

OUR PROJECT:

ARTECH SYSTEMS



GALLERY ADMINISTRATION AND BOOKING SYSTEM



MEET OUR TEAM





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This document is our Deliverable 6 System Documentation contains the Artech System final system requirements which includes a CRUD Matrix, validation tables and a conversion plan. This document lastly containsproject related issues the group faced during our project creation.





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1. Document Introduction

This deliverable will provide the complete technical specification and system documentation for the Artech system. This document is our Deliverable 6 System Documentation contains the Artech System final system requirements which includes a CRUD Matrix, validation tables and a conversion plan. This document lastly contains project related issues the group faced during our project creation with team sign off.





2. System Requirements

Introduction

The next section of this document contains the full set of our functional requirements as of Deliverable 6.

2.1 Functional Requirements List

2.1.1 Admin subsystem

- 1) Approve exhibition application
- 2) Search Exhibition User
- 3) Delete exhibition user
- 4) Create new Exhibition
- 5) Search Exhibition
- 6) Update Exhibition
- 7) Delete Exhibition
- 8) Create Artist exhibition Invitation
- 9) View Artist
- 10) Add showcase Artwork
- 11) Update Showcase Artwork
- 12) Delete Showcase Artwork
- 13) Print Tag
- 14) View Schedule
- 15) Create Class
- 16) Search Class
- 17) Update Class
- 18) Delete Class
- 19) Add Class Teacher
- 20) Search Class Teacher

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- 21) Update Class Teacher
- 22) Delete Class Teacher
- 23) Create Medium
- 24) Delete Medium
- 25) Archive status
- 26) Create Surface Type
- 27) Delete Surface Type
- 28) View Refund Requests

2.1.2 Art Class Subsystem

- 1) Book Art Class
- 2) Cancel Booking
- 3) View Booking of Class
- 4) View Refund Status
- 5) Capture Class Feedback
- 6) Make payment
- 7) Request Refund

2.1.3 Reporting Subsystem

- 1. Generate New User Report
- 2. Generate Art Class Report
- 3. Generate Class Teacher Report
- 4. Generate Exhibition Report
- 5. Generate Class Feedback Report

2.1.4 User subsystem

- 1) Register User
- 2) Log in
- 3) Log out
- 4) Reset Password
- 5) Update User
- 6) View Notification
- 7) View Artist Artwork showcase





2.1.5 Artist Subsystem

- 1. View Available Exhibitions
- 2. Apply for Exhibition
- 3. Create Artist showcase artwork
- 4. View Artwork showcase
- 5. Edit artist Profile
- 6. Accept Invitation for Exhibition.
- 7. Generate Tag

Conclusion

In conclusion the above section contains the full set of our final Functional Requirements.





3. Validations

Introduction

This section contains the complete requirement validation of the Artech developed systems specifications. It validates the system against the requirements using the entities from the ERD, screens and reports.

3.1 Validations

3.1.1 Admin Subsystem

System	Requirements	Use Case	Process	Entities	Screens	Reports
1.Admin	1.1 Approve Exhibition Application	1.1 Approve Exhibition Application	1.1.1 Retrieve and display applications	Exhibition Application	 Exhibition Applications Screen Exhibitions Screen 	N/A
			1.1.2 Display specific applications	None		
			1.1.3 Confirmatio n and validation of application approval	None		





		1.1.4 Save exhibition user	-Exhibition -Application Status		
		1.1.5 Notification to users	None		
1.2 Search exhibition User	1.2 Search exhibition User	1.2.1 Capture search exhibition user	None	 Exhibitions Screen Exhibition Participation Screen 	N/A
		1.2.2 Validate search exhibition user	None		
		1.2.3 Retrieve search results	Exhibition Artist		
		1.20.4 Display search exhibition user results	None		





1.	.3 Delete exhibition user	1.3 Delete	1	.3.1	None	• •	Exhibition Screen	N/A
		exhibition user	di ex	etrieve and isplay xhibition sers			Participants Screen	
			1.3.2 Confirmand validate exhibitions and validate exhibitions are supported by the confirmation of Delegation of Delegations are supported by the confirmation of Delegation of Delegat	tion of etion Delete Exhtion Art Notation ete	nibition ist			
1.4		1.4 Capture New exhibition	1.4.1 Captur new exhibit 1.4.2 Confirt validat new exhibit	tion No m and te		•	Exhibitions Screen Create new exhibition Screen	N/A





