Baruch COLLEGE | ZICKLIN SCHOOL OF BUSINESS

Course:

Information Systems Development Project

CIS 9590 – S3EA [7201] – Summer 2021

Project Phase 3 Report

"VacLife – Bridging Gaps Between COVID-19 Demand & Supply"

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CROCAGILE PROJECT SOLUTIONS

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Executive Summary

This report covers documentation for all necessary deliverables for the final Phase III of the CIS 9590 Group Project. The primary objective of this document is to provide the final project status and discuss various closeout deliverables. The report is divided into eight sections as follows:

1. Section A

   Covers the project information that includes a brief overview of the project background, assumptions, constraints, and risks logs.

2. Section B

   Covers the deployment plan including the production environment, database deployment, rollout plan, communication plan, training plan and future enhancements to the system.

3. Section C

   Covers the closeout report for the project.

4. Section D

   Lists all updates to the requirements traceability matrix (RTM) and test cases table.

5. Section E

   Lists any citations for utilized resources.

6. Section F

   Appendix section that contains the final project report, lessons learned for phase III, data for RTM and test cases table, updates to project plan and data for project closeout report.

7. Section G

   Includes the signed integrity statement from the group.

8. Section H

   Includes all meeting minutes.

Section A: Project Information

Background

Crocagile Inc.'s primary business goal is to provide effective solutions to trending problems. The firm has initiated and executed a project to solve the logistical issues surrounding COVID-19 vaccine demand and supply by creating an all-inclusive platform that allows scheduling vaccine appointments, storing resident information, and managing vaccine inventory. Crocagile's strategic goals include pioneering timely software solutions that generate growth and profits. The VacLife database system project will support these goals by providing a highly on-demand platform at this point of the virus outbreak as vaccine distribution plans are starting to roll out. In addition, a positive outcome in this project will attract significant exposure to the company that will fuel future endeavors.

With no current solutions in the market, the VacLife system has the potential to be one of the firm's greatest successes, especially with big clients like NYC DOH being interested in such a system. The firm is leveraging prior experience in building schedule appointment systems for commercial use and best-in-class project management practices to implement this system successfully.

Assumptions

There have been no revisions to the assumptions log for this phase and the existing assumptions are given below:

1. The market must desire the proposed database platform.
2. The system must pay for itself within the next three quarters from direct revenue growth.
3. The engineering and PMO office must work together as well as with external vendors when necessary.
4. The new system must run on existing hardware and software.
5. The QA team needs to be aware of all technical support requirements.

Constraints

There have been no revisions to the project constraints log for this phase and the existing constraints are given below:

1. The project has an aggressive timeline.
2. The project has a fixed budget that cannot be overrun.
3. The scope of the project is fixed and cannot be reduced further.

Risks

There have been no revisions to the project risks log for this phase and the existing constraints are given below:

1. **Technology risk:** Even though the team has prior experience with this technology, the robust project timeline will pose a technology risk. Especially from the testing perspective.
2. **Resource risk:** The project would need immediate and complete focus from the top resources in the firm. Without this allocation, the project would suffer.
3. **Business risk:** The primary business risk is investing time and money into this project and not realizing the projected benefits.
4. **Sourcing risk:** Due to supply chain interruption due to COVID-19, any replacement hardware for the project would see extended lead times. This is currently an industry wide standard risk

Section B: Deployment Plan

Production Environment

Technology Table

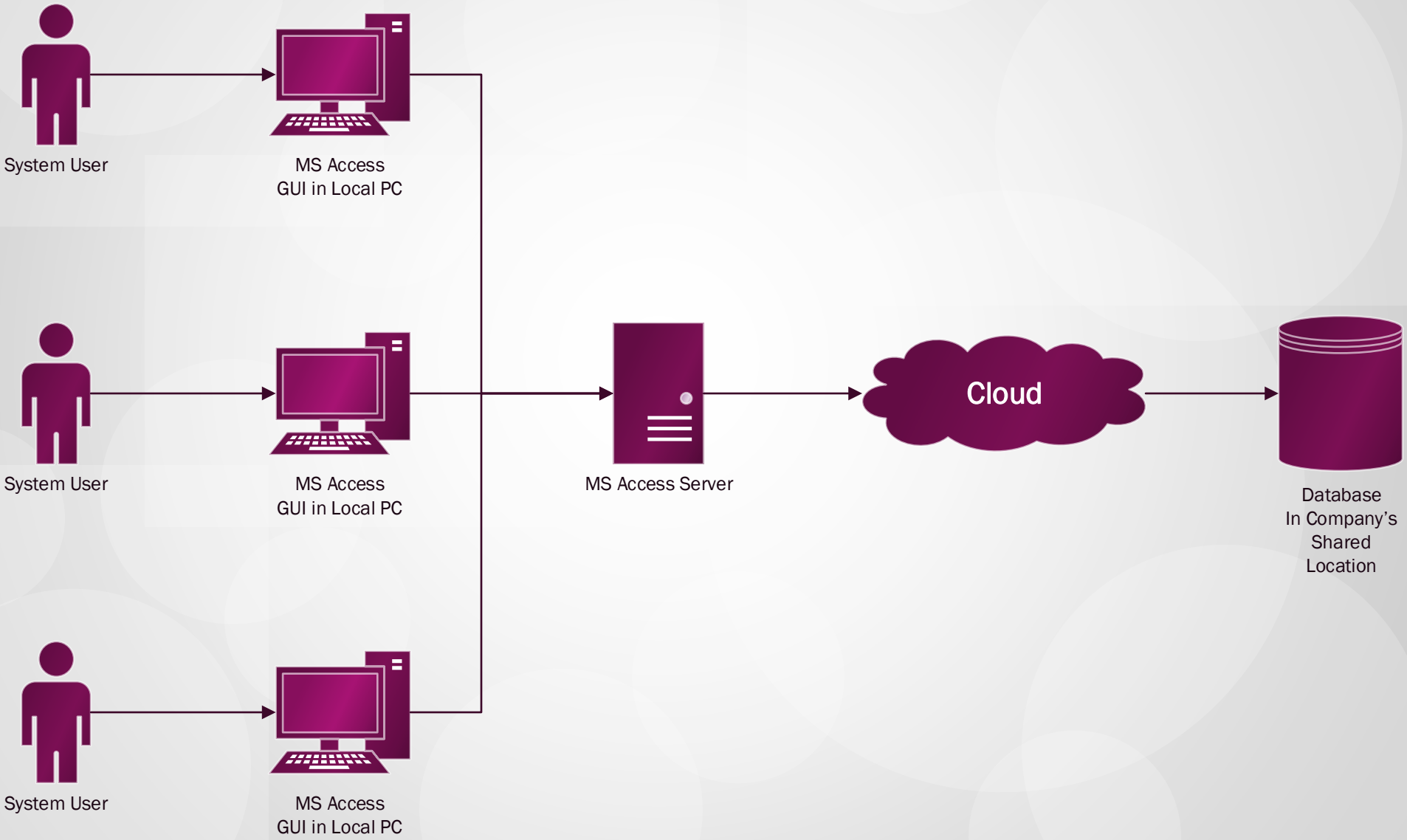
Component	Description	Estimated Cost	Readiness	Person Responsible
Hardware	Laptop/Desktop	$1200/user	Configurable settings completed; ready to install	System Administrator
	Central Server	$10000/installation	Configurable settings completed; ready to install	Network Engineer
Software	MS-Access Back-End File	N/A	Programming completed; ready to install	Senior Data Engineer
	MS-Access Front-End File	N/A	Programming completed; ready to install	Senior Data Engineer
Platform	Network Storage	$150/user/year	Subscription plan provided	Project Manager
	MS-Access License	$250/user/year	Client purchased; standard from Microsoft marketplace	Client

Deployment Diagram

The network diagram created in Phase 2 suffices the need for a deployment diagram. It contains all the major components at the higher level that are necessary for deployment. This diagram includes the individual laptop/desktop for the user holding the front-end logic application, the central access server for communication between the logic and data, and the back-end data stored at the company's shared network. The network diagram is available on the next page for reference.

