Storage-X

Covid Consumers	
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Milestone 7 Report

Milestone Manager: Thadeous Phipps

Project Manager: Paul Van Vliet

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Control Documents: Roles and Responsibilities Matrix

Name	Role	Responsibilities
Thadeous Phipps	The Project Manager is responsible for ensuring that the project is delivered on time and to the required quality standards.	Client Document, PM Chart, Commercial Software Component, Proprietary Software Component, Meeting Communications & Control Documents
Junfeng Ou	The Project Tracker ensures that members of the project are working in a timely and responsible manner.	Client Document, PM Chart, Commercial Software Component, Proprietary Software Component, Meeting Communications & Control Documents
Levi Price	The Project Producer focuses on making sure documents are reviewed before submission and submitted in a timely fashion.	Client Document, PM Chart, Commercial Software Component, Proprietary Software Component, Meeting Communications & Control Documents
Kyle Haston	The Project Communicator ensures necessary parts are completed by communicating with team members.	Client Document, PM Chart, Commercial Software Component, Proprietary Software Component, Meeting Communications & Control Documents

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Control Documents: Change Log

Date	Version	Change Description	Team Member
02/11/2021	5.1	Condensed milestone report from last semester and added Project Management Gantt Chart	Kyle Haston
02/11/2021	5.2	Updated Table of Contents, added ERD and FRDD	Levi Price
02/12/2021	5.3	Updated Table of Contents, Control Documents, Client Documents, Project Documents, and Meeting Communications	Levi Price Junfeng Ou Kyle Haston Thadeous Phipps
02/13/2021	5.4	Updated ERD, FRDD, and Meeting Communications	Junfeng Ou
02/23/2021	6.1	Updated Table of Contents, Client Documents, and Control Documents	Levi Price
02/27/2021	6.2	Added Comprehensive System Controls Plan, and Disaster Recovery Plans	Kyle Haston
02/28/2021	6.3	Added User Interface screenshot and updated Meeting Communications	Levi Price
03/06/2021	6.4	Updated Comprehensive System Controls Plan and Executive Summary	Kyle Haston
03/06/2021	6.5	Added Computer Architecture Design	Thadeous Phipps
03/09/2021	6.6	Updated UI Design screenshots	Levi Price
03/10/2021	6.7	Updated Computer Architecture Design (Actual Architecture and RFP)	Thadeous Phipps

Date	Version	Change Description	Team Member
03/12/2021	6.8	Updated Computer Architecture Design and Comprehensive System Controls Plan	Thadeous Phipps Junfeng Ou Kyle Haston
03/12/2021	6.9	Updated Executive Summary, Table of Contents, and PM Chart	Levi Price
03/25/2021	7.0	Updated Control Documents and Meetings Communications	Levi Price
03/28/2021	7.1	Added Structure Chart	Junfeng Ou
03/31/2021	7.2	Updated Control Document and Meetings Communications	Kyle Haston
03/31/2021	7.3	Completed Commercial Software Component and start CRUD table	Junfeng Ou
04/01/2021	7.4	Updated Control Document, Execute Summary, and PM Chart	Levi Price
04/02/2021	7.5	Updated Structure Chart and CRUD table	Junfeng Ou
04/09/2021	7.6	Updated Structure Chart and CRUD table	Junfeng Ou
04/10/2021	7.7	Updated CRUD Table, Run Sheets, and Table of Contents	Levi Price

Client Documents: Opening Statement

Milestone 7 of the Storage X system has been completed. The systems development project continues to remain on time and budget.

