

UWA FRACAS Requirements for MVP

This is the subset of the full requirements required for the MVP in Sprint 2.

Identifier	Name	Description
FR01	Failure Recording	The system shall record information about failures, their causes, their mechanisms, the corrective actions implemented, and the effectiveness of the actions. This is to perform the core function of a FRACAS.
FR02	New from Duplicate	The system should allow new failure records to be created by duplicating existing records and modifying them before saving. This could accelerate the workflow for the recording of failures similar to past failures.
FR03	User Profiles	The system shall require members to log into user profiles from a login portal. This will permit access to the system, allow for failure ownership and provide contact details.
FR04	Profile Creation	The system shall allow people to create new accounts from the login portal and request to join an area team in the organisation.
FR06	Commenting	The system shall support comment threads on failures. This is for feedback and collaborative problem-solving.
FR07	Partial Completion	The system shall allow incomplete failure records to be saved for later completion or deleted. This will reduce work being redone and provides flexibility.
FR08	Status	The system shall display the status (Incomplete, Complete, Validated) of a failure's record section, analysis section, and corrective action section. The system shall also display the status of the solution (Not Implemented, Implemented, Reviewed).
FR10	View Past Failures	The system shall allow all users to view all past and current failure records. This will enable learning from past failures and the investigation of failure trends.

Identifier	Name	Description
FR11	Filtered Searching	The system shall allow filtered searching of failure records by time period, competition year, technical team/vehicle subsystem, failure owner, and keywords. This will enable learning from past failures and the investigation of failure trends.
FR14	Report Generation	The system shall be capable of generating a report of all failure records for individual projects, or for selected failure records. This will produce a deliverable document for compliance and assurance purposes.
FR15	Teams Management	The system shall allow team leads or management to create new teams, appoint team leads, view team members, and accept members requesting to join teams.
FR21	Editing Records	The system shall allow management to edit or delete incorrect records. This will allow for the validation of record completeness and accuracy.
FR22	Review Dates	The system shall allow the setting of review dates to assess the effectiveness of corrective actions. This will ensure validation occurs and allows for integration with team scheduling.
PR01	Aesthetic Design	The system shall be aesthetically pleasing and intuitive to navigate.
PR02	Streamlined Workflow	The workflow process shall be as simple and streamlined as possible.
PR03	One-Click Report	The system shall allow the creation of a failure record with one click from anywhere in the system.
PR04	Auto-Completion	The system shall auto-complete as much of the form as possible, considering the failure owner's role in the organisation as well as past records of the owner (allowing changes if incorrect).

Identifier	Name	Description
PR05	Structured Fields	The system shall keep as many data fields structured and multi-choice/drop-down as possible.
PR06	Minimum Fields	The system shall record the minimum necessary information required for searching and analysis.
SR01	Low Cost	The system shall cost less to develop and implement than purchasing/subscribing to existing market options over a 10-year period.
SR02	Device Compatibility	The system shall be accessible from computers and mobile devices.
SR03	User Count	The system shall be capable of hosting at least 200 user profiles.
SR04	Storage Duration	The system should store records in an accessible way for at least ten years before archiving records.
SR05	Data Output Format	The system shall store or shall be able to output selected data in a format that allows for easy external analysis.
SR06	Security	The system shall prevent people outside of the system from viewing or interacting with communications and data on the system.
SR07	Maintainability	The system shall be built with a strong focus on extensibility and modularity to make adding new features or performing changes easier.