

Marquis Automated and Re-usable System (MARS) Web Application Phase-II

Software Requirement Specification (SRS)

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1. Introduction

1.1 Purpose

This document includes key specifications, functional & non-functional requirements and design of MARS Web Application during Phase-II of development. Tech Leads, Project Managers, Developers and Designers are intended audience of this document.

1.2 Document Convention

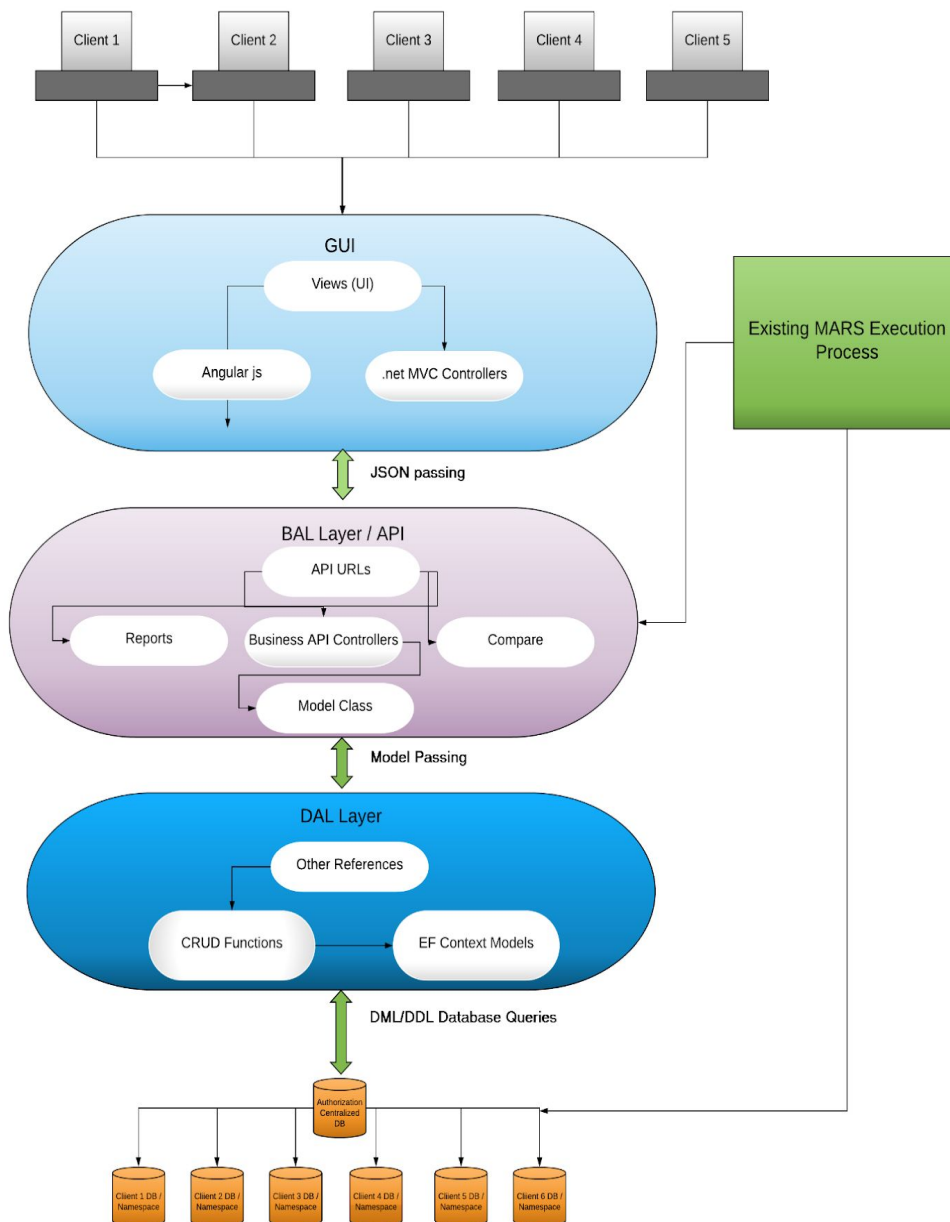
Document doesn't follow any SRS standards rigidly. Understandability of requirements is prioritized over following set standards. >> indicates next action/item or sub-menu

1.3 Scope

Intended audience may suggest modifications in this document. Features & functionalities not mentioned in this document are out scope for current development iteration (Phase-II).