	-				
		new	-Exhibition -ExhibitionType		
		<u> </u>	-Organisation ExhibitionAnnoucement	t	
		Announce new exhibition			
1.5 Search exhibition	1.5 Search exhibition	1.5.1 Capture Search exhibition	None	Exhibition Screen	N/A
		1.5.2 Validate search exhibition	None		
		1.5.3 Retrieve search exhibition	-Exhibition - Organisation		
		1.5.4 Disp search exhibition			
1.6 Update Exhibition	1.6 Update Exhibition	1.6.1 Retrieve a display exhibition search		Exhibitions ScreenUpdateExhibitions screen	N/A





			1.6.2 Capture exhibition update details	None		
			1.6.3 Confirm and validate exhibition	None		
			update details			
			1.6.4 Save exhibition update details	-Exhibition -Organisation		
			1.6.5 Display exhibition update details	None		
1.	.7 Delete exhibition	1.7 Delete exhibition	1.7.1 Retrieve and display search exhibition delete	None	• Exhibition	N/A
			1.7.2 Select exhibition delete	None		





		1.7.3 Confirmation n and validation exhibition delete	None		
		1.7.4 Delete exhibition	-Exhibition - Organisation		
1.8 Create artist exhibition invitation	1.8 Create artist exhibition invitation	1.8.1 Capture Artist	None	Send invitation Screen	N/A
		exhibition invitation details		Invitations Screen Exhibition Screen	
		1.8.2 Validation and confirm artist exhibition invitation details	None		
		1.8.3 Save new artist exhibition invitation	Exhibition Invite		





	-		•		
		1.8.4 Display new artist exhibition invitation	None		
1.9 View Artist	1.9 View Artist	1.9.1 Capture artist view details	None	Artists Screen	N/A
		1.9.2 Process and validate artist view details	None		
		1.9.3 Retrieve	Artist		
		view artist details			
		1.9.4 Display view artist details	Artist		
1.10 Add showcase Artwork	1.10 Add showcase Artwork	1.10.1 Capture Add showcase artwork details	None	Artworks Screen	N/A





		1.10.2 Validate and confirm add showcase artwork details	None		
		1.10.3 Save new showcase artwork details	Showcase Artwork		
		1.10.4 Display showcase artwork successfully added	None		
1.11 Update showcase artwork	1.11 Update showcase artwork	1.11.1 Retrieve and display showcase	Showcase Artwork	Artworks Screen	N/A
		artwork details			
		1.11.2 Capture updated showcase artwork details	None		





		1.11.3 Validate and confirm updated showcase artwork details	None		
		1.11.4 Save updated showcase artwork details	Showcase Artwork		
		1.11.5 Updated showcase artwork details announcem ent	None		
1.12 Delete showcase artwork	1.12 Delete showcase artwork	1.12.1 Retrieve and display artwork	None	Artworks Screen	N/A
		1.12.2 Delete criteria artwork	None		





		1.12.3 confirm and validate delete artwork	None		
		1.12.4 Delete artwork	Showcase Artwork		
		1.12.5 Notification of delete artwork	None		
1.13 Print Tag	1.13 Print Tag	1.13.1 Compile Tag details	-Exhibition -Tag	 Exhibition Tags Screen 	N/A
		1.13.2 Select and Print preference details	None		
		1.13.3 Compile and print tag details	None		
1.14 View Schedule	1.14 View Schedule	1.14.1 Gather	None	Exhibition schedule Screen	N/A
		chedule /pe data		Art Class Schedule Screen	





	~	1.14.2 Compile and display schedule data	Schedule	
1.15 Create Class	1.15 Create class	1.15.1 Capture Art class details	None	Art Classes ScreenCreate New Art class Screen
		1.15.2 Validate and Confirm art class details	None	
		1.15.3 Save art class details	-ArtClass -ArtClassType	
		1.15.4 Announce new art class	Art Class Announcement	
1.16 Search Class	1.16 Search Class	1.16.1 Capture search class	None	Art class Screen N/A
		1.16.2 Validate captured parameter	None	
		1.16.3 Retrieve results	Art class	





		1.16.4 display search results	None		
		1.16.5 display selected class	None		
1.17 Update class	1.17 Update class	1.17.1 Retrieve and display search class	None	Art class ScreenUpdate Exhibition screen	N/A
		1.17.2 Capture updated class details	None		
		1.17.3 validate captured details	None		
		1.17.4 confirmation n of changes made	None		
		1.17.5 save changes to art class	Art Class		