VacLife Database System Network Diagram

Crocagile Inc.



Database Deployment

To deploy the VacLife database, we will follow Microsoft's standard Access database deployment best practices. The checklists include the following:

- Split database into two files – front end (logic) and back end (data)

  To minimize data loss during multiple concurrent access, the VacLife database will be split into separate front-end and back-end files. The front-end file will contain the application logic where the user can request changes to the database using the GUI, and the back-end file will contain the actual data in the database. The back-end file will be a single version stored in the company's shared network location, while the front-end file will be distributed as one copy per user's computer. The system administrator will confirm the proper splitting of the database as part of the checklist

- Require client's network location to have NTFS security

  NTFS requirement on the client side will be added to the system specification. This specification refers to putting a requirement for the client to use an NTFS-compatible network drive to store the back-end data file for the database. This will ensure data integrity and make the database more reliable. The system administrator will verify the requirement as part of the checklist.

- Define user roles

  User roles and permissions would need to be defined for the intended application. The roles and permissions can be separate for the front-end and the back-end files. The permissions will include read-only, read, write, create, and delete. The system administrator will work with the client to define the roles and permissions as part of the checklist.

- Provide instructions on scalability

  The client needs to be aware of the database limitations. There is a 2 GB cap on the back-end file size. Once the client system reaches the 2 GB limit, a new license would need to be purchased from Crocagile. In addition, the Crocagile support group would need to be contacted to set up a new linked instance of the database to support additional storage. The project manager and the system administrator will work with the client to pass these instructions as part of the deployment.

- Confirm network compatibility

  The database is compatible with LAN or WAN settings or even a Home network if the user desires. The system administrator will work with the client and configure the system as needed as part of the deployment.

- Prepare and send package to client

  After all the checklists, the full software package will be put together. This workflow will include decisions regarding the file format (.accdb or .accdc or .accde or .accdr) based on the client's data integrity preference. The following step will include securing the files with encryption with an auto-generated password, backing up the database in Crocagile's internal server, and finally sending the full software package to the client. The system administrator will take the lead and work with the developer to complete the package as part of the deployment.

- Installing the package in the client system

  Finally, the package will be installed in the client's system – the back-end file will be placed in the network drive and the front-end files will be installed in the computers of the intended users. The version compatibility (must be 64-bit) will be verified as part of the installation. An update policy will be agreed upon for sending future updates to the system. The system administrator will complete the deployment with this task.

Rollout Plan

Crocagile will be implementing a Phased Rollout approach for the customer. The team understands that customers can currently use separate systems to track vaccine appointments, resident information storage, and vaccine inventory management. VacLife database, on the other hand, integrates all of these three features in a single platform solution. Because there is no current system available in the market that offers full integration as VacLife, introducing the new database will require some time for user adoption. We want to provide the opportunity for our customers to get accustomed to the new system with the least confusion. Therefore, for each implementation, Crocagile will migrate data from the legacy systems to the VacLife database directly to disable that portion of the feature in the legacy system and not have both systems running the same features concurrently. Following this modular plan, we will phase in our solution as per the breakdown below:

- Phase 1 (Planning)
    - Identify and initiate planning activities for the implementation of our system

- Phase 2 (Initiation)
    - Prepare environment for the transition
    - Data migration/conversion
    - Training users

- Phase 3 (Execution)
    - Begin implementation
    - Phase out the previous system

- Phase 4 (Completion)
    - Full implementation

Communication Plan

In phase III, the team finished building the database and testing the portal integration. We plan to have two kick-off meetings before rollout. We plan to send an email to inform all involved stakeholders to participate and engage in the first kick-off meeting through Zoom. We will discuss the testing performance, status report, testing reports and examine the project scope, timeline, and budget in the meeting. To better achieve the stakeholder's expectations, we will request feedback from key stakeholders to make change requests and address any questions or concerns.

For the second kick-off meeting, the project manager will call all senior-level managers, key stakeholders, and involved project team members to meet via Zoom again to discuss the details and share the rollout timeline. In addition, we plan to motivate and encourage all employees and other internal users to have at least three training sessions per week through Zoom on learning about the system's functionalities and capabilities.

For the rollout, the CEO will send out the official launch announcement email to inform everyone in the company and key stakeholders confirming the intention for launch and share the official system launch date.

Furthermore, we plan to have newsletter postings, videos, posters, and flyers for market reach and system adoption analysis. As a result, our engineers will have the capability to monitor usages, analyze performance and gather user feedback to enhance the quality of the system's user experience

The communication plan is summarized in the table below:

Communication Topic	Communication Type	Medium/ Platform	Project Stage	Person Responsible
Pre-rollout project status	Virtual meeting	Zoom	Before Rollout	Project Manager to conduct; All stakeholders to join
Rollout timeline	Virtual meeting	Zoom	Before Rollout	Project Manager to conduct; All senior-level managers, involved team members to join

System training	Virtual meeting	Zoom	During rollout	Project Manager to conduct; All team members and internal users to join
Launch announcement	Email	Company broadcast	Rollout	CEO to send out email
Marketing plan	Newsletter, videos, posters, flyers	Multiple	After rollout	Marketing and Research Engineering Team to lead

Training Plan

The training plan is essential for ensuring the success of this project. It should encourage end-users to use the product and be easy to follow. The team will start from putting together step-by-step guidelines for each process within the system. When putting together the guidelines, the developers and testers are consulted to understand how the user should use the portals. Testers can highlight any area they found confusing, or think will need extra explanation for the users. As an additional resource, an FAQ page will be setup in an easily accessible location where users can visit for instant support for any popular questions.

Moreover, our engineering team will put together a presentation on how to use the portals, a presentation on how to log tickets for issues, and a step-by-step user guide for each portal to share with our clients. The engineering team will provide the two presentations to customers upon implementation.

While the presentations will be very detailed, we understand questions will come up as end-users start to use the system. Therefore, we will provide an on-site QA resource for each customer to ask questions during the first week of this solution going live.