2. Overall Description

2.1 Product Architecture



2.2 Technology

Backend

- Oracle 11g or 12e
- Entity Framework with edmx file
- ASP.NET MVC with .net Framework 4.7.2

Frontend

- Angular, JQuery

Web API

- ASP.NET MVC with .net Framework 4.7.2

2.3 Product Features

MARS Revamp product will contain all business logic for MARS Explorer. Phase-II will contain all operations for Storyboard operations like adding new storyboard, update storyboard to the database and execute engine in Storyboard.

2.4 User Classes & Characteristics

MARS Phase-2 will contain generalized user specifications.

There will be one administrator user who will be able to create new users / update passwords or remove users.

Other users will be able to access the application from their credentials created by the administrator.

2.5 Operating Environment

Any modern web-browser for Web Application.

Windows 2012+ , IIS 8+, Oracle Engine deployed on on-prem or cloud environment.

2.6 Application Integration Overview

The web application will be used to execute the 3rd party application which will be covered in phase-2.

MARS Web application will be using the default Oracle database as MARS Explorer is using.

2.7 Design & Implementation Constratings

UI Design:

UI Design the application is using is METRONICS theme.

The design will be responsive so that it will be compatible with mobile versions also.

Security:

Application will be using 80 port for HTTP request.

Custom ports can be used if the server is on premises.

Application will be using SSL certificate which will cause application to be used as HTTPS.

2.8 Assumptions & Dependencies

Oracle DB will be used as it is.

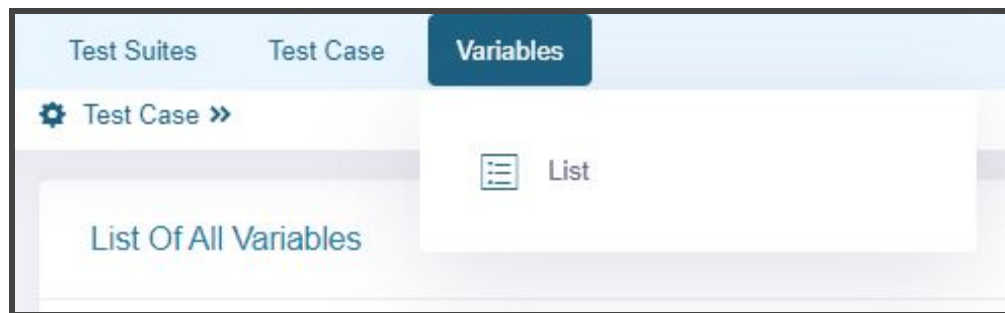
MARS Engine is available for execution from Web App.

3. System Features

3.1 Functional Requirements

3.1.1 Menu Bar

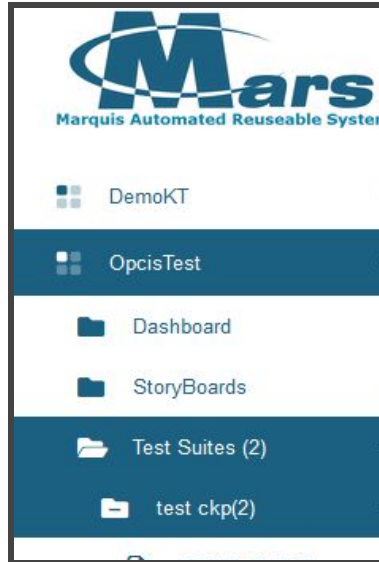
FR-31-1	Contains following Menus 1.Project 2.Test Suite 3.Test Case 4Storyboard 5.Variable 6.Application 7.Object 8.Help
FR-31-2	Each Menu contains following common options 1.List 2.Import
FR-31-3	Help contains link to MARS documentation. Documents should be downloadable.
FR-31-4	Project >> Open >> Display list of Projects >> Selecting a Project will add it in the Left Sidebar.
FR-31-5	Project >> Run Current Storyboard will initialize Test Case Execution engine using Microsoft ClickOnce. Update Storyboard after completion of execution.