		1.17.6 Notification of	None		
		successful update			
1.18 Delete Class	1.18 Delete Class	1.18.1 Retrieve and display class	None	Art class Screen	N/A
		1.18.2 confirmation n of changes made	None		
		1.18.3 Delete class	Art class		
		1.18.4 Notification of successfully deleted	None		
		1.18.4 [ALT] Deletion notification of unsuccessful	None		





System	Requirements	Use Case	Process	Entities	Screens	Reports
1.Admin	1.19 Add Class Teacher	1.19 Add Class Teacher	eacher Capture So Class teacher • A	Screen	N/A	
			1.19.3 Confirmation n of captured details	None	-	
			1.19.4 Save Art Class Teacher Details	None		
			1.19.5 Save art Class Teacher Details	Class Teacher		





		1.19.6 Create notifications successfully created notification	None		
		1.19.6 [ALT] Notification of unsuccessful Creation	None		
1.20 Search Class Teacher	1.20 Search Class Teacher	1.20.1 Capture Search Class teacher	None	Art Class screenClass TeacherScreen	N/A
		1.20.2 Validate Captured parameter	None		
		1.20.3 Retrieve Search Results	ClassTeacher		
		1.20.4 Display search results	None		





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		1.20.5 Display selected class	None		
1.21 Update Class Teacher	1.21 Update Class Teacher	1.21.1 Retrieve and display search class Teacher	None	 Art Class Screen Class Teacher Screen Update Class Teacher Screen 	N/A
		1.21.2 Capture updated	None		
		class teacher details			
		1.21.3 Validate captured details	None		
		1.21.4 Confirmation n of changes made	None		
		1.21.5 Save changes to Art Class Teacher	ClassTeacher		





1	Γ	1.21.6	None		
		Notification of successful Update	None		
1.22 Delete Class Teacher	1.22 Delete Class Teacher	1.22.1 Retrieve and display class teacher	None	Class Teacher Screen	N/A
		1.22.2 Confirmation n of changes made	None		
		1.22.3 Delete Class teacher	Class Teacher		
		1.22.4 Notification of successfully deleted	None		
		1.22.4 [ALT] Deletion Notification of unessuccess ful	None		





1.23 Create Medium	1.23 Create Medium	1.23.1 Load create medium page	None	•	Medium Types Screen	N/A
		1.23.2 Validate create medium info	None			
		1.23.3 Confirm and capture create medium	None			
		1.23.4 Save create medium info	None			
		1.23.5 Generate medium	MediumType			
1.24 Delete Medium	1.24 Delete Medium	1.24.1 Load all medium	MediumType	•	Medium Types Screen	N/A
		1.24.2 Capture medium selection	None			





	n				
		1.24.3 Confirm deletion	None		
		1.24.4 Delete medium	-MediumType -Artwork		
1.25 Archive Status	1.25 Archive Status	1.25.1 Load all artworks	-Artwork - ArtworkStatus	Archive Status Screen	N/A
		1.25.2 Capture Archive status selection	None		
		1.25.3 Confirm change status	None		
		1.25.4 Change Archive Status	-Artwork -ArtworkStatus -Sold/Returned		
1.26 Create Surface Type	1.26 Create Surface Type	1.26.1 Load create surface type page	None	Surface Types Screen	N/A
		1.26.2 Validate	None		





		surface type creation info			
		1.26.3 Confirm surface type creation info	None		
		1.26.4 Save surface type creation info	None		
		1.26.5 Generate surface type	Surface Type		
1.27 Delete Surface Type	1.27 Delete Surface Type	1.27.1 Load all Surface type	None	 Surface Types Screen 	N/A
		1.27.2 Capture surface type selection	Surface Type		
		1.27.3 Confirm deletion	None		
		1.27.4 Delete surface type	-Artwork -Surface Type		





1.28 View Refund Requests	1.28 View Refund Requests	1.28.1 Load all Refund Requests	Refund	Refunds Screen	N/A
		1.28.2 Capture	None		
		approve refund selection			
		1.28.3 Display feedback refund	None		

3.1.2 Art Class Subsystem

System	Requirements	Use Case	Process	Entities	Screens	Reports
2.Art Class	2.1 Book Art Class	2.1 Book Art Class	2.1.1 Retrieve and display Art class details	ArtClass	Art Class ScreenView Class Screen	N/A
			2.1.2 Capturing Booking details for Art Class	None		





		2.1.3 Validate Captures Booking details	-ArtClass -User		
		2.1.4 Redirection of Payment	None		
		2.1.5 Save and stores Art class booking details	Booking		
		2.1.6 Notification of successful Art Class booking task	None		
2.2 Cancel Booking	2.2 Cancel Booking	2.2.1 Request class information and display art class booking details	Art Class	My booking Page Screen	N/A