Client Documents: Executive Summary

Milestone 7 report consists of the Control Documents, Project Documents, and Meeting Communications. The Control Documents contain the Roles and Responsibilities Matrix and the Change Log. These documents cover what the team members will be responsible for as well as what they will be working on during the current milestone. The Change Log notates any changes that have been made within this report. The Project Documents contain the Commercial Software Component and the Proprietary Software Component. The Commercial Software Component contains information regarding our system's operating system software, website software framework and dependencies, database used, commercial software upgrades, as well as how the commercial software upgrades will affect our system. The Proprietary Software Component contains information regarding the approach of our software design team, Structure Chart, CRUD Table, and run sheets for our modules. The Structure Chart describes the individual functions or tasks that our system needs to perform and how they're related. This will help us design, code, and test each task individually and to know how they are connected together. The CRUD Table looks at what database tables and what functions are contained in our structure chart. CRUD stands for create, read only, update, and delete which lists all our software functions and all our database tables. Each function will become a row in our CRUD table. The individual run sheets are informed by the structure chart and are based off of different tasks . A

run sheet is a detailed description of functionality of a particular task. Lastly, we have our

Meeting Communications that contains each Milestone Meeting Minutes. These Meeting

Minutes cover the times the team members met to discuss the status of the milestone.

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Client Documents: Implications for Client

Milestone 7 implications for the client have been requiring consent for information needed to continue the progress with the development of the project. No weekly meetings have been set up with the client, but are available by appointment and emails are exchanged periodically. No work processes of the client will be affected by the changes in the current milestone. The client will not be required to learn any skills that are affected by the current milestone. This milestone is setting up the backbone for the client to effectively increase their productivity by streamlining their work processes into a more organized and automated approach. As a team we plan to develop and implement an effective information system for our client.

Client Documents: Items for Approval

Items for Approval: Access to information on DIY's data management.

Status: All the items have been approved by the client, Kirk Alloway.

Project Documents: Commercial Software Component

Operating system:

Name: 64-bit Windows 10   OS Build Version: 18363.1440   Manufacture: Microsoft

Website software framework and dependencies:

Name: **React**   Version: 17.0.1   Manufacturer: Facebook

Name: **NextJS**   Version: 10.0.3   Manufacturer: NextJS Team

Name: **GraphQL**   Version: 15.4.0   Manufacturer: Lee Byron

Name: **TailwindCSS**   Version: 2.0.3   Manufacturer: TailwindCSS Team

Name: **Style-Component**   Version: 5.2.1   Manufacturer: Styled Component Team

Name: **KeystoneJs**   Version: 9.3.0   Manufacturer: Keystone Team

Database:

Name: **MongoDB**   Version: 4.0   Manufacturer: MongoDB Team

Commercial software upgrades:

React: Future software updates will not affect current version.

NextJS: All current features will work with future updates.

GraphQL: All current features will work with future updates.

TailwindCSS: Future updates will have no impact on the project if we do not switch to the new version.

Styled-Component: Styled Component uses plain CSS; no future updates will affect the current software.

KeystoneJS: Future updates may have some impact on the software. New features will be announced ahead of time and the Keystone team will send out emails to developers to notify everyone for future changes that may break current applications with recommended changes. We will act accordingly once the update rolls out.

Project Documents: Proprietary Software Component

Software Design Team Identification

Members and Roles

Junfeng Ou - Design and Code

Kyle Haston - Testing

Thadeous Phipps - Documentation

Levi Price - Documentation

Software Development Approach:

On this project the software design team utilizes a top down structured development, where the team first begins by developing the first-level systems and progressively develops each subsystem with more detail until the subsystem contains the base values necessary. By utilizing this approach the team intends to break down the database diagram into its core components and develop a web-app based on those principles.

