

**Construction 2**  
**Document 5: Team File**



**HexaTech**

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**INFO3003A**

## Table of Contents: Construction 2

Version Control .....	2
Requirement Gathering Evidence and Analysis .....	3
Narrative of Analysis of Requirements Data .....	3
Analysis of Data .....	4
Meeting Minutes.....	5
14 March Meeting Minutes – Only meeting with client .....	5
Iteration 1 Meeting Minutes .....	5
7 March 2024 .....	5
21 March 2024 .....	6
25 March 2024 .....	6
4 April 2024 .....	7
8 April 2024 .....	7
12 April 2024 .....	8
16 April 2024 .....	8
Iteration 2 Meeting Minutes .....	9
3 May 2024 .....	9
15 May 2024 .....	9
20 May 2024 .....	10
Iteration 3 Meeting Minutes .....	11
31 July 2024 Meeting Minutes .....	11
9 August 2024 Meeting Minutes .....	11
27 August 2024 Meeting Minutes .....	11
2 September 2024 Meeting Minutes .....	12
Iteration 4 Meeting Minutes .....	12
9 September 2024 Meeting Minutes .....	12
24 September 2024 Meeting Minutes .....	13
4 October 2024 Meeting Minutes .....	14
9 October 2024 Meeting Minutes .....	14
Work Breakdown.....	15
Iteration 1 .....	15
Iteration 2 .....	15
Iteration 3 .....	16
Iteration 4 .....	17
Iteration 5 .....	17
Team Sign-Off.....	17
Detailed Work Breakdown – All Iterations.....	18

Iteration 1 .....	18
Yaaseen Hassim.....	18
Muhammad Bodhanian.....	18
Yu-Hsin Chen .....	18
Philani Mkalipi.....	18
Lebohang Nkateko Sebilane.....	19
Phasha Thipe.....	19
Iteration 2 .....	19
Yaaseen Hassim.....	19
Muhammad Bodhanian.....	19
Yu-Hsin Chen .....	19
Philani Mkalipi.....	19
Lebohang Nkateko Sebilane.....	19
Phasha Thipe.....	19
Iteration 3 .....	19
Yaaseen Hassim.....	19
Muhammad Bodhanian.....	19
Yu-Hsin Chen .....	19
Philani Mkalipi.....	20
Lebohang Nkateko Sebilane.....	20
Phasha Thipe.....	20
Iteration 4 .....	20
Yaaseen Hassim.....	20
Muhammad Bodhanian.....	20
Yu-Hsin Chen .....	20
Philani Mkalipi.....	20
Lebohang Nkateko Sebilane.....	20
Phasha Thipe.....	20
Iteration 5 .....	20
Yaaseen Hassim.....	20
Yu-Hsin Chen .....	20
Appendix .....	21
Client Agreement.....	21

## **Version Control**

Updates to documentation from elaboration 2 to construction 1.

<u>Update</u>	<u>Details</u>
Meeting Minutes	<ul style="list-style-type: none"> <li>Retained minutes from first meeting with client for clarity on requirements.</li> <li>Included new minutes for group meetings for this submission.</li> </ul>
Work Breakdown	<ul style="list-style-type: none"> <li>Hours and detailed work breakdown have been updated to reflect work done on this submission – construction 1.</li> </ul>
Next Iteration Plan	<ul style="list-style-type: none"> <li>New plan has been drafted for the next iteration – Construction 2.</li> </ul>

Updates to documentation from construction 1 to construction 2

<u>Update</u>	<u>Details</u>
Meeting Minutes	<ul style="list-style-type: none"> <li>Retained minutes from first meeting with client for clarity on requirements.</li> <li>Included new minutes for all meetings from the beginning of the project.</li> </ul>
Work Breakdown	<ul style="list-style-type: none"> <li>All work breakdowns and detailed work breakdowns from all the documents have been compiled here.</li> <li>Included work breakdown for iteration 5.</li> </ul>

## **Requirement Gathering Evidence and Analysis**

### **Narrative of Analysis of Requirements Data**

A meeting was held at the beginning of this project, on the 14 March 2024 between Yaaseen Hassim and the owner of SolarWay Suppliers, Riaz Moosajee. This was the only

communication between Hexatech and SolarWay Suppliers as SolarWay Suppliers requested not to be heavily involved in the development process due to their intense business load. The minutes for this meeting can be found below – the 14 March 2024 meeting.