	-				
		2.2.2 Captures booking details and displays booking details	Booking		
		2.2.3 Confirmation n of cancel booking	Booking		
		2.2.4 Notification of	None		
		successful cancellation of booking			
2.3 View Booking of class	2.3 View Booking of class	2.3.1 Request to display Art Class Booking details	None	 My booking page screen 	N/A
		2.3.2 Captures and gathers booking and art class details	-Payment -ArtClass -Booking -User		





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		2.3.3 Successfully generated Art Class and booking information	None		
2.4 View Refund Status	2.4 View Refund Status	2.4.1 Retrieve class information and display Art class booking details	None	My bookings page screen	N/A
		2.4.2 Capture and displays refund	-Booking -Refund -Payment		
		details of the booking table			
2.5 Capture Class Feedback	2.5 Capture Class Feedback	2.5.1 Request and display Art Class Booking details	Art Class	 My bookings page screen Feedback Screen 	N/A





	Π			
		2.5.2 Select class and capturing feedback details for Art Class	None	
		2.5.3 Validate captured feedback details	None	
		2.5.4 Confirmation n of feedback details	None	
		2.5.5 Captures and stores feedback details	Feedback	
		2.5.6 Notification of	None	





						_
			successful feedback details stored			
	2.6 Make Payment	2.6 Make Payment	2.6.1 Request and display payment screen	ArtClass	My bookings page screen	N/A
			2.6.2 System loads external Payment API	None		
			2.6.3 Capture and Validates Payment details	None		
			2.6.4 Captures payment details and generate new payment info	-Payment -PaymentType		





	Π-					
			2.6.5 Notification of successful payment	Booking		
			2.6.6 Sends payment confirmation n	None		
	2.7 Request Refund	2.7 Request Refund	2.7.1 Retrieve payment details of specific booking	-Booking -Payment	My bookings page screen	N/A
			2.7.2 Confirmation n of refund request	None		
			2.7.3 Captures and generates new refund information	Refund		
			2.7.4 Notification of successful refund request	None		





3.1.3 Reporting Subsystem

System	Requirements	Use Case	Process	Entities	Screens	Reports
3.Reporting	3.1 Generate New User Report	3.1 Generate New User Report	3.1.1Capture New User Report	None	 Generate New User Report Screen Print Report 	Generate New user Report
			3.1.2 Display New User Report Screen	None		
			3.1.3 Generate and Retrieve New User Report	ClassTeacherArt ClassBooking		
			3.1.4 Display Print New User Report	Class Teacher Art Class		
	3.2 Generate Art Class Report	3.2 Generate Art Class Report	3.2.1 Display Generate Art Class Report	None	Art Class ReportPrint Report	Generate Art Class Report





		3.2.2 Cap Art Classe Button Lii	es es	None		
		3.2.3 Retr name of	ieve	• • Payment User		
		I				1
		ArtClass then generate report				
		3.2.4 Generate and Display Art Class Report Successfully				
		3.2.5 Capture to print Class Report Task				
3.3 Generate Class Teacher Report	3.3 Generate Class Teacher Report	33.1 Display Generate Class Teacher Report	None		Class Teacher ReportPrint Screen	Generate Class
		3.3.2 Capture the Class Teacher Button Link	None			Teacher Report
		3.3.3Retrieve name of Class Teacher then Generate Report		ArtClassClassTeacherBookings		





 -					
		3.3.4 Generate and Display Class Teacher Report Successfully	ArtClassClassTeacherBookings		
		3.3.5 Display Print Class Teacher Task	None		
3.4Generate Exhibition Report	3.4 Generate Exhibition Report	3.4.1 Display Generate an Exhibition Report	None	Exhibition ReportPrint Screen	Generate Exhihibitio Report
		3.4.2 Capture Exhibition Link Button	None		
		3.4.3 Capture the Exhibition then Generate Report	ArtistArtwork		
		3.4.4Generate and Display Exhibition Report Successfully.	ArtistArtwork		





		3.4.5 Display and Print Print Report Task	None
3.5 Generate Class Feedback Report	3.5 Generate Class Feedback Report Survey	3.5.1 Display and Generate a Feedback survey report	None
		3.5.2 Capture the Class Feedback Survey Button	None
		3.5.3 Retrieve the Name of Art Class then Generate Report	ArtistFeedbackSurvey
		3.5.4 Display the Class Survey Report Generated Successfully	Artist Feedback Survey
		3.5.5Display and print Class Feedback Survey Report	None





