### Project Name: Clerk-Create Mobile Page for Ordering Certificates Project ID:DB3212MC

Leadership Group: Co	ourts								
Department: Clerk/Vi	tals		Division: County Clerks						
Project Sponsor: Jeni	nifer Howden	Date Requ	ested: 2/13/22	PM Customer No.2	12				
Request Type: New Development									
IT Team Name: Court	IT Team Name: Courts IT Team No: B								
Project Manager/Lead	er: Beth Gleaso	n							
Account 95400 Number:	Account Description:		itals Records	Customer Vitals Name:					
Grant Funded? No			Mandate? N Mandate Sour	vo rce:					

# Project Goal

To replace the current online Vital Ordering screens with mobile friendly pages for ordering Vital Certificates so that the public can order Birth, Death, and Marriage Certificates from a mobile device.

## **Business Objective**

This change will allow more public users to order Vital Certificates online rather than coming into the office. This will be more efficient and reduce the number of Clerk physical office visits which will protect the public and the clerk's office during the COVID pandemic. This will also create a better experience for the public ordering records online as well as allow for further enhanced capabilities with newer technology.

#### Major Deliverables

- Detailed Project Plan
- Application and/or System Requirements
- End User Hardware and Software Requirements Document
- Technical Design Document
- Technical Architecture Diagram
- Training Plan
- User Acceptance Test Plan
- Implementation Plan
- Application Code
- Disaster Recovery Toolkit
- Service Center Knowledge Documents

#### Project Name: Clerk-Create Mobile Page for Ordering Certificates Project ID:DB3212MC

#### Approach

- Develop Detailed Project Plan
- Review current business process and conduct needs assessment with customer, ensuring current manual processes are refined and automated.
- Security Reviews
- Document system requirements
- Determine and document system architecture and diagram
- Assess User Hardware and Software Requirements
- Conduct Tech Review
- Conduct Code and System Changes as needed
- Develop Implementation Plan
- Develop User Acceptance Test Plan
- Acquire User Acceptance Sign off
- Conduct Change Control
- Develop Disaster Recovery Toolkit and Service Center Knowledge
   Documents
- Release new system into production

### **Research & Analysis**

**Research Recommendation** 

## **Benefits**

See Return on Investment (ROI) Analysis Document

### **Impact**

Number of Users	Public/Unlimited
Divisions	Clerk/Vital
Leadership Groups	Courts

## <u>Risk</u>

<b>Business Environment</b>	Low - Project will require some changes to existing
	business processes.
Technical Environment	Medium - Previously implemented technologies with new aspects
	and/or new requirements.

### Project Name: Clerk-Create Mobile Page for Ordering Certificates Project ID:DB3212MC

# **Assumptions**

**Staffing** IT Staffing: resources will be available for the hours indicated per the attached project plan.

Other Staffing: additional staffing will be available as follows:

<u>Role:</u>	Name	<u>Hours per Day</u>
Project Sponsor	Jennifer Howden	As Needed
Clerks Tester	TBD	As Needed

### Facilities

•

### Technical

•

## Funding

• Information Technology

### Other

•

Priority

# **Constraints**

- •
- •

# **Exclusions**

- •
- •

# Project Name: Clerk-Create Mobile Page for Ordering Certificates Project ID:DB3212MC

#### PROJECT PHASE AUTHORIZATION

Phase(s): All				
Total Estimated Application Services	Hours	s: 1	,796	
Total Estimated Technical Systems	Hour	s:	90	
Total Estimated CLEMIS	Hour	5:		
Total Estimated Internal Services				
IT Application Services Division Manager Approval	Date:			
IT Technical Systems Division Manager Approval:	Date:			
IT CLEMIS Division Manager Approval:				Date:
IT Internal Services Division Manager Approval:				Date:
IT Management Approval:				
Approved:	Yes		No	Date:
Reason:				
Project Sponsor Approval:				
Title:				Date:

#### PROJECT SUMMARY

Authorized Development (see above)	Hours: 1,886	
Preliminary Estimated Development for Future Phases	Hours:	
Grand Total Estimated Development	Hours: 1,886	Cost: \$311,190

# Project Name: Clerk-Create Mobile Page for Ordering Certificates Project ID:DB3212MC

### PROJECT COMPLETION AUTHORIZATION

Customer Acceptance of Product:						
Title:	Date:					
Project Office Review:	Date:					

Clerk-Create Mobile Page for Ordering Certificates - Size Estimate (+/- 10% to 50%)

_	Туре	ID	Task Name	Estimated	Estimate Notes
2				Hours	
3	Phase	000000	PROJECT MANAGEMENT	508	
4	Phase	200000	DEFINE BUSINESS REQUIREMENTS	72	
5	Phase	300000	DESIGN SYSTEM ARCHITECTURE	110	
6	Phase	500000	DEVELOP APPLICATION	995	
7	Phase	600000	IMPLEMENTATION PHASE	115	
8	Phase	800000	POST IMPLEMENTATION SUPPORT	86	
9				1,886	

Return on Investment Analysis

Project Summary

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Benefits/Savings:							
Tangible Benefits Subtotal:	0	0	0	0	0	0	0
Cost Avoidance Subtotal:	0	0	0	0	0	0	0
Costs:							
Development Services Subtotal:	311,190	3,350	6,799	3,451	7,005	3,555	335,350
Hardware Subtotal:	0	0	0	0	0	0	0
Software Subtotal:	0	0	0	0	0	0	0
Infrastructure Subtotal	0	0	0	0	0	0	0
Training Subtotal:	0	0	0	0	0	0	0
Other Subtotal:	0	0	0	0	0	0	0
Annual Statistics:							
Annual Total Savings	0	0	0	0	0	0	0
Annual Total Costs	311,190	3,350	6,799	3,451	7,005	3,555	335,350
Annual Return on Investment	(311,190)	(3,350)	(6,799)	(3,451)	(7,005)	(3,555)	(335,350)
Annual Costs/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	(000,000)
Project Cumulative Statistics:							
Cumulative Total Savings	0	0	0	0	0	0	0
Cumulative Total Costs	311,190	314,540	321,339	324,790	331,795	335,350	335,350
Cumulative Return on Investment	(311,190)	(314,540)	(321,339)	(324,790)	(331,795)	(335,350)	(335,350)
Cumulative Cost/Savings Ratio	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Year Positive Payback Achieved							NO PAYBACK
State or Federal Mandate?							
Signatures:							
Benefits Reviewed By Project Sponsor				Date:			
Costs (including IT Resources) Reviewed By Information Technology Project Manager				Date:			

Return on Investment Analysis

Savings Detail

Benefit/Savings Description	Project Savings Category	Budget Category/Funding Source	Unit Desc	Units	Rate per Unit	Total Savings	Annual Multiplier
1. Updating ordering screens to be							
compatible with mobile devices to allow							
for increased usage of online ordering.	Intangible Benefit					0	1.015
2. Providing a better customer							
experience with our office.	Intangible Benefit					0	1.015
3. Moving the Vital ordering pages to							
newer technology.	Intangible Benefit					0	1.015
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	
						0	

Return on Investment Analysis

Savings Detail

		Affects Project ROI?			Potential Savings Extensions									
Benefit/Savings Description	Project Savings Category	Y1	Y2	Y3	Y4	4 Y	′5	Y6	Y1	Y2	Y3	Y4	Y5	Y6
2. Providing a better customer experience with our office.	Intangible Benefit Intangible Benefit													
<ol> <li>Moving the Vital ordering pages to newer technology.</li> </ol>	Intangible Benefit													

# Oakland County -- Clerk-Create Mobile Page for Ordering Certificates Return on Investment Analysis

Savings Summary

Benefit/Savings Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Tangible Benefit:							
Tangible Benefits Subtotal:							
Cost Avoidance:							
Cost Avoidance Subtotal:							
Intangible Benefit:							
1. Updating ordering screens to be							
compatible with mobile devices to allow for							
increased usage of online ordering.							
2. Providing a better customer experience with our office.							
3. Moving the Vital ordering pages to newer							
technology.							
Savings Total:							