In this meeting, the requirements for a system that will benefit SolarWay Suppliers was discussed, and a decision was made to develop an information system for the repairs department of the business. Mr Moosajee reminded Yaaseen Hassim of the process of the current repairs system and informed Yaaseen that Hexatech has full discretion to design the system, digitising and streamlining the current process, he did not give detailed requirements.

Mr Moosajee did, however, give a few basic requirements:

- The system should cater for repairs in-house as well as those sent away to manufacturers.
- Customer information stored in the repairs system should be separate from the main point of sale system – SolarWay Supplier treats repairs as independent to sales due to warranty agreements.
- The system should track parts used in repairs.
- The system should track hours worked by respective technicians on repairs.

In addition to this client meeting, Yaaseen Hassim did vacation work for SolarWay Suppliers in December 2023, where he shadowed the repairs administrator. With this knowledge gained on the repairs system within SolarWay Suppliers and the business process surrounding it, Mr Moosajee made it clear that he trusts the discretion of Yaaseen Hassim and Hexatech to develop an information system that meets the requirements of SolarWay Suppliers.

## Analysis of Data

With the above in mind, the team used the data acquired from the current system and Yaaseen Hassim's experience at SolarWay Suppliers to inform the models for the information system.

Using Mr Moosajee's basic requirements and Yaaseen Hassim's knowledge of the business, the entity relationship diagram was drafted first to determine what entities were required within the system. Following this, an activity diagram detailing the new repairs process was created, this activity diagram portrays how the business process will flow with the new information system in place. All diagrams can be found in the Use Cases and Models document – document 2.

**An agreement between Hexatech and SolarWay is attached in the Appendix.** The owner, Mr Moosajee signed this agreement.

## Meeting Minutes

### 14 March Meeting Minutes – Only meeting with client

Attendees: Yaaseen Hassim, Riaz Moosajee (Owner of SolarWay Suppliers)

Agenda Item	Action Points
Overall objective of meeting with SolarWay Owner	<ul style="list-style-type: none"><li>• Potentially implementing a software solution to streamline repair processes.</li></ul>
Observation of Current Methods	<ul style="list-style-type: none"><li>• Company is using a manual method for documenting repairs, relying on handwritten notes and Excel spreadsheets.</li><li>• The owner described the issues in efficiency and effectiveness that the repairs department is currently having.</li></ul>
Proposal for Digital Transformation	<ul style="list-style-type: none"><li>• Develop a customized software solution to improve repair tracking and customer communication.</li></ul>
Owner's Response	<ul style="list-style-type: none"><li>• Impressed and enthusiastic about the project and gives approval.</li></ul>
Development Freedom	<ul style="list-style-type: none"><li>• Owner prefers hands-off approach</li><li>• Gives team full creative control</li><li>• Owner reiterated that the company is extremely busy, and they do not have time to micro-manage the project, giving Hexatech full creative control.</li></ul>
Basic Requirements	<ul style="list-style-type: none"><li>• The owner provided basic requirements</li><li>• Does not expect the final solution to meet all due to the academic nature of the project.</li><li>• The owner emphasised his enthusiasm to be involved in an academic undertaking and understands SolarWay Suppliers may not get anything tangible by the end of the development period.</li></ul>

### Iteration 1 Meeting Minutes

7 March 2024

Attendees: Yaaseen Hassim, Muhammad Bodhanian, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Client ideas	<ul style="list-style-type: none"> <li>Suggested focusing on a solar company; volunteered to reach out to one.</li> <li>creating a system for a car tracker company.</li> <li>Suggested a clothing company as a potential client.</li> </ul>	14/03/24	Yaaseen Hassim, Lebohang Sebiloane, Muhammad Bodhania
Team Name	<ul style="list-style-type: none"> <li>Collaborated to decide on the team's name "HexaTech."</li> </ul>	14/03/24	Yaaseen Hassim, Lebohang Sebiloane, Muhammad Bodhania, Yu-Hsin Chen, Thihe Phasha, Philani Mkalipi