3.1.4 User Subsystem

System	Requirements	Use Case	Process	Entities	Screens	Reports
4.User	4.1 Register User	4.1 Register User	4.1.1 Display Register User Page	None	Register User	N/A
			4.1.2Validate Captured User Details Task	• User		N/A

4.1.2 (ALT) Validation Error Modal Notification	• User	N/A
4.1.3 Generate Confirmation Email Task	• None	N/A





	Γ	Г	l		
		4.1.4 Display Confirm Email	• None		N/A
		Page 4.1.5 Display Confirm Email Page	• None		N/S
		4.1.6 Display Successfully Registered Task	• None		N/A
4.2 Login	4.2 Login	4.2.1 Display Login Page	• None	• Login Page	N/A
		4.2.1 (ALT) Validation Error Task	• None		
		4.2.2 . Validate Captured Information	• User		N/A
		4.2.3 Retrieve User Details	• User		N/A
1				I	





		4.2.4 Hash Captured Password	• User		N/A
		4.3.5 Compare Captured Password to saved Password	• User		N/A
		4.2.5 Display Incorrect Password Notification Tas	• None		N/A
		5.2.6 Retrieve Access Level Task	• None		N/A
		5.2.7 Logged in	• None		N/A
4.3 Logout	4.3Logout	4.3.1 Request Confirmation of Logout task	• None	Logout Screen	N/A
		4.3.2 Remove Session Task	• User		N/A
		4.3.3 Logged Out Task	•		N/A





4.4 Reset Password			1	<u> </u>			
confirm Emil information 4.4.2.(ALT)Valid action Error Task 4.4.3 Retrieve Email Information 4.4.4 Generate and Send Password 4.4.5 Display New Password Page 4.4.6 Validation Captured Password 4.4.6 Validation • User 4.4.7 Hash • User	4.4 Reset Password	4.4. Reset Password	Forgot	•	None	Forgot Password screen	N/A
action Error Task 4.4.3 Retrieve Email Information 4.4.4 Generate and Send Password 4.4.5 Display New Password Page 4.4.6 Validation Captured Password 4.4.7 Hash User None None • New Password Screen • New Password Screen			confirm Emil	•	None		N/A
Email Information 4.4.4 Generate and Send Password 4.4.5 Display New Password Page 4.4.6 Validation Captured Password Password 4.4.7 Hash User			action Error	•	None	•	N/A
and Send Password 4.4.5 Display New Password Page 4.4.6 Validation Captured Password Password 4.4.7 Hash User			Email	•	None		N/A
New Password Page 4.4.6 Validation Captured Password 4.4.7 Hash User			and Send	•	User	New Password Screen	N./A
Captured Password 4.4.7 Hash • User			New Password	•	None		N/A
			Captured	•	User		N/A
				•	User		N/A





•					
		4.4.6 Display Successful Update Notifications Task	• None		N/A
4.5 Update User	4.4 Update User	4.5.1 Display User Profile Details	• None	User Profile	N/A
		4.5.2 Capture and validate User Details	• User		N/A
		4.5.3 Display and Update Confirmation of Details	• User		N/A
		4.5.4 Update User Details	• User	Update User Modal	N/A
		4.5.5 Generate Completion Notification	• None		N/A
4.6 View Exhibition	4.6 View Exhibition	4.6.1 Request to Display Notifications	• None		N.A
		4.6.2 Display Notification details info	 Notification 		N/A





	4.7 View Artist Artwork Showcase	4.7 View Artist Artwork Showcase	4.7.1 Retrieve the Artist Artwork Screen	 Artist Artwork 	 Artist Artwork Showcase Screen 	N/A
			4.7.2. Display Artist Artworks Screen	• None		N/A

3.1.5 Artist Subsystem

System	Requirements	Use Case	Process	Entities	Screens	Reports
5.Exhibition	5.1 View Available Exhibitions	5.1 View Available Exhibitions	5.1.1 Display the Available Exhibitions Screen	• None	Available Exhibition Screen	N/A
			5.1.2 Display the Exhibitions Screen	Exhibition		N/A
	5.2 Apply for Exhibition	5.2 Apply for Exhibition	5.2.1 Display Apply For Exhibitions Page	• None	Apply for Exhibition Screen	N/A
			5.2.2 Validate and Capture Artist Application Details	Exhibition Application		N/A