The training activities are summarized in the table below:

Training material	Purpose	Responsibility
Step-by-step guidelines	To create documentation that guides the users on the use of each process and portal within the system	PMO, Development Team, Testing Team
FAQ webpage	To create instant support webpage for users to get quick answers about popular procedures/issues	QA Team, Web Development Team
System demo presentation	To conduct live demonstrations on the use of each process and portal within the system	QA Team, Engineering Team
On-site assistance	To offer on-site assistance to the client for the first week post implementation	QA Team

Future Enhancements

As part of future enhancements, the team suggests the following:

Short-term:

- Add statistics

  The data collected by the VacLife database can benefit from having built-in statistic functions that can calculate metrics such as frequency distribution of the type of vaccines, percentage of vaccinated individuals in specific zip codes, etc.

- Add data visualization

  The reports generated by the VacLife database can be enhanced by adding data visualization features. For example, collected data converted into bar charts and histograms can portray trends more clearly to the stakeholders. This enhancement will boost business decisions and increase the impact of these decisions on the field.

Long-term:

- Implement data warehousing and analytics

  Over time, the database can grow into an unmanageable size. But, more importantly, the data collected will be priceless for future encounters with such a pandemic. With data warehousing techniques, the collected data can be systematically stored and processed to feed data and business analytics directly. The analytics can then be used to automate processes, identify trends, and support actionable decisions to improve the system's efficiency and provide new opportunities to the business.

- Switch to a Microsoft SQL Server back-end with MS-Access front-end

  To allow for more extensive storage per back-end file, add more security features such as allowing permissions for data sets and improved overall database performance, the back-end access file can be migrated into the Microsoft SQL Server, keeping the MS-Access front-end as it is. This way, the users will not be affected, while the database benefits from the new server's features.

Section C: Closeout Report

Please refer to Appendix G

Section D: RTM and Test Cases Updates

Please refer to Appendices C and D, respectively.

Section E: Citations/References

Schwalbe, K. (2019). *Information technology project management*. Course Technology, Cengage Learning.

"Deploy an Access Application." *Access*, Microsoft Inc., support.microsoft.com/en-us/office/deploy-an-access-application-7bb4f2ba-30ee-458c-a673-102dc34bf14f.

Section F: Appendices

Appendix A – Project Report

Project Title:	VacLife	**Reporting Period Start Date:**	07/21/21
Project Team:	Crocagile	**Reporting Period End Date:**	08/01/21
Prepared by:	Jason Sinchi	**Date prepared:**	08/01/21

Project Status				
Project Summary: **Brief overview of the project to date**	All design, building, testing deliverables have been completed for the project as 08/01/21. The team is currently working on rollout and deployment to close the project			
Performance Metrics: ▪ Var = G if ≥ 0; 0% > if ≥ -25%; R= if < -25% ▪ SPI/CPI = G if ≥ 1; Y=1 < if ≥ 0.5; R= if < 0.5 Prior Phase Defects = G if 0 – 19; Y if 20 – 39; R if 40+	**Green (G) (On-track)**	**Yellow (Y) (At risk)**	**Red (R) (Off-track)**	**Comments**
Project Scope Variance (Var) of % Complete (Planned – Actual) = ((15-14)/15)*100	**+6%**			14 out of the 15 in scope items were met
Schedule Performance (SPI) = 0.9/0.85	**1.05**			Earned value is currently at 90% while planned value at this stage was 85%
Cost Performance (CPI) = (0.9*80000)/65000	**1.1**			Earned value has reached $72,000 while actual cost to date has been $65,000
Quality-Number of Defects from prior Phase =	**1**			Only one defect identified – portal shows a macro error window if a constraint is violated – team is working ot customize the error message

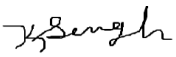
Tasks completed this reporting period				
Indicate all tasks completed during the reporting period.				
Team Member	**Tasks Completed**	**Date Completed**	**Number of Tasks**	**% of Total Tasks**
Aarif Munwar Jahan	Product Environment, Database Deployment, Future Enhancements, Closeout Report Create Presentation Slides	7/29/2021	5 (2 with Jason)	36%
Jason Sinchi	Product Environment, Rollout Plan	7/29/2021	2(with Aarif)	16%
Jing Chen	Communication Plan, Test Cases	7/29/2021	2(with Yun)	16%
Kristin Singh	Training Plan, RTM	7/29/2021	2	16%
Yun Chen	Communication Plan, Test Cases	7/29/2021	2(with Jing)	16%
Total Tasks			**13**	**100%**

Tasks planned for next reporting period			
#	Tasks to be Completed	Start Date	Finish Date
N/A			

Change Control		
Indicate any major change planned and/or completed during reporting period.		
Change Description/Impact	**Responsible Person**	**Completion Or Due Date**
Cannot implement appointment slot suggestion feature due to technical limitations – removed from scope and confirmed a nice to have feature with stakeholders	Kristin Singh	7/26/21

Issues Log				
List any issue or defect impacting the project during the reporting period.				
#	**Description/Impact**	**Status** 1. Open 2. Work in Progress 3. Resolved **4.** No Action Needed	**Assigned to**	**Date Resolved**
1	Could not implement appointment suggestions feature	No action needed – removed from scope	Developer	7/26/21

Project Team Members Names and Digital Signature:

Name (print)	Signature	Date
Jason Sinchi	**Jason Sinchi**	**8/1/2021**
AARIF MUNWAR JAHAN	**ammunwarjahan**	**8/1/2021**
Kristin Singh		**8/1/2021**
Yun Chen	**Yun Chen**	**8/1/2021**
Jing Chen	**Jing Chen**	**8/1/2021**

Appendix B – Lessons Learned Report

#	Statement
	What things the team did well? Similar to the previous phases, we communicated effectively and answered any questions that other group members had. We also did design review amongst ourselves and provided feedback for any changes to the system. This helped in getting different views and apply improvements to the system.
2.	What things the team did not do well and why? This being the final phase, the team started a little late on the deliverables due to commitments from other class (projects due). However, the team caught up well and made that time to complete all deliverables before the deadline.
3.	What things and how the team plans to improve for the next deliverable? This was the last phase of the project; the team is planning on finishing strong by staying motivated to complete all the remaining deliverables and show a demo to the class with the same consistency that was maintained throughout the semester.

Complete the table with the most appropriate responses.