Menu Bar

3.1.2 Left Sidebar

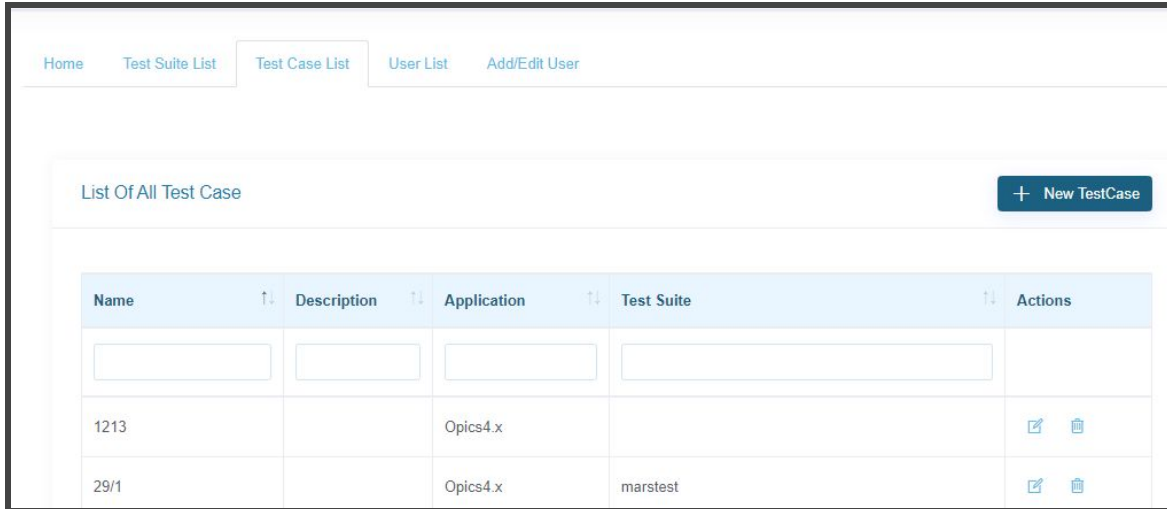
Projects	
FR-32-1	On the initialization of application, only last worked projects should be displayed here.
FR-32-2	Project >> Right click: Display a menu with following options 1.Rename 2.Delete 3.Export 4.SaveAs
Storyboard	
FR-32-3	Storyboards >> Right click: Display menu with option "Add Storyboard"
FR-32-4	Storyboard >> Left click: Open it in a new tab. Users can open multiple Storyboards.
FR-32-5	Storyboard >> Right click: Display a menu with following option 1.Rename 2.Delete 3.Export 4.SaveAs
Test Suites	
FR-32-6	Test Case >> Right Click >> Menu: Add 1.Move 2.SaveAs options User should be able to move test case from one Test Suite to Another.
FR-32-7	Display DataSets under a Test Case
FR-32-8	Test Case >> DataSet: Use should be able to drag DataSet and drop it in the Storyboard datagrid tab.
FR-32-9	Test Case >> Left Click: Render data in tab without refreshing whole page
FR-32-10	Test Case >> DataSet >> Right Click: Display Menu with following options 1.Rename 2.Delete 3.SaveAs



Left Sidebar

3.1.3 Canvas & Tabs

FR-33-1	Every listing or grid is displayed in a tab. Use can open multiple tabs. If the same entity is opened again, do not open a new tab. Bring existing tab to focus.
FR-33-2	If close(x) is clicked and data is not saved, display an alert seeking user confirmation
FR-33-3	Data in tab is either displayed as list or datagrid. Generic properties are in 3.1.4 & 3.1.5. Special cases are mentioned in respective sections.