Project Documents: Module Runsheets

Course:	**ISQA 4120 – System Design & Implementation**
Document:	**Program/Module Runsheet**

Module Name:	Sign Up Form
Location:	Systems Development
Programmer(s):	Covid Consumers
Date Completed:	March 28, 2021
Project Name:	Covid Consumers
Client:	DIY Storage

Module Objectives:	Sign Up on the website
Manual Input:	User enters required information fields User clicks Sign Up button to sign up
Files Used:	Customer: read/write
Fields Used:	Customer. Customer.id read/write Customer. Customer.username: read/write Customer. Customer.email: read/write Customer Customer.password: read/write Customer. Customer.name: read/write Customer. Customer.address: read/write

	Customer. Customer.city: read/write Customer. Customer.state: read/write Customer. Customer.ZipCode: read/write Customer. Customer.Phone: read/write Customer. Customer.DriversLicense
Output:	Outcome of Customer Signup
Hardware Requirements:	Minimum 2GB RAM
Program Messages:	None
Controls:	All fields listed above are required

Course:	**ISQA 4120 – System Design & Implementation**
Document:	**Program/Module Runsheet**

Module Name:	About Page
Location:	Systems Development
Programmer(s):	Covid Consumers
Date Completed:	March 31, 2021
Project Name:	Covid Consumers
Client:	DIY Storage

Module Objectives:	Learn about DIY Storage
Manual Input:	No input required
Files Used:	None
Fields Used:	N/A
Output:	N/A

Hardware Requirements:	Minimum 2GB Ram
Program Messages:	N/A
Controls:	N/A

Course:	**ISQA 4120 – System Design & Implementation**
Document:	**Program/Module Runsheet**

Module Name:	FAQ
Location:	Systems Development
Programmer(s):	Covid Consumers
Date Completed:	March 30, 2021
Project Name:	Covid Consumers
Client:	DIY Storage

Module Objectives:	Answer common questions customers might have about DIY-Storage or how to use the website.
Manual Input:	User enters required information fields
Files Used:	None
Fields Used:	N/A
Output:	N/A
Hardware Requirements:	Minimum 2GB RAM
Program Messages:	N/A
Controls:	N/A

Course:	**ISQA 4120 – System Design & Implementation**
Document:	**Program/Module Runsheet**

Module Name:	Rental Form
Location:	Systems Development
Programmer(s):	Covid Consumers
Date Completed:	March 29, 2021
Project Name:	Covid Consumers
Client:	DIY Storage

Module Objectives:	The objective of the Rental Form is to add available storage units to the rental form.
Manual Input:	User enters required information fields
Files Used:	Storage Unit Type : read/write
Fields Used:	Storage Unit . Storage_Unit_Availability Storage Unit Type. Storage Unit Type_ID Storage Unit. Storage_Unit_ID Storage Unit. Storage_unit_price
Output:	Outcome of Rental Form (Items Added / Not Added Successfully)
Hardware Requirements:	Minimum 2GB RAM
Program Messages:	Rental Updated Successfully
Controls:	N/A