Appendix C – Requirements Traceability Matrix (RTM)

Req.ID	Requirement Name	Requirement Type	Priority	WBS ID	Test Case ID	Estimation	Status	Assigned To	Implemented? (Yes/No)
FR 8.1	Resident Registration	Functional	High	31, 36	801.1 to 801.5	2.5	Done	Engineer	Yes
FR 8.2	Appointment Lookup	Functional	High	30, 36	802.1 to 802.3	2.5	Done	J. Sinchi	Yes
FR 8.3	Appointment Scheduling	Functional	High	30, 36	803.1 to 803.4	2.5	Done	J. Sinchi	Yes
FR 8.4	Inventory Management	Functional	High	33, 36	804.1 to 804.5	2.5	Done	Y. Chen	Yes
FR 8.5	Reporting	Functional	High	34, 36	805.1to 805.4	2.5	Done	J. Sinchi	Yes
FR 8.6	Vaccine Information	Functional	High	32, 36	806.1, 806.2	2.5	Done	Y. Chen	Yes
NFR 9.1	Response Time	Non-functional	High	29, 35	901.1	3	Done	Engineer, Y.Chen	No
NFR 9.2	Security	Non-functional	High	37	902.1	2	Done	Engineer	Yes

Appendix D – Test Cases

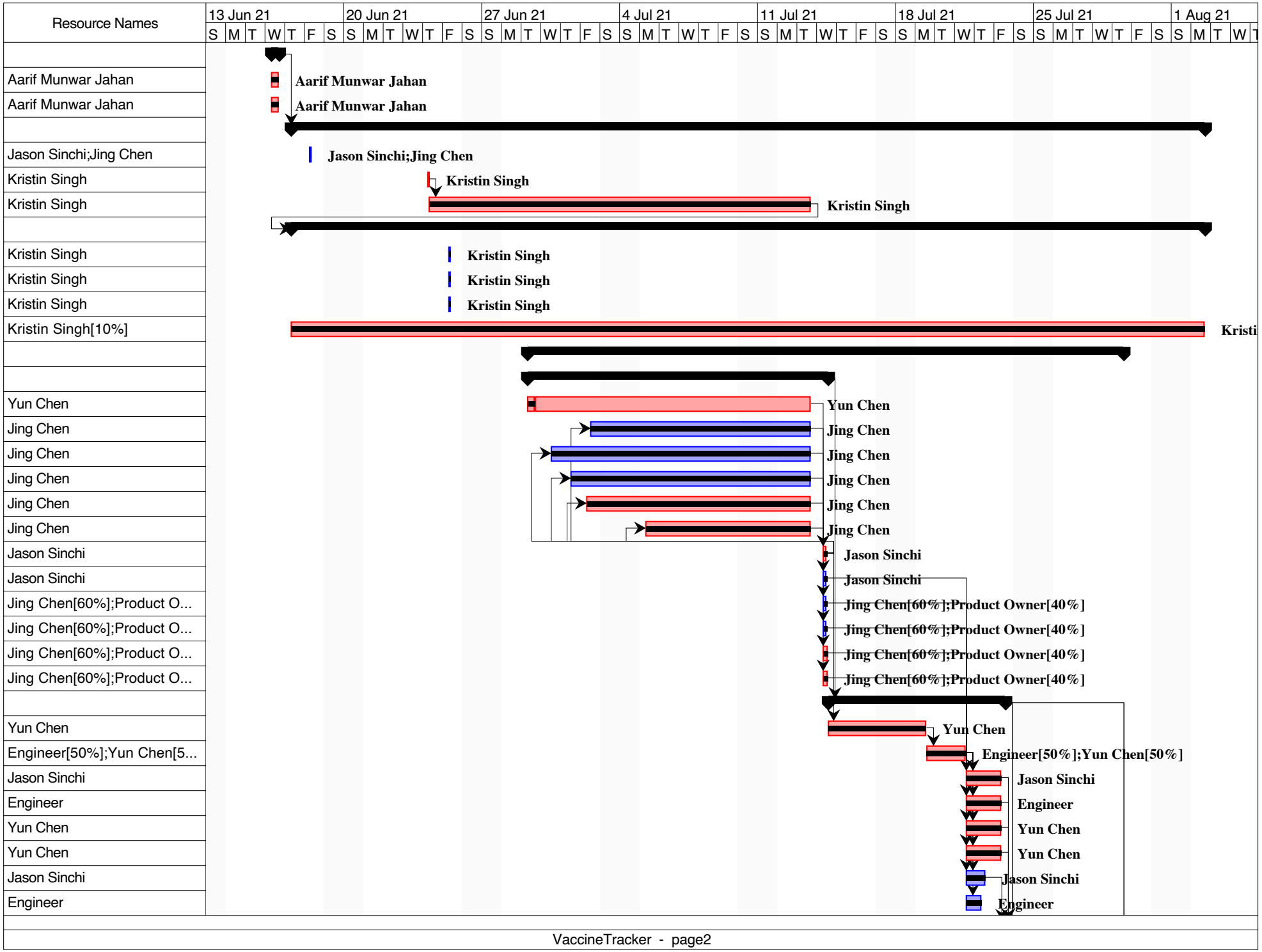
Test Case ID	Test Element	Test Case Description	Req. ID	Pass/Fail/ Not Tested
TC801.1	Registration - Application Information & Account Information	Checking and validating the system allows the user to enter application information	FR 8.1.1	Pass
TC801.2		Checking and validating the system validating the user's application information against existing user information in the system via email address.	FR 8.1.2	Pass
TC801.3		Checking and validating the user's existence via email.	FR 8.1.3	Pass
TC801.4		Checking and validating the system creating a user account once the user is validated	FR 8.1.4	Pass
TC801.5		Checking and validating the system allowing the user to edit the following account information: username, address, email address, insurance information, and phone number.	FR 8.1.5	Not Tested
TC802.1	Appointment Lookup - Search Term & Vaccine Type Category	Checking and validating the system allowing users to enter search terms that contain numbers and letters.	FR 8.2.1	Pass
TC802.2		Checking and validating the system returning valid search results related to the search term	FR 8.2.2	Pass
TC802.3		Checking and validating the system allowing users to filter results by vaccine type category	FR 8.2.3	Pass
TC803.1	Appointment Scheduling -	Checking and validating the system allowing users to add appointments to their account	FR 8.3.1	Pass

TC803.2	Appointment Editing	Checking and validating the system allowing users to view appointments and cancel appointments to their account.	FR 8.3.2	Pass
TC803.3		Checking and validating the system allowing users to view appointments and modify appointments to their account.	FR 8.3.3	Pass
TC803.4		Checking and validating the system suggesting appointments to the users based on existing appointments	FR 8.3.4	Fail
TC804.1	Inventory Management - Inventory	Checking and validating the system allowing users to view inventory	FR 8.4.1	Pass
TC804.2		Checking and validating the system allowing users to add inventory	FR 8.4.2	Pass
TC804.3		Checking and validating the system allowing users to update inventory	FR 8.4.3	Pass
TC804.4		Checking and validating the system allowing users to search inventory by entering a search term containing letters and numbers.	FR 8.4.4	Pass
TC804.5		Checking and validating the system allowing users to filter inventory by vaccine type and batch lot	FR 8.4.5	Pass
TC805.1	Reporting - inventory report & vaccination metric report	Checking and validating the system creating inventory reports	FR 8.5.1	Pass
TC805.2		Checking and validating the system creating vaccination metric reports	FR 8.5.2	Pass
TC805.3		Checking and validating the system allowing users to view the reports	FR 8.5.3	Pass
TC805.4		Checking and validating the system allowing users to send the reports	FR 8.5.4	Pass
TC806.1	Vaccine Information	Checking and validating the system presenting all eligibility information	FR 8.6.1	Pass
TC806.2		Checking and validating the system presenting all available vaccine information	FR 8.6.2	Pass
TC901.1	Response Time	Checking and validating the system having industry standard response time of less than 5 seconds	NFR 9.1.1	Pass
TC902.1	Security	Checking and validating the system encrypting all personal information	NFR 9.2.1	Pass

Appendix E – Project Plan Updates

The following pages contain updates to the project plan and Gantt charts.