Canvas with tabs

3.1.4 List

FR-34-1	Menu Bar >> Menu >> List >> Left click: Opens details of similar entities in a tab as a list Entities include 1.Project 2.Test Suite 3.Test Case 4.Variable 5.Objects 6.Application 7.keyword
FR-34-2	Each list contains following common functionalities <ul style="list-style-type: none"> - Search & sort option on columns - Pagination - “Add Entity” button above the list. - List contains following data columns (additional columns mentioned in following FR points) 1.Name 2.Description 3.Project 4.Application 5.Actions - Actions contain following options (additional columns mentioned in following FR points) 1.Edit 2.Delete
Test Case	

FR-34-3	Additional Column: Test Suite
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List Of All Test Suite

+ New Test Suite

Name	Description	Application	Project	Actions
DemoKTTS	DemoKTTS	Summit,Opics4.x,Summi5.8,aa,Summit6.0,Alex,Summit5.7	DemoKT	
DemoTS1	DemoTS1	aa,Alex		
dfdfdf		Summit6.0,Summit5.7	DemoKT	
dfs	dfs	Summit6.0		
dfs2	dfs2	Opics4.x		

List

3.1.4 Datagrid

FR-34-1	Left Sidebar >> individual entity >> Left click: Opens relevant data in tab as datagrid
FR-34-2	<p>Each grid contains excel like structure and following common functionalities</p> <ul style="list-style-type: none"> - Top row has following buttons on Left 1.Reload 2.Undo 3.Redo 4.Reset Filter 5 Freeze 6.Toggle Collapse 7.Wrap - Top row has following buttons on Right 1.New Step 2.Validate 3.Save 4.Export - Search & sort option on columns - Depending on entity, different columns will be displayed
Storyboard	

FR-34-3	Display following columns Actions, Step name, Test Suite, Test Case, Dataset, Result, Error Cause, Script Start, Script End, Dependency, Description
FR-34-4	Row >> Right click: Display in Menu option "Show Test Result" Clicking it opens Modal to display relevant results
FR-34-5	Actions column cell is a drop-down with following options 1.Execute 2.Skip 3.Run 4.Done
FR-34-6	Test Suite column cell becomes drop-down on click and displays list of test suites for selected Project
FR-34-7	Test Case column cell becomes drop-down on click and displays list of test cases for selected Test Suite
FR-34-8	DataSet column cell becomes drop-down on click and displays list of test cases for selected Test Suite
FR-34-9	Results can have PASS/FAIL/BLANK values
FR-34-10	Dependency column cell is a drop-down with options depending on value of Step Name. It can be empty.
Test Case	
FR-34-11	User should be able to create regions. Regions should be expand and collapse on click.