Project Documents: Structure Chart
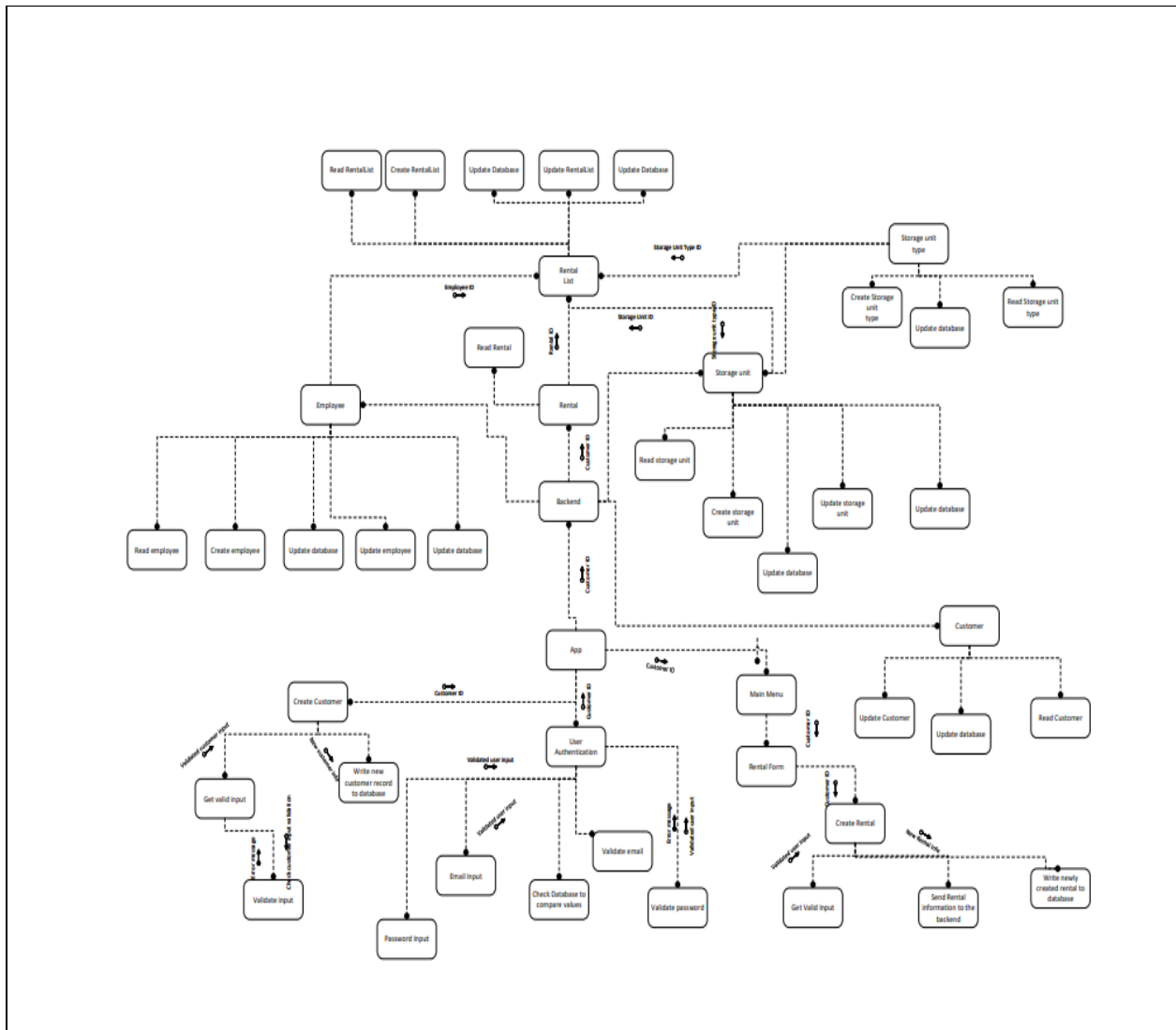
Project Documents: CRUD Table

Customer CRUD	
Create Customer	**C**
Get valid input	
Validate Input	
Write newly created customer to database	
User Authentication	**C**
Email Input	
Password input	
Check database to compare input values	
Validate email	
Validate password	
Update Customer	**U**
Update database	
Read Customer	**R**

Employee CRUD	
Read Employee	R
Create employee	C
Update database	
Update employee	U
Update database	

Storage Unit CRUD	
Read storage unit	R
Create storage unit	C
Update database	
Update storage unit	U
Update database	

Storage Unit Type	
Create storage unit type	C
Update database	
Read storage unit type	U

Rental List CRUD	
Read rental list	R
Create rental list	C
Update database	
Update rental list	U
Update database	

Rental CRUD	
Create rental	C
Get valid input	
Send rental information to the backend	
Write newly created rental to database	
Read rental	R

Meeting Communications

Communication Management Plan				
Who	**What**	**Why**	**When**	**Where**
Team Members	Ongoing Emails	Inform team members about current status of the project	As needed	UNO Email
Team Members	Ongoing Messages	Discuss with team members about current status of the project	As needed	Discord
Team Members and Client	Stakeholder Meeting	Provide milestone updates to the client	By appointment	Zoom

Meeting Minutes: Milestone 5
Date: 02/12/2021
Time: 3 PM
Location: Zoom
Attendance: Project Manager, Levi Price**,** Junfeng Ou, Kyle Haston, and Thadeous Phipps

Notes: In the meeting, we discussed some of the flaws in our Entity Relationship Diagram and the Full Relational Database Design with the Project Manager. We also obtained some general advice on how we should improve our model from the Project Manager. Lastly, we discussed the general format of the milestone document and the structure we need to follow in each section.