		Name	Duration	Start	Finish	Predecessors
1		**Initiation**	**1 day?**	**6/16/21 8:00 AM**	**6/16/21 5:00 PM**	
2		Stakeholder Identification	1 day?	6/16/21 8:00 AM	6/16/21 5:00 PM	
3		Project Charter	1 day?	6/16/21 8:00 AM	6/16/21 5:00 PM	
4		**Planning**	**33 days?**	**6/17/21 8:00 AM**	**8/2/21 5:00 PM**	**1**
5		Project Management Plan	0.02 days?	6/18/21 8:00 AM	6/18/21 8:09 AM	
6		Team Planning Meeting	0.062 days?	6/24/21 8:00 AM	6/24/21 8:30 AM	
7		Scope Statement	13.938 days?	6/24/21 8:30 AM	7/13/21 5:00 PM	6
8		**Schedule and Cost Ba...**	**33 days?**	**6/17/21 8:00 AM**	**8/2/21 5:00 PM**	**7**
9		Task Resources	0.25 days?	6/25/21 8:30 AM	6/25/21 10:30 AM	
10		Task Durations	0.25 days?	6/25/21 8:30 AM	6/25/21 10:30 AM	
11		Task Dependencies	0.25 days?	6/25/21 8:30 AM	6/25/21 10:30 AM	
12		Risk Prioritization	33 days?	6/17/21 8:00 AM	8/2/21 5:00 PM	
13		**Executing**	**22.6 days?**	**6/29/21 8:00 AM**	**7/29/21 1:48 PM**	
14		**Design**	**11.6 days?**	**6/29/21 8:00 AM**	**7/14/21 1:48 PM**	
15		Design Data Architecture	11 days?	6/29/21 8:00 AM	7/13/21 5:00 PM	
16		Design Scheduling Portal	7.5 days?	7/2/21 12:00 PM	7/13/21 5:00 PM	21
17		Design Resident Portal	9.5 days?	6/30/21 12:00 PM	7/13/21 5:00 PM	21
18		Design Vaccine Inform...	8.5 days?	7/1/21 12:00 PM	7/13/21 5:00 PM	21
19		Design Vaccine Invent...	8 days?	7/2/21 8:00 AM	7/13/21 5:00 PM	21
20		Design Report Portal	7 days?	7/5/21 8:00 AM	7/13/21 5:00 PM	21
21		Approve Data Architec...	0.5 days?	7/14/21 8:00 AM	7/14/21 1:00 PM	15
22		Approve Scheduling Po...	0.5 days?	7/14/21 8:00 AM	7/14/21 1:00 PM	16
23		Approve Resident Port...	0.5 days?	7/14/21 8:00 AM	7/14/21 1:00 PM	17
24		Approve Vaccine Infor...	0.5 days?	7/14/21 8:00 AM	7/14/21 1:00 PM	18
25		Approve Vaccine Inve...	0.6 days?	7/14/21 8:00 AM	7/14/21 1:48 PM	19
26		Approve Report Portal...	0.6 days?	7/14/21 8:00 AM	7/14/21 1:48 PM	20
27		**Build**	**7 days?**	**7/14/21 1:48 PM**	**7/23/21 1:48 PM**	**14**
28		Build DDL	3 days?	7/14/21 1:48 PM	7/19/21 1:48 PM	21
29		Build Data Processes	2 days?	7/19/21 1:48 PM	7/21/21 1:48 PM	28
30		Build Scheduling Portal	1.5 days?	7/21/21 1:48 PM	7/23/21 8:48 AM	22;29
31		Build Resident Portal	1.5 days?	7/21/21 1:48 PM	7/23/21 8:48 AM	23;29
32		Build Vaccine Informati...	1.5 days	7/21/21 1:48 PM	7/23/21 8:48 AM	24;29
33		Build Vaccine Inventor...	1.5 days	7/21/21 1:48 PM	7/23/21 8:48 AM	25;29
34		Build Report Portal	1 day?	7/21/21 1:48 PM	7/22/21 1:48 PM	26;29
35		Unit Testing Data	0.5 days?	7/21/21 1:48 PM	7/22/21 8:48 AM	29


Resource Names
13 Jun 21
20 Jun 21
27 Jun 21
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Aarif Munwar Jahan
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Jason Sinchi;Jing Chen
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Jason Sinchi
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	8 Aug 21							15 Aug 21							22 Aug 21							29 Aug 21							5 Sep 21							12 Sep 21						
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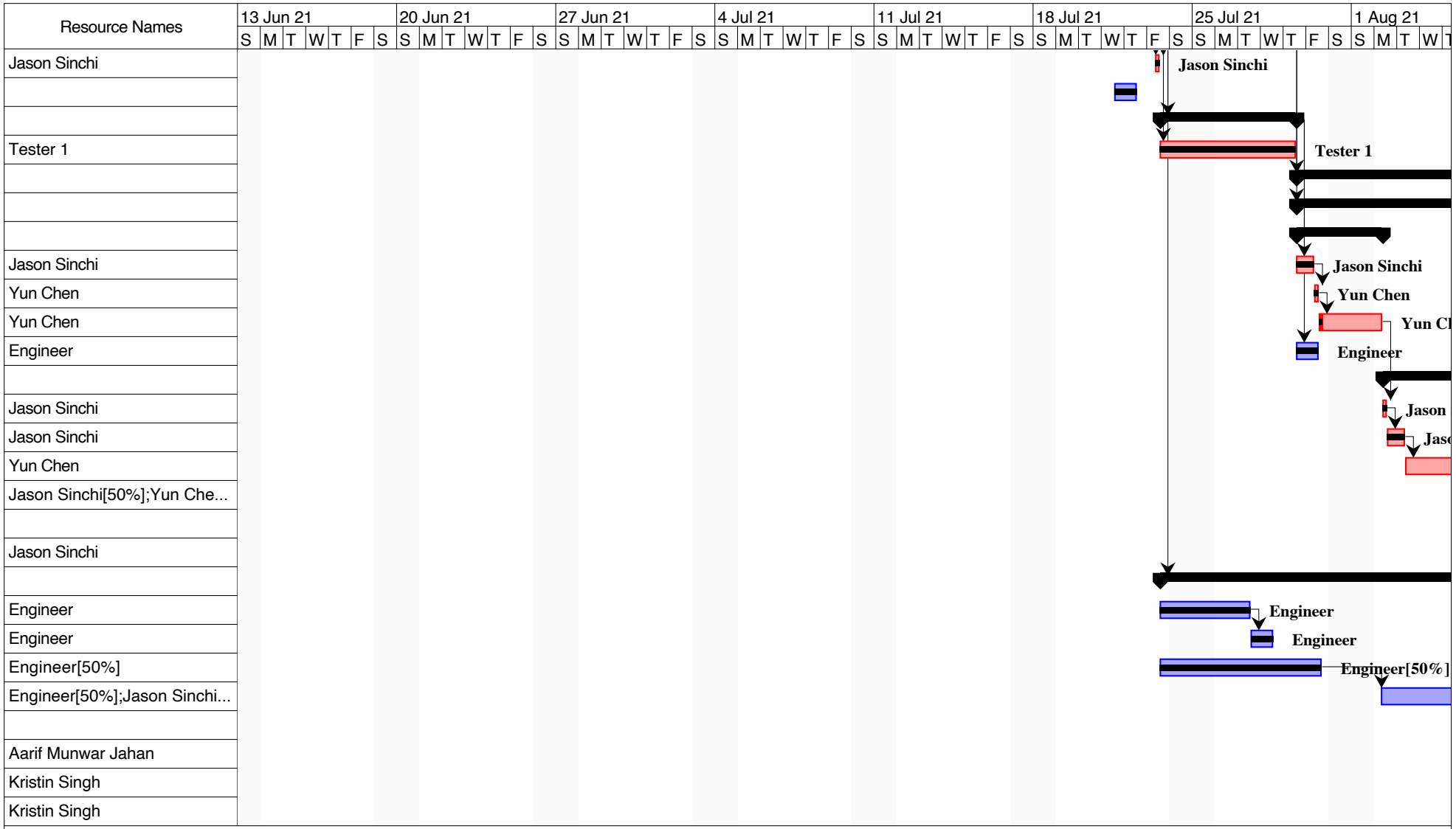
n Singh[10%]