		Keyword	Object	Para	Com	BSYS RUN		BSYS RUN4					
						Data		Data					
1		WaitForSeconds		fsdfsdf	test	<input checked="" type="checkbox"/>	fsf	<input type="checkbox"/>	1				
2		ClickMenuIcon	MAIN_TOOLBAR			<input type="checkbox"/>	pp	<input type="checkbox"/>	2				
3		WaitForSeconds		test	test	<input type="checkbox"/>	cherish	<input type="checkbox"/>	3				
4		SelectMenuItem	BSYS_TOOLBAR	/		<input type="checkbox"/>		<input type="checkbox"/>	4				
5		MaximizeWindow	OPICS_MAIN	test 1	test	<input type="checkbox"/>	dataset	<input type="checkbox"/>	5				
6		PegWindow	BSYS	test	test	<input type="checkbox"/>	123	<input type="checkbox"/>	6				
7		MaximizeWindow	OPICS_MAIN	test 1	test	<input type="checkbox"/>		<input type="checkbox"/>	7				
8		MaximizeWindow	OPICS_MAIN	test 1	test	<input type="checkbox"/>	dataset	<input type="checkbox"/>	8				
9		Dismiss		test	test	<input type="checkbox"/>		<input checked="" type="checkbox"/>	9				
10		LaunchApplication	MAIN_TOOLBAR	TEXT:		<input type="checkbox"/>		<input type="checkbox"/>	10				
11		ClickMenuIcon	MAIN_TOOLBAR	test2		<input type="checkbox"/>		<input type="checkbox"/>	11				
12		CloseWindow	BSYS	test	test5	<input type="checkbox"/>		<input type="checkbox"/>	12				
13		WaitForSeconds		F	test	<input type="checkbox"/>		<input type="checkbox"/>	13				
14		WaitForSeconds		F		<input type="checkbox"/>		<input type="checkbox"/>	14				

Datagrid

3.1.5 Modal

FR-35-1	“Add/Edit Entity” button in List opens modal with following fields 1.Name 2.Description 3.Project 4.Application
FR-35-2	Validation for empty fields
Variable: Add/Edit	
FR-35-3	Display following fields for add/edit 1.Variable Name 2.Display Name 3.Type 4.Status
Storyboard: Add/Edit	
FR-35-4	Display following fields for add/edit 1.Storyboard Name 2.Description

3.1.6 Validation

FR-36-1	Variable, DataSet, Storyboard, Project name should be unique
FR-36-2	A Test Case only belongs to single Test Suite
Variables	
FR-36-3	If variable type is GLOBAL_VAR then don't display BASELINE/COMPARE fields in Status.
FR-36-4	If variable type is MODAL_VAR or LOOP_VAR, display BASELINE/COMPARE/NULL fields in Status and make it user selectable (drop-down)
FR-36-5	Variable name is globally unique
FR-36-6	Variable name, Type, Display Name are mandatory in Add/Edit modal
FR-36-7	Variable Type contains 1.GLOBAL_VAR 2.MODAL_VAR 3.LOOP_VAR
Storyboard - Datagrid	
FR-36-8	Following column cells can't be blank 1.Actions 2. Test Suite 3.Test Case 4.DataSet
FR-36-9	It's not allowed to put any other value in Action field than one's in drop-down.
FR-36-10	Step Name is unique. It's value can be blank or unique
FR-36-11	Following column cells are non-editable 1.Results 2.Error Cause 3.Script Start 4.Script End 5.Description
FR-36-12	Dependency column cells can have empty values
FR-37-13	While copy-pasting or editing DataSet, Test Case or Test Suite, validate if they belong to appropriate parent entity
Storyboard: Add/Edit	
FR-36-14	Storyboard name , description & Project are required fields
FR-36-15	Storyboard name must be unique
Test Case: Datagrid	

FR-36-16	Only one user should be able to edit a Test Case at a time.
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3.1.7 API

Variable	
FR-37-1	List all variables
FR-37-2	Add/Edit a variable
FR-37-3	Delete a variable
FR-37-4	Duplicate validation for a variable
FR-37-5	Get variable type & status by ID
FR-37-6	Load Baseline & compare
Storyboard	
FR-37-7	List all Storyboards
FR-37-8	Add/Edit a Storyboard
FR-37-9	Delete a Storyboard
FR-37-10	Duplicate validation for a Storyboard
Storyboard - DataGrid	
FR-37-11	Get details of a Storyboard
FR-37-12	Load Action list
FR-37-13	List of Test Suites based on Project Id
FR-37-14	List of Test Cases based on Test Suite Id & Project Id
FR-37-15	List of DataSets based on Test Case Id & Test Suite Id
FR-37-16	List Dependency based on Step Name

FR-37-17	Save Storyboard Datagrid
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