Meeting Minutes: Milestone 5
Date: 02/12/2021
Time: 8 PM
Location: Discord
Attendance: Levi Price**,** Junfeng Ou, Kyle Haston, and Thadeous Phipps

Notes: In the meeting, we discussed each team member's role & responsibilities in the milestone. Levi is updating the Control Documents, Client Documents, Project Documents, and Meeting Communications. Kyle started to create the Project Management Chart with Office Timeline, but Levi will be converting our agenda to Microsoft Project. Jun is creating the Entity Relationship Diagram with Lucidchart and the Full Relational Database Design with Microsoft Access. Thadeous is responsible for reviewing the milestone and verifying all parts have been completed.

Meeting Minutes: Milestone 6
Date: 02/28/2021
Time: 12 PM
Location: Zoom
Attendance: Project Manager, Kyle Haston, Junfeng Ou, and Levi Price

Notes: In the meeting, we discussed our progress on the Milestone 6 report. Noting that the Executive Summary could use better client friendly details about the project documents. The need to get started on the Computer Architecture Design & Proposal document. The Comprehensive System Controls Plan needs to be updated and could have better descriptions. The User Interface is off to a good start.

Meeting Minutes: Milestone 6
Date: 03/12/2021
Time: 1 PM
Location: Zoom
Attendance: Project Manager, Kyle Haston, and Thadeous Phipps

Notes: In the meeting, we discussed our progress on the Milestone 6 report before resubmission. The Project Manager mainly recommended changes towards our RFP and Control Plan.

Meeting Minutes: Milestone 7
Date: 03/22/2021
Time: 6:30 PM
Location: Zoom
Attendance: Kyle Haston, Levi Price, and Thadeous Phipps

Notes: In the meeting, we discussed our progress on Milestone 7 and worked on our Structure Chart.

Meeting Minutes: Milestone 7
Date: 03/25/2021
Time: 8 PM
Location: Zoom
Attendance: Project Manager, Junfeng Ou, Levi Price, and Thadeous Phipps

Notes: In the meeting, we discussed our progress on Milestone 7 so far with the Structure Chart. The Project Manager provided feedback and recommended improvements towards our Structure Chart.

Meeting Minutes: Milestone 7
Date: 03/31/2021
Time: 2 PM
Location: Zoom
Attendance: Project Manager, Junfeng Ou, Kyle Haston

Notes: In the meeting, we discussed our progress on Milestone 7 so far including the Structure Chart and the CRUD Table. We also discussed our Commercial Software Component. The Project Manager provided feedback and recommended improvements towards our Structure Chart and changes that needed to be made to our CRUD Table based on the modules in our structure chart.

Meeting Minutes: Milestone 7
Date: 04/02/2021
Time: 12:15 PM
Location: Zoom
Attendance: Project Manager, Junfeng Ou, Kyle Haston, Levi Price, and Thadeous Phipps

Notes: In the meeting, we discussed our progress on Milestone 7 with the Project Manager to get some advice on the Structure Chart, CRUD Table, and our 4 run sheets. The Project

Manager provided feedback based on the layout of the Structure Chart and added some run sheet clarification.

Meeting Minutes: Milestone 7
Date: 04/09/2021
Time: 12:15 PM
Location: Zoom
Attendance: Project Manager, Junfeng Ou, Kyle Haston, Levi Price, and Thadeous Phipps

Notes: In the meeting, we discussed our progress on Milestone 7 before resubmission. The Project Manager provided helpful feedback regarding our Executive Summary, Structure Chart, CRUD Table, and run sheets.