		Name	Duration	Start	Finish	Predecessors
36	✔	Unit Test Portal	0.5 days?	7/23/21 8:48 AM	7/23/21 1:48 PM	30;31;32;33;34
37	✔	Security Feature	1 day?	7/21/21 1:48 PM	7/22/21 1:48 PM	
38	✔	**Testing**	**4 days?**	**7/23/21 1:48 PM**	**7/29/21 1:48 PM**	**27**
39	✔	Test Portal Integration...	4 days?	7/23/21 1:48 PM	7/29/21 1:48 PM	30
40		**Deployment**	**9 days?**	**7/29/21 1:48 PM**	**8/11/21 1:48 PM**	**27**
41		**Full Rollout**	**9 days?**	**7/29/21 1:48 PM**	**8/11/21 1:48 PM**	**27**
42		**Phase 2**	**1.5 days?**	**7/29/21 1:48 PM**	**8/2/21 8:48 AM**	
43	✔	Stand up servers	0.5 days	7/29/21 1:48 PM	7/30/21 8:48 AM	38
44	✔	Deploy Data Architec...	0.5 days	7/30/21 8:48 AM	7/30/21 1:48 PM	43
45		Transfer Data	0.5 days	7/30/21 1:48 PM	8/2/21 8:48 AM	44
46	✔	Train hospital users i...	1 day?	7/29/21 1:48 PM	7/30/21 1:48 PM	38
47		**Phase 3**	**6.5 days?**	**8/2/21 8:48 AM**	**8/10/21 1:48 PM**	
48	✔	Deploy Portals	0.5 days?	8/2/21 8:48 AM	8/2/21 1:48 PM	45
49	✔	Cutover to new portals	0.5 days?	8/2/21 1:48 PM	8/3/21 8:48 AM	48
50		Monitoring Usage	5 days?	8/3/21 8:48 AM	8/10/21 8:48 AM	49
51		Analyze Performance	0.5 days?	8/10/21 8:48 AM	8/10/21 1:48 PM	50
52		**Phase 4**	**1 day?**	**8/10/21 1:48 PM**	**8/11/21 1:48 PM**	
53		Turn off legacy system	1 day?	8/10/21 1:48 PM	8/11/21 1:48 PM	51
54		**Support**	**9.4 days?**	**7/23/21 1:48 PM**	**8/5/21 5:00 PM**	**27**
55	✔	Technical Documentation	2 days?	7/23/21 1:48 PM	7/27/21 1:48 PM	
56	✔	Training Material	1 day?	7/27/21 1:48 PM	7/28/21 1:48 PM	55
57	✔	User Support	5.4 days?	7/23/21 1:48 PM	7/30/21 5:00 PM	
58		Enhancements	4 days	8/2/21 8:00 AM	8/5/21 5:00 PM	57
59		**Closing**	**3.125 days?**	**8/6/21 8:00 AM**	**8/11/21 9:00 AM**	**58**
60		Final Project Report	0.5 days?	8/6/21 8:00 AM	8/6/21 1:00 PM	
61		Final Project Presentation	0.5 days?	8/6/21 8:00 AM	8/6/21 1:00 PM	
62		Final Project Retro	0.125 days?	8/11/21 8:00 AM	8/11/21 9:00 AM	


Resource Names
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Jason Sinchi
Tester 1
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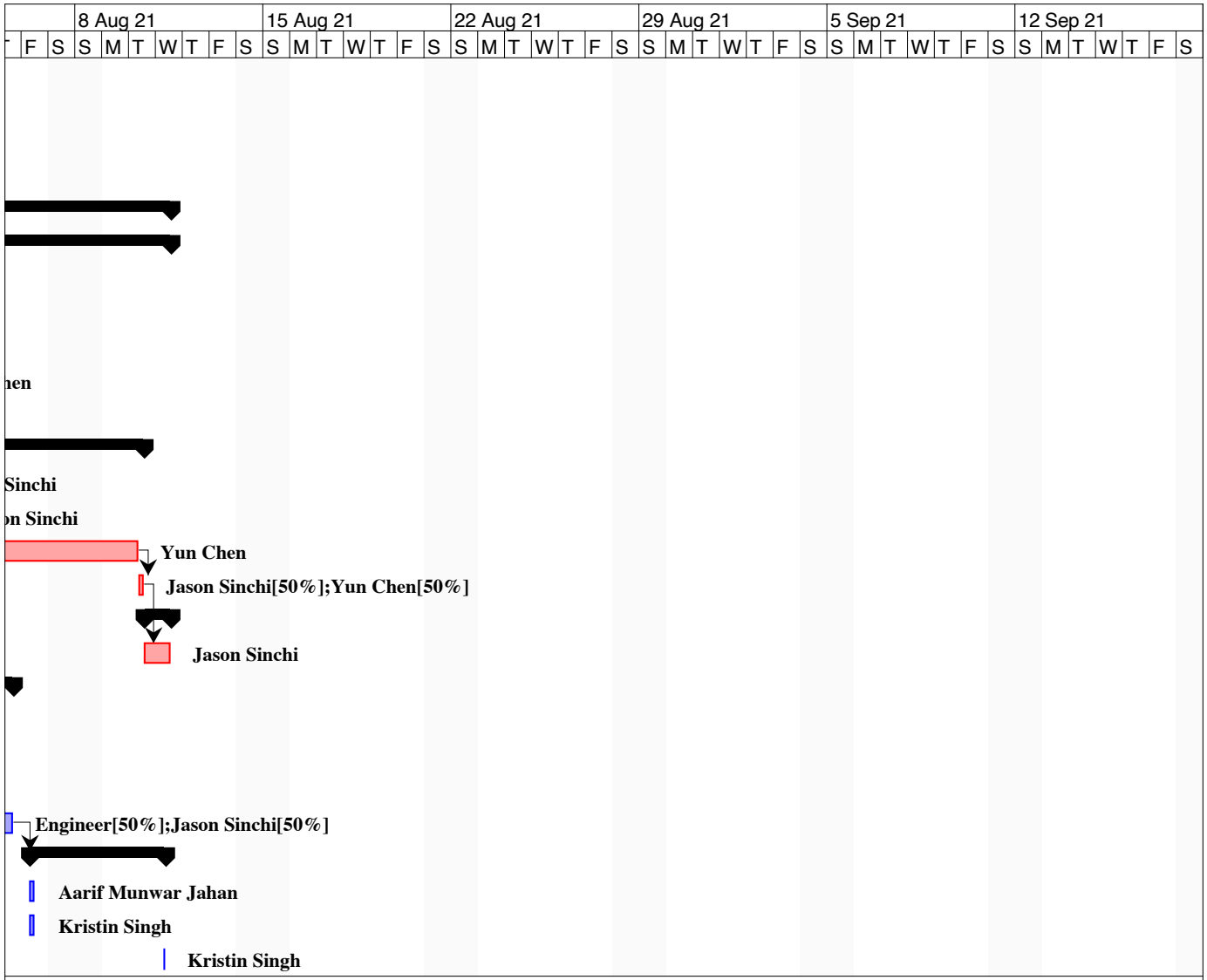
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Jason Sinchi
Engineer[50%];Jason Sinchi[50%]
Aarif Munwar Jahan
Kristin Singh
Kristin Singh