### 21 March 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Non-functional Requirements	<ul style="list-style-type: none"> <li>Tasked with defining non-functional requirements.</li> </ul>	25/03/24	Yu-Hsin Chen
Constraints	<ul style="list-style-type: none"> <li>Assigned to identify potential constraints.</li> </ul>	25/03/24	Muhammad Bodhania
Reports	<ul style="list-style-type: none"> <li>Began outlining essential reports for the system.</li> </ul>	25/03/24	Lebohang Sebiloane
Vision Statement	<ul style="list-style-type: none"> <li>Worked on crafting the vision statement for the project.</li> </ul>	25/03/24	Yaaseen Hassim
Industry Analysis	<ul style="list-style-type: none"> <li>Conducted an industry analysis of the solar sector.</li> </ul>	25/03/24	Thihe Phasha
Project Risks	<ul style="list-style-type: none"> <li>Identified potential project risks.</li> </ul>	25/03/24	Philani Mkalipi

### 25 March 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
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System Boundaries	<ul style="list-style-type: none"> <li>• Took the lead on defining system boundaries</li> </ul>	04/04/24	Yu-Hsin Chen
Actors and Goals	<ul style="list-style-type: none"> <li>• Focused on detailing actors and goals</li> </ul>	04/04/24	Muhammad Bodhania
"Create Repair" Use case	<ul style="list-style-type: none"> <li>• Worked on the "Create Repair"</li> </ul>	04/04/24	Yaaseen Hassim
"Update Repair" Use Case	<ul style="list-style-type: none"> <li>• Assigned to the "Update Repair"</li> </ul>	04/04/24	Lebohang Sebiloane
"Read Repair" Use case	<ul style="list-style-type: none"> <li>• Tasked with the "Read Repair" Use</li> <li>• creating the Use Case Diagram.</li> </ul>	04/04/24	Thipe Phasha
System Features	<ul style="list-style-type: none"> <li>• Compiled the list of system features</li> </ul>	04/04/24	Philani Mkalipi

#### 4 April 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Industry Analysis	<ul style="list-style-type: none"> <li>• Focused on finalizing the industry analysis and Use Case Diagram</li> </ul>	08/04/24	Thipe Phasha
Reports and Customer Touchpoints	<ul style="list-style-type: none"> <li>• Enhanced reports and refined customer touchpoints</li> </ul>	08/04/24	Lebohang Sebiloane
Actors/Goals and "Update Part" Use Case	<ul style="list-style-type: none"> <li>• Revised actors/goals and created the "Update Part" use case</li> </ul>	08/04/24	Muhammad Bodhania
"Create Repair" Use Case	<ul style="list-style-type: none"> <li>• Created the "Create Repair" use case and developed an activity diagram.</li> </ul>	08/04/24	Yaaseen Hassim

#### 8 April 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Presentation Script	<ul style="list-style-type: none"> <li>• Started developing the presentation script</li> </ul>	12/04/24	Yaaseen Hassim, Muhammad Bodhania



System Boundary and Activity Diagrams	<ul style="list-style-type: none"> <li>Refined the system boundary and activity diagrams</li> </ul>	12/04/24	Yu-Hsin Chen
Use Case Diagram Visual	<ul style="list-style-type: none"> <li>Updated the Use Case Diagram visual</li> </ul>	12/04/24	Thipe Phasha
Reports and Mission Statement	<ul style="list-style-type: none"> <li>Continued refining reports and updating the mission statement.</li> </ul>	12/04/24	Lebohang Sebiloane

12 April 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
"Update Repair" Use Case	<ul style="list-style-type: none"> <li>Revised the "Update Repair" use case and created a project poster</li> </ul>	16/04/24	Muhammad Bodhania
Reports, Mission Statement, and Rules	<ul style="list-style-type: none"> <li>Worked on new reports,</li> <li>mission statement,</li> <li>project rules</li> </ul>	16/04/24	Lebohang Sebiloane
Maintenance Use Cases	<ul style="list-style-type: none"> <li>Added maintenance use cases and updated the Use Case Diagram</li> </ul>	16/04/24	Thipe Phasha
Project Glossary	<ul style="list-style-type: none"> <li>Created a project glossary</li> </ul>	16/04/24	Philani Mkalipi