Return on Investment Analysis

								Af	fect	s Pro	ojec	t RC	) ?
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual		ļ				
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5	<b>Y6</b>
IT Hours - New Development	Development Svcs		HR	1,886	165	311,190	1.015	х					
IT Hours - System Maintenance	Development Svcs		HR	10	165	1,650	1.015		х	Х	х	х	х
IT Hours - Customer Support	Development Svcs		HR	10	165	1,650	1.015		х	х	х	х	х
IT Hours - Planned Maintenance	Development Svcs		HR	20	165	3,300	1.015			х		х	1
User Hours - New Development	Development Svcs					0						, 1	i
User Hours - PTNE/OT	Development Svcs					0						, I	ļ
Contractor Professional Services	Development Svcs					0						1	
PC System - Acquisition	Hardware				639	0							;
PC System - Maintenance	Hardware				3,352	0		Î					1
Laptop - Acquisition	Hardware				922	0							1
Laptop - Maintenance	Hardware				3,352	0							
Tablet Notebook - Acquisition	Hardware				1,069	0						, 1	i
Tablet Notebook - Maintenance	Hardware				3,352	0						ļ	1
File Space (100GB)	Hardware		ANN		23	0						1	1
Package Software - Acquisition	Software					0							
Package Software - Maintenance	Software					0		Î			, <b>1</b>		1
Business Objects Access	Software					0						1	1
Term Emulation SFTW-Acquisition	Software					0							;
Term Emulation SFTW-Maintenance	Software					0		Î				, 1	i
Server - Acquisition/Upgrade	Infrastructure				8,000	0							!
Server - Maintenance	Infrastructure				360	0							
Server Sftwre - Acquisition/Upgrade	Infrastructure				335	0						i l	;
Server Sftwre - Maintenance	Infrastructure					0							1
Server Rack Mount	Infrastructure				400	0							!
Oracle Enterprise Software Purchase -													;
Per Processor (4 Cores) - Requires											, 1	, 1	i
Annual Support Below	Infrastructure				42,280	0						. !	ļ
Oracle Enterprise Software Support -												1	
Per Processor (4 Cores)	Infrastructure				9,293	0	1.030				. 1	, 1	;
SQL Server Enterprise Software								Î	ļ				1
Purchase - Per Processor (4 cores) -												. 1	!
Purchased Sept 2019-Aug 2020 -												, 1	1
Includes Support thru Aug 2022	Infrastructure				16,985	0						, 1	i

Date:March 7th, 2022

Return on Investment Analysis

								Af	fect	s Proj	ect F	ROI?
	Project Cost	Budget Category/Funding	Unit		Rate per	Trial Oraci	Annual		×0			
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3 Y	4 Y	′5 Y6
SQL Server Enterprise Software												
Purchase - Per Processor (4 cores) -												
Purchased Sept 2020-Aug 2021 -												
Includes Support thru Aug 2022	Infrastructure				12,724	0						
SQL Server Enterprise Software												
Purchase - Per Processor (4 cores) -												
Purchased Sept 2021-Aug 2022 -												
Includes Support thru Aug 2022	Infrastructure				8,463	0						
SQL Server Enterprise - Support, Per												
Processor (4 cores) - Sept 2022 and												
Beyond	Infrastructure				4,261	0						
SQL Server Standard Software												
Purchase - Per Processor (4 cores) -												
Purchased Sept 2019-Aug 2020 -										1		
Includes Support thru Aug 2022	Infrastructure				4,429	0						
SQL Server Standard Software											Ţ	
Purchase - Per Processor (4 cores) -												
Purchased Sept 2020-Aug 2021 -												
Includes Support thru Aug 2022	Infrastructure				3,317	0						
SQL Server Standard Software												
Purchase - Per Processor (4 cores) -												
Purchased Sept 2021-Aug 2022 -												
Includes Support thru Aug 2022	Infrastructure				2,205	0						
SQL Server - Standard Support, Per												
Processor (4 cores) - Sept 2022 and										i		
Beyond	Infrastructure				1,112	0						
Websphere Basic Per Processor												
Single/Dual Core - Includes Year 1												
Maintenance	Infrastructure				3,506	0						
											Ţ	
Websphere Basic Per Processor												
Single/Dual Core - Year 2 and Beyond	Infrastructure				701	0					ĺ	Ì
Websphere ND Per Processor												
Single/Dual Core - Includes Year 1												
Maintenance	Infrastructure				13,180	0						