Appendix F – Project Closeout Report

Project Title:	VacLife – Bridging gaps between COVID-19 Vaccine demand and supply	Date Prepared: July 28th, 2021	Project Manager:	Kristin Singh
Goal	**Project Objectives**	**Success Criteria**	**How Met**	**Variance**
Scope	Create a system that will bridge the gap between COVID-19 demand and supply	Provide vaccine appointment scheduling, resident information, inventory management all in one platform with 15 scope items	Mostly met; only one scope item could not be met and was deemed a nice to have	=No. of scope items planned – no. of scope items achieved = 15-14 = **+1**
Schedule	Provide a COVID-19 portal instantly to get into marketq	Complete project within 3 months of initiation	Completed on time, before schedule	= EV – PV = (0.9*80000) – (0.85*80000) = **+$4000**
Cost	Create the COVID-19 portal under a fixed budget	Complete project within $80,000	Completed under budget	= EV-AC = (0.9*80000) – 65000 = **+$7000**
Quality	Create a system for COVID-19 vaccines free of issues with all necessary security features	Complete all 26 requirements for the project	Mostly met; only two requirements not met – one failed, other not tested	= % of (No. of requirements achieved/No. of requirements planned) = (24/26) *100 = **92%**
Other	N/A			

Lessons Learned Report (for the overall project)	Managing and controlling scope is the most important, primarily because the scope is defined early in the project. This is because visualizing the final product and anticipating technical challenges can be difficult when the project is getting initiated. Managing scope about the features that will be included, creating wireframes, getting feedback from stakeholders on the wireframes, and then building to those specifications has turned out to be very successful for our team. Understanding the expertise and limitations of team members early in the project is also crucial since it helps with the appropriate division of work and achieves better throughput.

What knowledge area(s) went well, and how this was achieve?

Schedule management – by meeting regularly, dividing work early and providing status periodically.
Resource management – by understanding strengths and weaknesses of team members and dividing work accordingly
Scope management – by raising flags when there are concerns, by having team discussions on verifying what is being designed
Communications management – by being very active on the group chat and answering any concerns as soon as possible

What were the project challenges and how they could be addressed on another project?

1. Delivering a system with a lot of integration – could be handled by dividing the work between three teams who build separate systems first and then it gets merged into a single system at the end.

2. Good knowledge of SQLand VBA – could get a team member who is a professional SQL/VBA developer to add more features to the database
What would be done different on a similar project? *Design in a more iterative manager using user feedback at each stage. This will ensure the system built is favorable to the users' needs. However, the trade-off with time and cost would need to be considered.*
What are the key takeaways about working in an IT project environment? *1. Feedback is very important, primarily to identify concerns* *2. The highly structured Waterfall method works reasonably well when there is a good vision of what is getting built* *3. Team-work is key to success. Various expertise, opinions, skills are required in an IT project. Without team harmony and necessary range of skills, the project will suffer.*

Section G: Integrity Statement & Signature

Project Name: **VacLife – Bridging Gaps Between COVID-19 Vaccine Supply and Demand**	**Project Team:** **Crocagile**

Code of Conduct: As a project team, we will:

- Work together, prevent any problems, and constructively and respectfully resolve any differences.
- Keep all team members fully informed of any project related information.
- Always consider what is within the best interest of the entire project team.
- Prepare and submit all work in a neat, organized, and professional manner, and will represent work performed by the team, and not copied or done by other people.
- Conduct all project work in an ethical and honest manner, and not place the project and team members at risk with any preach in policies on academic dishonesty.

Participation: We will:

- Participate equally, fully, and honestly in all project activities and duties.
- Always work together to provide the highest quality deliverables, with each member fulfilling their responsibilities and providing the highest quality work.
- Encourage diversity in our work and be open to new ideas and ways of doing things.
- Inform the team in advance when individual members are unable to make a meeting or may have an issue completing a given task on time.

Communication: We will:

- Determine as a team, the best ways, and times to communicate, using the most appropriate effective communication method and meeting options available to all team members.
- Keep all discussions focused on the project and present all ideas and thoughts in a manner that will benefit the entire team.
- Work together to meet our project schedule and deliver all work on time.

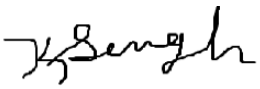
Problem Solving: We will:

- Give everyone the opportunity to participate in solving problems.
- Provide constructive feedback, and focus on resolving any issues, and not blame or criticize anyone.
- Aim to build on each other's ideas and suggestions.

Meeting Guidelines: We will:

- Plan to meet as needed, face-to-face or virtual, at a time convenient to each member
- Include all team members in all meetings, and equally and willingly share information and duties during each meeting.
- Record our meeting minutes in a Team Meeting Log and distribute them to the team in a timely manner, clearly identifying the decisions made and action items.

Project Team Members Names and Sign-off:

Name (print)	Sign-off on Team Contract	Date
AARIF MUNWAR JAHAN	**ammunwarjahan**	**07/31/2021**
JASON SINCHI	**Jason Sinchi**	**07/31/2021**
KRISTIN SINGH		**07/31/2021**
YUN CHEN	**Yun Chen**	**07/31/2021**
JING CHEN	**Jing Chen**	**07/31/2021**

Section H: Meeting Minutes

Meeting 1

Meeting/Project Title:	**VacLife - Phase III**	**Group Name/No.**	**Crocagile**
Meeting Date: (MM/DD/YY)	07/22/21	**Start Time:**	9:30pm
Meeting Type:	**Face-to-Face __ / Virtual _X_**	**End Time:**	10pm
Facilitator:	Aarif Munwar Jahan	**Minutes Taker:**	Jason Sinchi

1. Meeting Objective

For our first meeting our objectives were as follows:

- Go over the deliverable
- Finish documentation by 7/29
- Finish slides by 7/31
- Finish presentation by 8/1

We set reasonable dates to complete each of these tasks. We hope to conduct another Zoom call on 7/26 to get a status update on everyone's part.