16 April 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Refined Presentation Script	<ul style="list-style-type: none"> <li>Developed a refined script for the presentation</li> </ul>	19/04/24	Yaaseen Hassim, Muhammad Bodhania
Document Compilation	<ul style="list-style-type: none"> <li>Compiled all documents from team members</li> <li>worked on business rules and glossary</li> </ul>	19/04/24	Yaaseen Hassim
Use Case Summary and Admin Script	<ul style="list-style-type: none"> <li>Completed the summary of use cases</li> <li>admin script</li> </ul>	19/04/24	Muhammad Bodhania

System Boundary	<ul style="list-style-type: none"> <li>Finalized the system boundary</li> </ul>	19/04/24	Yu-Hsin Chen
Presentation Visuals and Posters	<ul style="list-style-type: none"> <li>Finished presentation visuals and posters</li> </ul>	19/04/24	Thipe Phasha
Glossary and Final Proofreading	<ul style="list-style-type: none"> <li>Final proofreading and glossary additions</li> </ul>	19/04/24	Philani Mkalipi

## Iteration 2 Meeting Minutes

3 May 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Update Repair Use Case	<ul style="list-style-type: none"> <li>Fully dress the Update Repair Use Case and provide its sequence diagram</li> </ul>	15/05/24	Muhammad Bodhania
Business Rules	<ul style="list-style-type: none"> <li>Define the Business Rules</li> </ul>		
Create Repair Use Case and ERD	<ul style="list-style-type: none"> <li>Fully dress the Create Repair Use Case and provide its sequence diagram</li> <li>Design the Entity-Relationship Diagram (ERD)</li> </ul>	15/05/24	Yaaseen Hassim
Create Job Use Case	<ul style="list-style-type: none"> <li>Fully dress the Create Job Use Case and create its sequence diagram</li> </ul>	15/05/24	Yu-Hsin Chen
State Machine Diagram	<ul style="list-style-type: none"> <li>Develop the State Machine Diagram</li> </ul>	15/05/24	Thipe Phasha
Class Diagram	<ul style="list-style-type: none"> <li>Develop the Class Diagram</li> </ul>	15/05/24	Philani Mkalipi
Glossary	<ul style="list-style-type: none"> <li>Compile the Glossary</li> </ul>	15/05/24	Lebohang Sebiloane
Prototype Development	<ul style="list-style-type: none"> <li>Collaborate on the development of the prototype</li> </ul>	15/05/24	Philani Mkalipi, Thipe Phasha

15 May 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
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ERD and Sequence Diagram	<ul style="list-style-type: none"> <li>• Handle the ERD</li> <li>• Fully dress the Create Repair use case and its sequence diagram</li> <li>• Compile the business rules</li> </ul>	20/05/24	Yaaseen Hassim
Update Repair Use Case and state machine diagram	<ul style="list-style-type: none"> <li>• Complete the fully dressed Update Repair use case and sequence diagram</li> <li>• Work on the State Machine Chart</li> </ul>	20/05/24	Muhammad Bodhania
Class Diagram and Prototype	<ul style="list-style-type: none"> <li>• Update the class diagram</li> <li>• Create the prototype, design the GUI in Figma</li> <li>• Discuss Figma interface changes</li> </ul>	20/05/24	Philani Mkalipi
Interface Development	<ul style="list-style-type: none"> <li>• Create the HTML interface</li> <li>• Change the background on draw.io files</li> </ul>	20/05/24	Yu-Hsin Chen
Figma Interface Adjustments	<ul style="list-style-type: none"> <li>• Handle the Figma interface adjustments</li> <li>• Prepare sequence and use case diagrams</li> </ul>	20/05/24	Thipe Phasha
Glossary and Data Dictionary	<ul style="list-style-type: none"> <li>• Focus on completing the glossary, including the Data Dictionary</li> </ul>	20/05/24	Lebohang Sebiloane

20 May 2024

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Final Document Compilation	<ul style="list-style-type: none"> <li>• Review all tasks, compile the final document, and create the video presentation</li> </ul>	23/05/24	Yaaseen Hassim
State Machine Chart	<ul style="list-style-type: none"> <li>• Complete the State Machine Chart, finalize meeting minutes, and plan the next iteration</li> </ul>	23/05/24	Muhammad Bodhania
Figma Interface and Prototype	<ul style="list-style-type: none"> <li>• Adjust the Figma interface per discussed changes and refer to the wireframe</li> </ul>	23/05/24	Thipe Phasha
Final Figma Design	<ul style="list-style-type: none"> <li>• Finalize the Figma design</li> </ul>	23/05/24	Philani Mkalipi

