etc.	Template updated to include all relevant sections including formalization. External knowledge from supervisor added. Revision history updated.	#166

Feedback Source	Feedback Item	Response	Issue
TA	Formatting and Style: Grammar, captilization errors; Focus on Users: Issues with stakeholder and user section; Phase In Plan: missing phase in plan; LO Impact: impact on society is not clear.	Fixed grammar, random captilization. Updated stakeholders and users section. Society is listed as a stakeholder along with impact on health safety, cultural diversity etc. Phase in plan added.	#167
TA	Notations and Conventions: use case diagram missing labels.	Use case diagram updated	#168
TA	What not How(Abstract): Constraints listed as requirements; Basis for Design: Vague constriants, HIPAA included which is not applicable; LO Standards: vague requirements.	Constriants and NFRs updated to address issues. Compliance is changed to PIPEDA.	#169
TA	Complete, Correct and Unambiguous: Unclear requirements; Traceable Requirements: Incorrect traceability matrix; Verifiable Requirements: Unclear fit criterion.	Outlined requirements and fit criterion reworded. Traceability matrix fixed.	#170
Peer Review	Unclear Requirements for Accessibility Compliance.	Requirement removed as a result of changed scope.	#79
Peer Review	Missing Phase in Plan.	Added as a result of TA feedback.	#80
Peer Review	Vague Specification for Functional Requirements.	Requirements reworded.	#81
Peer Review	Complete, Correct and Unambiguous Criteria: Functional Requirements not properly worded.	Reworded functional requirements.	#82
Peer Review	NFRs: Gap in Data Backup and Recovery.	NFRs reworded and updated	#83
Peer Review	Requirements for System Scalability lack details.	NFR reworded and updated.	#84

Table 2: Changes for Hazard Analysis

Feedback Source	Feedback Item	Response	Issue
TA	Spelling and grammar and style: FMEA Table formatting.	Formatting fixed.	#171

Feedback Source	Feedback Item	Response	Issue
TA	Recommended Actions: mention user involvement in assumptions.	Assumptions updated.	#172
Peer Review	Missing Requirements: Missing some of the requirements such as Security etc.	Requirements included in SRS.	#103
Peer Review	Scope and Purpose of Hazard Analysis: API modules need more robust solutions.	Details of roboust solutions added.	#104
Peer Review	FMEA table does not account for formatting issues in classification.	Potential hazard aadded in the table.	#105
Peer Review	Roadmap lacks clarity.	Roadmap updated for clarity to include how iterative feedback would be used.	#106
Peer Review	Access requirements does not address how system will handle repeated failed login attempts.	Access requirements reworded to handle repeated login attempts.	#107
Peer Review	Detection gaps in FMEA table.	Measures added for data accuracy and consistency.	#108

1.2   Design and Design Documentation

Changes to Desgin and Design Documentation along with the feedback, response and associated issues and PRs can be found in the tables below:

Table 3: Changes for Design

Feedback Source	Feedback Item	Response	Issue
Peer Review			
Peer Review			
Peer Review			
Peer Review			
Peer Review			
Peer Review			

Table 4: Changes for MG and MIS

Feedback Source	Feedback Item	Response	Issue
TA	SoftArchitec: Quality Information: Some secrets are not secrets and should be updated.	kalsi	#419
TA	DetDesDoc: EnoughToBuild: Vague and ambious wording.	kalsi	#420
TA	CI/CD Infrastruture: Not working, actions failing.	CI/CD fully setup with no issues.	#421
TA	LO SpecMath: No specific feedback provided.	Already formalised best to our ability.	#422
TA	LO ProbSolutions: No specific feedback provided.	Already completed best to our ability.	#423
TA	LO Explores: No specific feedback provided.	Already completed best to our ability.	#424
Peer Review	Module Guide: Secrets for patient model and administrator model module do not cover data validation, consistency rules, and any internal logic hidden from other modules.	Minor changes added, main secret is mentioned, data validation is a inferred function as well.	#249
Peer Review	MG: Insufficient Detail on Relationships Between Modules.	Provided in the network sections, HTTP + sockets.	#250
Peer Review	MIS: Missing Details in Assumptions for Prediction Modules.	Updated assumptions to include edge cases, such as handling missing or invalid data in the input chart.	#251
Peer Review	MIS: Missing Error Handling Details in Broker Module.	Added details on how the Broker Module handles module-level failures.	#252
Peer Review	MG: Lack of Integration Details for Administrator Account Management.	Included a description of the request/response structure for the CRUD operations and specify validation requirements for API calls.	#253

1.3 VnV Plan and Report

Changes to VnV Plan and Report along with the feedback, response and associated issues and PRs can be found in the table below:

Table 5: Changes for VnV Plan

Feedback Source	Feedback Item	Response	Issue
TA	Content: Broken entry in references	Reference issue fixed.	#190
TA	Spelling and grammar and style: Break into paragraphs such that one paragraph talks about one topic.	Formatting fixed.	#191
TA	Plan: VnV Reviews issues.	Updated to remove mutation testing and include a checklist.	#194
TA	System Tests for Functional Requirements are specific: Issues in input and error messages.	Provide concrete inputs and error messages.	#197
TA	Tests for Nonfunctional Requirements are specific: Vague tests.	Updated tests to include details and concrete details.	#198
TA	Nondynamic testing used as necessary: Details missing for static testing.	Added details for static testing and fixed errors.	#200
Peer Review	General Infromation: Lacks clarity in its objectives.	Updated to emphasize the critical nature of safety and security in healthcare applications.	#137
Peer Review	Usability survey: Does not include specific and open-ended questions.	Usability survey pdated to include tailored questions to collect data on various design components.	#138
Peer Review	Implementation Verification Plan: Does not provide clear criteria for identifying "critical sections".	Updated to include checklist to identify critical sections.	#139
Peer Review	Tests for functional requirements: Lacks details on error messages details.	Updated output to include specific details in error messages.	#140
Peer Review	Static Testing Procedures: Lacks structured apporach.	Static Testing Procedures updated to include structured approach and a checklist.	#141
Peer Review	Software Validation Plan: Lacks specific criteria for validating the software against stakeholder expectations.	Updated to include specific criteria to validate software.	#142

Table 6: Changes for VnV Report

Feedback Source	Feedback Item	Response	Issue
Peer Review	VnV Report: Verification of Nonfunctional Requirement 1 is missing	Results from usability testing included.	#357
Peer Review	Report has grammar and spelling issues.	Updated to fix grammar and spellings.	#358
Peer Review	VnV Report Insufficient Explanation for Deviations from the VnV Plan.	Both VnV PLan and Report updated to include changes due to updated requirements. Any deviations are fully explained.	#359
Peer Review	VnV Report Shallow Safety and Security Testing.	Updated Safety and security requirements to include specific creteria and match updated requirements.	#360
Peer Review	VnV Report: Revision history not updated.	Revision history updated to include details.	#361
Peer Review	VnV Report: Undefined Pass/Fail Criteria for Voice-to-Text Transcription	Tests updated to include specifics. Also socvered as a part of unit testing.	#362

2 Challenge Level and Extras

2.1 Challenge Level

[State the challenge level (advanced, general, basic) for your project. Your challenge level should exactly match what is included in your problem statement. This should be the challenge level agreed on between you and the course instructor. —TPLT]

2.2 Extras

[Summarize the extras (if any) that were tackled by this project. Extras can include usability testing, code walkthroughs, user documentation, formal proof, GenderMag personas, Design Thinking, etc. Extras should have already been approved by the course instructor as included in your problem statement. —TPLT]

3 Design Iteration (LO11 (PrototypeIterate))

[Explain how you arrived at your final design and implementation. How did the design evolve from the first version to the final version? —TPLT]

[Don't just say what you changed, say why you changed it. The needs of the client should be part of the explanation. For example, if you made changes in response to usability testing, explain what the testing found and what changes it led to. —TPLT]

4 Design Decisions (LO12)

[Reflect and justify your design decisions. How did limitations, assumptions, and constraints influence your decisions? Discuss each of these separately. —TPLT]

5 Economic Considerations (LO23)

[Is there a market for your product? What would be involved in marketing your product? What is your estimate of the cost to produce a version that you could sell? What would you charge for your product? How many units would you have to sell to make money? If your product isn't something that would be sold, like an open source project, how would you go about attracting users? How many potential users currently exist? —TPLT]

6 Reflection on Project Management (LO24)

[This question focuses on processes and tools used for project management. —TPLT]

6.1 How Does Your Project Management Compare to Your Development Plan

[Did you follow your Development plan, with respect to the team meeting plan, team communication plan, team member roles and workflow plan. Did you use the technology you planned on using? —TPLT]

6.2 What Went Well?

[What went well for your project management in terms of processes and technology? —TPLT]

6.3 What Went Wrong?

[What went wrong in terms of processes and technology? —TPLT]

6.4 What Would you Do Differently Next Time?

[What will you do differently for your next project? —TPLT]

7 Reflection on Capstone

[This question focuses on what you learned during the course of the capstone project. —TPLT]

7.1 Which Courses Were Relevant

[Which of the courses you have taken were relevant for the capstone project? —TPLT]

7.2 Knowledge/Skills Outside of Courses

[What skills/knowledge did you need to acquire for your capstone project that was outside of the courses you took? —TPLT]