2. Attendance

Name	In Attendance (Y/N)	Reason for Absence
Jason Sinchi	Y	
Aarif Munwar Jahan	Y	
Jing Chen	Y	
Yun Chen	Y	
Kristin Singh	Y	

3. Agenda, Decisions, Issues

Discussion Notes	Discussion led by
Discussed action items and set dates for our future meetings.	All group members

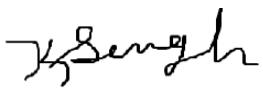
4. Action Item/Task Assigned

Activity	Assigned To	Due Date
Complete parts assigned to each group member.	All group members	7/29/2021

5. Next Meeting

Date:	7/26/2021	**Time:**	10:15PM	**Meeting Type:**	**Face-to-Face ____ / Virtual __X__**
Objective:	Go over tasks due by the next meeting. Discuss the project deliverables and any questions between our group.				

Project Team Members Names and Signature:

Name (print)	Signature	Date
Jason Sinchi	**Jason Sinchi**	**7/22/2021**
AARIF MUNWAR JAHAN	**Ammunwarjahan**	**7/22/2021**
Kristin Singh		**7/22/2021**
Yun Chen	**Yun Chen**	**7/22/2021**
Jing Chen	**Jing Chen**	**7/22/2021**

Meeting 2

Meeting/Project Title:	VacLife - Phase III	Group Name/No.	Crocagile
Meeting Date: (MM/DD/YY)	07/26/21	Start Time:	10:15pm
Meeting Type:	Face-to-Face __ / Virtual _X_	End Time:	10:30pm
Facilitator:	Aarif Munwar Jahan	Minutes Taker:	Jason Sinchi

1. Meeting Objective

We had a status report for this meeting. We checked to ensure that our information was consistent with each of our parts.

2. Attendance

Name	In Attendance (Y/N)	Reason for Absence
Jason Sinchi	Y	
Aarif Munwar Jahan	Y	
Jing Chen	Y	
Yun Chen	Y	
Kristin Singh	Y	

3. Agenda, Decisions, Issues

Discussion Notes	Discussion led by
We agreed to have our parts done by the 29th and will hold a Zoom call to go over anything.	All group members

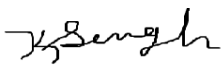
4. Action Item/Task Assigned

Activity	Assigned To	Due Date
Product Environment, Database Deployment, Future Enhancements, Closeout Report	Aarif Munwar Jahan	7/29/2021
Communication Plan, Test Cases	Jing Chen	7/29/2021
Product Environment, Rollout Plan	Jason Sinchi	7/29/2021
Communication Plan, Test Cases	Yun Chen	7/29/2021
Training Plan, RTM	Kristin Singh	7/29/2021

5. Next Meeting

Date:	7/29/2021	Time:	9:30pm	Meeting Type:	Face-to-Face ____ / Virtual __X__
Objective:	To come together as a group and discuss any issues encountered when completing our tasks. Getting ready to discuss how we are going to format our presentation and preparing a date to record our presentation for submission.				

Project Team Members Names and Signature:

Name (print)	Signature	Date
Jason Sinchi	Jason Sinchi	7/26/2021
AARIF MUNWAR JAHAN	Ammunwarjahan	7/26/2021
Kristin Singh		7/26/2021
Yun Chen	Yun Chen	7/26/2021
Jing Chen	Jing Chen	7/26/2021

Meeting 3

Meeting/Project Title:	VacLife - Phase III	Group Name/No.	Crocagile
Meeting Date: (MM/DD/YY)	07/29/21	Start Time:	9:30pm
Meeting Type:	Face-to-Face __ / Virtual _X_	End Time:	10pm
Facilitator:	Aarif Munwar Jahan	Minutes Taker:	Jason Sinchi

1. Meeting Objective

Crocagile met to discuss our next steps in creating our powerpoint presentation. We were talking about the number of slides needed to present, what to present, and who will present them.

2. Attendance

Name	In Attendance (Y/N)	Reason for Absence
Jason Sinchi	Y	
Aarif Munwar Jahan	Y	
Jing Chen	Y	
Yun Chen	Y	
Kristin Singh	Y	

3. Agenda, Decisions, Issues

Discussion Notes	Discussion led by
Discuss action items for our powerpoint presentation.	All group members
Assign presentation roles for each member.	All group members

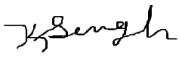
4. Action Item/Task Assigned

Activity	Assigned To	Due Date
Populate slides in the powerpoint	All group members	7/31/2021

5. Next Meeting

Date:	8/1/2021	Time:	12pm	Meeting Type:	Face-to-Face ____ / Virtual __X__
Objective:	To have our powerpoint ready to start recording our presentation.				

Project Team Members Names and Signature:

Name (print)	Signature	Date
Jason Sinchi	Jason Sinchi	7/29/2021
AARIF MUNWAR JAHAN	Ammunwarjahan	7/29/2021
Kristin Singh		7/29/2021
Yun Chen	Yun Chen	7/29/2021
Jing Chen	Jing Chen	7/29/2021

Meeting 4

Meeting/Project Title:	VacLife - Phase III	Group Name/No.	Crocagile
Meeting Date: (MM/DD/YY)	08/1/21	Start Time:	12pm
Meeting Type:	Face-to-Face __ / Virtual _X_	End Time:	2pm
Facilitator:	Aarif Munwar Jahan	Minutes Taker:	Jason Sinchi

6. Meeting Objective

Crocagile met to finalize our powerpoint and start recording our presentation.

7. Attendance

Name	In Attendance (Y/N)	Reason for Absence
Jason Sinchi	Y	
Aarif Munwar Jahan	Y	
Jing Chen	Y	
Yun Chen	Y	
Kristin Singh	Y	

8. Agenda, Decisions, Issues

Discussion Notes	Discussion led by
Record our presentation.	All group members

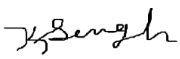
9. Action Item/Task Assigned

Activity	Assigned To	Due Date
Record our presentation.	All group members	8/1/2021

10. Next Meeting

Date:	N/A	Time:	N/A	Meeting Type:	Face-to-Face ____ / Virtual ____
Objective:	N/A				

Project Team Members Names and Signature:

Name (print)	Signature	Date
Jason Sinchi	Jason Sinchi	8/1/2021
AARIF MUNWAR JAHAN	Ammunwarjahan	8/1/2021
Kristin Singh		8/1/2021
Yun Chen	Yun Chen	8/1/2021
Jing Chen	Jing Chen	8/1/2021