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			5.2.2(ALT) Validation Error	 Exhibition Application 			N/A
			5.2.3 Display My Exhibitions Page	• None	• My	Exhibitions Screen	N/A
	5.3 Create Artist Artwork Showcase	5.3 Create Artist Artwork Showcase	5.3.1 Display My Artworks Page	• None	• My /	Artworks Screen	N/A
			5.3.2 Display Add Artwork Modal	•	None	Add Artwork Modal	N/A
			5.3.3 Validate and Capture Artist Application	•	Artwork	Artist Artwork Showcase Screen	N/A
			5.3.3(ALT) Validate Error Task	•	Artwork		N/A
			5.3.4 Successfully Added Artwork Notification	•	None		N.A
5.4 \	View Artwork Showcase	5.4 View Artwork Showcase	5.4.1 Retrieve Artist Artwork	•	Artwork		N/A





		5.4.2 Display the Artist Artworks			N/A
5.5 Update Artist p	profile 5.5 Update Artist	profile 5.5.1 Display Artist Profile Details	• Artist	Artist Profile screen	N/A
		5.5.2 Capture and Validate Artist Details	 Artist ArtistType		N/A
		5.5.3 Display and Update Confirmation of Details	None		N/A
		5.5.4 Update Artist Details	• Artist		N/A
		5.5.5 Generate Completion of Update Notification	• None		N/A
5.6 Accept Invitatio Exhibition	5.6 Accept Invitation	tion 5.6.1 Display Invitation Page	• None	Invitations	N/A
		5.6.2 Capture Accept	• None	•	N/A





		5.6.3 Change Exhibition Status	• Exhibition	Exhibition Invitation Page	N/A	
		5.6.4 Display Exhibition Accepted Modal	• None		N/A	
5.7 Generate Tag	5.7 Generate Tag	5.7.1 Display My Exhibitions Page	• None	My Exhibitions Screen	N/A	
		5.7.2 Display the tags screen	• None	Tags Screen.	N/A	
		5.7.3 Prompt to Generate Tag	• None		N/A	
		5.7.4 Validate and Capture Artist Application Details	Artist Artwork	Tags Screen		N/A
		5.7.4 (ALT) Validation Error	• None	• Tag's screen		N/A
		5.7.5 Successfully Generated Notification	• None	•		N/A
		5.7.7 Populate Tag Details	Artwork	•		N/A
4	1		1			





Conclusions

This section shows how the system is validated against the outlined requirements using the entities from the ERD, screens and reports. The validation section lists every requirement and shows which use cases, processes, entities, screens, and reports satisfy the requirement

4. CRUD Matrix

Introduction

The following section contains a full Create, Read, Update & Delete matrix based on every feature and passing of data that is contained in the Artech System

4.1 CRUD Matrix





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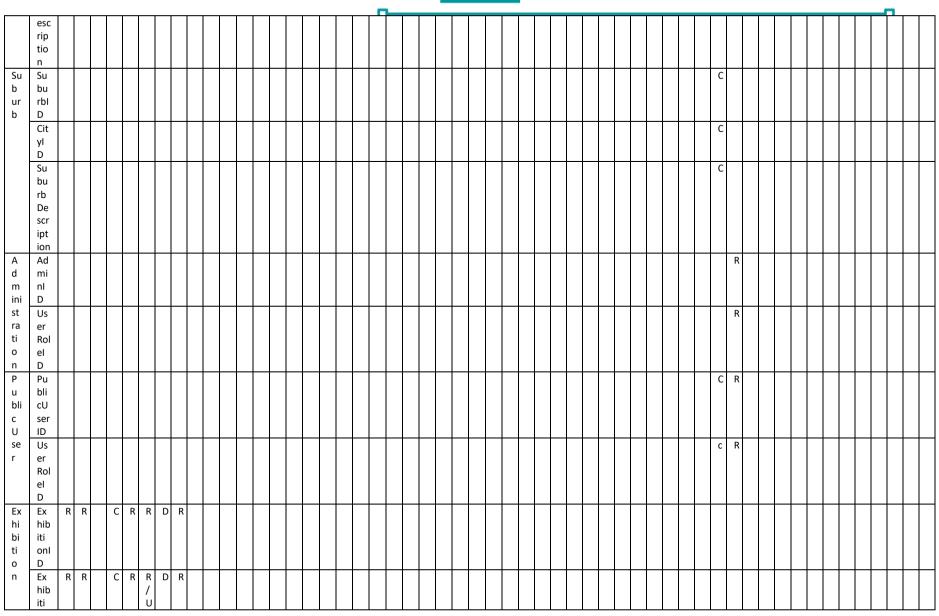




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Conclusion

The previous section contained all our Create, Read, Update & Delete specifications for our system based on the features of the system.