Return on Investment Analysis

							Affects Projec			ject	ROI	?	
	Project Cost	Budget Category/Funding	Unit		Rate per		Annual						
Cost Description	Category	Source	Desc	Units	Unit	Total Cost	Multiplier	Y1	Y2	Y3	Y4	Y5 ۱	<b>′</b> 6
Websphere ND Per Processor													
	Infrastructure				2,635	0							
SSL Certificate	Infrastructure				845	0		-					
Internet Access	Infrastructure				180	0						-+-	
Imperva Web Application Firewall					100							-	-
(External Web Applications Only)	Infrastructure		ANN		500	0					l		
App Code Directories on Consolidated													
IIS Server (Virtual)	Infrastructure		ANN		415	0							
Dedicated Virtual Server	Infrastructure		ANN		4,150	0							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure		ANN			0							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure		ANN			0							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure		ANN			0							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure		ANN			0							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137			ANN			0							

Return on Investment Analysis

		Potential Cost Extensions						
	Project Cost							
Cost Description	Category	Y1	Y2	Y3	Y4	Y5	Y6	
IT Hours - New Development	Development Svcs	311,190.00						
IT Hours - System Maintenance	Development Svcs		1,674.75	1,699.87	1,725.37	1,751.25	1,777.52	
IT Hours - Customer Support	Development Svcs		1,674.75	1,699.87	1,725.37	1,751.25	1,777.52	
IT Hours - Planned Maintenance	Development Svcs			3,399.74		3,502.50		
User Hours - New Development	Development Svcs							
User Hours - PTNE/OT	Development Svcs							
Contractor Professional Services	Development Svcs							
PC System - Acquisition	Hardware							
PC System - Maintenance	Hardware			Î				
Laptop - Acquisition	Hardware							
Laptop - Maintenance	Hardware							
Tablet Notebook - Acquisition	Hardware							
Tablet Notebook - Maintenance	Hardware							
File Space (100GB)	Hardware							
Package Software - Acquisition	Software							
Package Software - Maintenance	Software							
Business Objects Access	Software							
Term Emulation SFTW-Acquisition	Software							
Term Emulation SFTW-Maintenance	Software							
Server - Acquisition/Upgrade	Infrastructure							
Server - Maintenance	Infrastructure							
Server Sftwre - Acquisition/Upgrade	Infrastructure							
Server Sftwre - Maintenance	Infrastructure							
Server Rack Mount	Infrastructure							
Oracle Enterprise Software Purchase -								
Per Processor (4 Cores) - Requires								
Annual Support Below	Infrastructure							
Oracle Enterprise Software Support -								
Per Processor (4 Cores)	Infrastructure							
SQL Server Enterprise Software					,			
Purchase - Per Processor (4 cores) -								
Purchased Sept 2019-Aug 2020 -								
Includes Support thru Aug 2022	Infrastructure							