5. Conversion Plan

Introduction

This section will consist of a conversion plan for the Artech System. The conversion plan is formed during the implementation phase of a project and the deployment of a system. This plan identifies what database installation requirements will need to be met, what end-user training and documentation needs to be developed, and what conversion strategy will be used to convert from the old system to the new system.

5.1 Conversion Plan

Background Information

The Johann van Heerden Art Gallery is a gallery that showcases artworks of artists around South Africa. Its goal is to be physically available within the country as well as go global on an online platform a few. All operations run within the art gallery are executed physically, on paper or over basic Microsoft

Office applications like Excel, PowerPoint, Word etc. The communication between the curator and the user takes place over e-mails, WhatsApp, or phone calls. There is no implementation of any sort of a hard-core technological system to perform these operations effectively. Hence, all the work done

within the gallery at the moment is performed by Mieke.

Binary Brains has therefore developed a more advanced system for the Art Gallery. The team will guide the Johan Van Heerden art gallery with the installation of the new system as well as training for her as the curator, and her clients, to be able to able to use the system thoroughly.

The system comprises of the following applications in order to meet business requirements:

- The Artech system website: This is the client side of the system. It has been constructed and has been built using ASP.NET API AND Angular and will be hosted on Azure.
- The Artech Administration Website: This is the business/administration -side of the system. It is built with MVC ASP.NET API and Angular and will be hosted on Azure.
- All these modules are supported by the SQL Server Database and the database will be hosted on Azure.





Conclusion

The above section was an overview of the conversion strategy involving the conversion requirements, conversion plan, the system acceptance test, the installation, and setup of the new system database. The system access as well as information training for the user.

6. Sign off by Client

Deliverable Name: System Requirements

Deliverable Number: 6

Delivered on Date: 2021/06/28

Client name: Johann van Heerden Art Gallery

Approving Client Representative: Miekie Lourens

Project Leader: Dean Botha

Deliverable Approval

Signing off this document signifies that the client is satisfied with the deliverables listed above. The client acknowledges the accuracy of all aspects related to the Gallery. The client is also satisfied in the way we approached the proposed system and how we have worked together with the client in a respectful and efficient manner.

Client Signature





Project Leader Signature

Signed on: 10 April 2021

7. Complexity

Topic	Level		Marks	Marks given	MAX
	For online applications: Responsive web design For desktop applications: Form design according to design principles (Schneiderman's golden rule on navigation applies here)	*	3		
	Appropriate use of grids/tables		3		
	Appropriate use of tabs/links		3		
	Use of graphs in an appropriate business context		4		
	The storage and display of graphical information, like photos with a good business reason		3		
	Working e-mail automatically generated from the database in an appropriate business context		2		
1. Special GUI	SMS messages automatically generated from the system in an appropriate business context		2		42
	Extensive user-friendly search facility		3		
	At least one use of a tree to display data from the database		3		
	Able to dynamically modify a data tree structure and in doing so adjusting the data in the database		4		
	At least one use of a calendar view of data (not a date/time picker; not a plug-in such as Google calendar)		3		
	Uploading a file into the system with appropriate business reason		3		
	The use of audio/video in an appropriate business context		3		
	At least one use of an administrator configurable timer in an appropriate business context		3		
2. Database access	At least 30 tables used (4 member groups) or 40 tables used (5 member groups)	*	6		15





[Full referential integrity on all tables	*	6						
	At least one use of master-detail table relationships (Schneiderman's golden rule on system status applies here)	*	3						
	At least 3 simple list reports in a reporting tool (no control breaks, no graphs, single table)	*	3						
3. Reports	At least 2 transactional report with 2 or more control breaks (with heading and calculated values/totals, multiple tables)	*	6		15				
	At least 1 report with adjustable criteria		3						
	At least 1 management report using a graph		3						
4 Flavibilia	All data that can change in future should not be hard coded but maintained in a sub-module of the system (e.g. Lookup tables)		6		12				
4. Flexibility	Some business rules are not hard coded, but maintained in a submodule of the system.		6		12				
5. Error handling	All system-generated errors are trapped and consistent, user-friendly error messages are displayed		6		12				
	Appropriate data validation on all input fields		6						
	At least one menu item or other control that opens up a complete help document (HTML, PDF, Help-file)		3						
6. Help	Extensive context-sensitive help. E.g. calling Help on a specific screen/function will automatically open the specific help for that screen/function.		6		15				
	Search Facility on Help		3						
	Extensive use of hints 3								
	Logon screen with user ID and password and fixed user profiles		3						
7 Consuits	Applying two factor authentication with applicable business reason.		3		12				
7. Security	Encrypted passwords in database	*	1		13				
	Flexible user profiles (i.e. you can dynamically add user profiles that will enable/disable access to certain parts of the system)		6						
8. Audit Trail	An audit trail of all transactions in the system showing at least date, time, user, transaction type, critical data (such as amount and quantity of transaction)		6		9				
	Able to search the audit trail on any of the following: date, use transaction type		3						