Return on Investment Analysis

		Potential Cost Extensions						
Cost Description	Project Cost Category	¥1	Y2	Y3	Y4	Y5	Y6	
SQL Server Enterprise Software	outegoly		12		· · ·	10	10	
Purchase - Per Processor (4 cores) -								
Purchased Sept 2020-Aug 2021 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Enterprise Software	Innastructure							
Purchase - Per Processor (4 cores) -								
Purchased Sept 2021-Aug 2022 -								
Includes Support thru Aug 2022	Infrastructure							
SQL Server Enterprise - Support, Per	IIIIIastiucture							
Processor (4 cores) - Sept 2022 and								
Beyond	Infrastructure							
SQL Server Standard Software	Innastructure							
Purchase - Per Processor (4 cores) -								
Purchased Sept 2019-Aug 2020 -	Infrastructure							
Includes Support thru Aug 2022	Inirastructure							
SQL Server Standard Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2020-Aug 2021 -	Infrastructure							
Includes Support thru Aug 2022	Inirastructure							
SQL Server Standard Software								
Purchase - Per Processor (4 cores) -								
Purchased Sept 2021-Aug 2022 -	In face a face of the sec							
Includes Support thru Aug 2022	Infrastructure							
SQL Server - Standard Support, Per								
Processor (4 cores) - Sept 2022 and	In face a face of the sec							
Beyond	Infrastructure							
Websphere Basic Per Processor								
Single/Dual Core - Includes Year 1	In fire a two of the							
Maintenance	Infrastructure							
Websphere Basic Per Processor								
Single/Dual Core - Year 2 and Beyond	Infrastructure							
Websphere ND Per Processor					<u> </u>			
Single/Dual Core - Includes Year 1								
Maintenance	Infrastructure		ļ					
Wallice	initastructure							

Return on Investment Analysis

		Potential Cost Extensions						
Cost Description	Project Cost Category	Y1	Y2	Y3	Y4	Y5	Y6	
				-   				
Websphere ND Per Processor								
Single/Dual Core - Year 2 and Beyond	Infrastructure							
SSL Certificate	Infrastructure							
Internet Access	Infrastructure							
Imperva Web Application Firewall								
(External Web Applications Only)	Infrastructure							
App Code Directories on Consolidated								
IIS Server (Virtual)	Infrastructure							
Dedicated Virtual Server	Infrastructure							
Extra Small - 2 Core 8GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$601 On Premise Physical Server = \$2,735	Infrastructure							
Small - 4 Core 16GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$951 On Premise Physical Server = \$3,057	Infrastructure							
Medium - 8 Core 32GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$1,702 On Premise Physical Server = \$8,715	Infrastructure							
Large - 16 Core 64GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$3,167 On Premise Physical Server = \$10,758	Infrastructure							
Extra Large - 40 Core 192GB RAM, 500GB Drive, 10 GB NIC - Cloud/Virtual = \$7,564 On Premise Physical Server = \$24,137	Infrastructure							

Return on Investment Analysis

Cost Summary

Cost Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Development Services:							
IT Hours - New Development	311,190						311,190
IT Hours - System Maintenance		1,675	1,700	1,725	1,751	1,778	8,629
IT Hours - Customer Support		1,675	1,700	1,725	1,751	1,778	8,629
IT Hours - Planned Maintenance			3,400		3,502		6,902
User Hours - New Development							
User Hours - PTNE/OT							
Contractor Professional Services							
Development Services Subtotal:	311,190	3,350	6,799	3,451	7,005	3,555	335,350
Hardware:							
Hardware Subtotal:							
Software:							
Software Subtotal:							
Infrastructure:							
Infrastructure Subtotal							
Training:							
Training Subtotal:							
Other:							
Other Subtotal:							
Costs Total:	311,190	3,350	6,799	3,451	7,005	3,555	335,350

Return on Investment Analysis

#### Assumptions

Date	Assumption Description
19-May-22	10 hours page screen in Versal Code Template x 15 screens
19-May-22	Use existing consolidated app server, should not have to account for the time to build a new server.
19-May-22	FW between new servers and DB
	FW between DL location storage
19-May-22	Server team: Configure a iis website on the existing Versal Code server
	NGINX change for new application
19-May-22	Treat like new application so security scan
19-May-22	Higher integration testing to test DL upload