Topic	Level		Marks	Marks given	MAX	
	For a desktop application: Fully functional installation disks that take care of application installation requirements (install and uninstall)		3			
9. Deployment	For an online application: Deployment of application to a publicly accessible web server	3		15		
	For a mobile application: Deployment to an App Market place (such as the PlayStore or the AppStore)	6				
	Deployment of the database to a remote database server		3			
10. Backup and Restore	A backup and restore subsystem exists that backup/restore all data (system may exit during restore)		3		3	
11 Import/Evport Data	Able to open Word or Excel and automatically place data in it based on the parameters provided (with a good business reason)	6		9		
11. Import/Export Data	XML or JSON: At least 1 XMLor JSON file for Importing or Exporting of data (with good business reason)		3		9	





	Complexity Marks Obtained			0	
16. Innovative addition to the system	Any very advanced innovative addition to the system (e.g. machine learning, AI, block chain, text mining, IOT, etc.)	#	1-9		9
	Comprehensive use of stored procedures and/or triggers and/or jobs.		3		
15. Programming Principles	The use of an API to facilitate interaction between your business layer and your presentation layer		6		12
	The use of a data layer to facilitate interaction between your database and your business layer		3		
	Substantial processing on a third platform (i.e. both reading and writing data from the system's database)		9		27
pusiness reason	Uploading a file through an alternative platform onto the system's database.		3		
14. Multiplatform processing for an appropriate business reason	Appropriate use of substantial dynamic views on an alternative platform (i.e. both reading and writing data from the system's database)		9		
	Appropriate use of dynamic views on an alternative platform (i.e. data is displayed from the system's database)		3		
	Appropriate business use of static views on an alternative platform.		3		
APPLICATION / Services	A fully functional link to an installed external application system exists and the interface must be shown to work on the external system. Note that this excludes Microsoft Office Applications		6		9
13. External	Integrate an existing web service into your application (with good business reason)		3		
	Tight Link to an external INPUT device using device specific software. Data or images must seamlessly be stored in the database but device specific software is not visible to the user. (This could include a digital camera, scanner, voice recording device, thump print reader, etc.)		9		
12. External INPUT device	Loose Link to an external INPUT device using device specific software. Data or images must seamlessly be stored in the database but device specific software is visible to the user. (This could include a digital camera, scanner, voice recording device, thump print reader, etc.)		6		18
	Simple Link to an external INPUT device using plug-and-play technology, such as a swipe card reader, bar code reader, etc. or a native component such as a QR reader, a GPS component, etc		3		

Maximum Complexity Marks

exity Marks 235

Complexity Marks Required for Del 5 (5 members in team)
Complexity Marks Required for Del 5 (4 members in team)

130 100





8. Team Sign Off

Introduction

This section proves that the team members stated below has read and agrees with the information stated within this document. By signing, each member gives proof that he/she is satisfied with the contents of this document and that he/she has contributed a fair share of content to this document.

8.1 Team Sign-Off

١,

Full name	Student number	Date	Signature
Dean Botha	u18002197	01/09/2021	10 gas
Trishla Pathak	u18198644	01/09/2021	Juishlafathel
Reagile Matloga	u18201696	01/09/2021	
Gamuchirai Dambanjera	u17272522	01/09/2021	Gamu
Reinhardt Smit	u18131451	01/09/2021	

, declare and agree that I am satisfied and contributed to the content of this deliverable and produced work of a professional matter and high standards.

Conclusion

In conclusion, this section consists of the signatures of each team member as a sign of their recognition and approval regarding the content of this deliverable.





9. Document Conclusion

This document described the system on the physical level, and included the use case diagrams and documentation, data flow diagrams along with the pseudo code for each primitive level diagram, ERD and database size estimation, interface design, hardware and software specification and the validation of each requirement. Test cases and test data was also provided for a selected few use cases.