HTML Interface	<ul style="list-style-type: none"> <li>Finalize the HTML interface</li> </ul>	23/05/24	Yu-Hsin Chen
Glossary and Data Dictionary	<ul style="list-style-type: none"> <li>Complete the glossary, including the Data Dictionary</li> </ul>	23/05/24	Lebohang Sebiloane

### Iteration 3 Meeting Minutes

#### 31 July 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Coding the user interface	Complete the HTML and CSS for the software.	9/08/24	Thihe Phasha
Coding the database	Design and implement the database.	9/08/24	Philani Mkalipi
Backend Development	Complete the backend development.	9/08/24	Yu-Hsin Chen
Document Preparation	Begin drafting updates to documents	Continuous	Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane.

#### 9 August 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Software review	<ul style="list-style-type: none"> <li>Database and backend are still in development.</li> </ul>	14/08/24	Philani Mkalipi, Yu-Hsin Chen
User interface	<ul style="list-style-type: none"> <li>Made alterations to the layout and colour.</li> </ul>	N/A	Thihe Phasha
Sequence Diagram & Use Case	<ul style="list-style-type: none"> <li>Complete update part, update job use case, create repair part use case.</li> </ul>	14/08/24	Yaaseen Hassim, Muhammad Bodhania.
Minutes	<ul style="list-style-type: none"> <li>Document the meetings.</li> </ul>	Continuous	Muhammad Bodhania

#### 27 August 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Software Updates	<ul style="list-style-type: none"> <li>Add dropdown menus to software</li> </ul>	28/08/24	Yu-Hsin Chen

Data description for software	<ul style="list-style-type: none"> <li>Add description to the repair's database.</li> <li>Update data for checkout date.</li> </ul>	28/08/24	Philani Mkalipi
Team file Update diagrams	<ul style="list-style-type: none"> <li>Plan for iteration 4.</li> <li>Update sequence diagrams, ERD and class diagram.</li> </ul>	28/08/24	Muhammad bodhanian
BPMN Glossary	<ul style="list-style-type: none"> <li>Create BPMN for the 6 uses cases.</li> <li>Update glossary.</li> </ul>	28/08/24	Lebohang Sebiloane
Software Supplementary specification	<ul style="list-style-type: none"> <li>Complete reports in the software.</li> <li>Complete the reports in supplementary specification.</li> </ul>	28/08/24	Yaaseen Hassim

## 2 September 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Yu-Hsin Chen, Lebohang Sebiloane, Muhammad Bodhanian, Philani Mkalipi, Thihe Phasha

Agenda Item	Action Points	Person Responsible
Presentation Practice	<ul style="list-style-type: none"> <li>The team gathered to practice the presentation.</li> <li>Reviewed and rehearsed the script prepared by Yaaseen.</li> <li>Practiced delivering the system presentation created by Yaaseen and Yu-Hsin.</li> <li>Provided feedback on delivery and content.</li> <li>Made final adjustments to the presentation.</li> </ul>	All Team Members

## Iteration 4 Meeting Minutes

### 9 September 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhanian, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Software update and	<ul style="list-style-type: none"> <li>Repair Entity Database. Add description attribute</li> </ul>	22/09/24	Philani Mkalipi

user interface	(Fuse, Wire, Voltage, etc.) <ul style="list-style-type: none"> <li>Create UI for Customer Entity, Part, and Unit (Create, Update, View).</li> </ul>		
User interface	<ul style="list-style-type: none"> <li>Create, Update, and View UI for Manufacturer and Staff Entities.</li> </ul>	22/09/24	Thipe Phasha
Testing Preparation	<ul style="list-style-type: none"> <li>Start 3 testing ideas and principles; prepare inputs for testing.</li> </ul>	22/09/24	Yaaseen Hassim, Lebohang Sebiloane
Testing Document Review	<ul style="list-style-type: none"> <li>Review and read testing documents.</li> </ul>	22/09/24	Yaaseen Hassim, Muhammad Bodhania.
Update Job Function	<ul style="list-style-type: none"> <li>Change the Update Job function to search by Staff Name.</li> </ul>	22/09/24	Yu-Hsin Chen
Minutes	<ul style="list-style-type: none"> <li>Document the meetings.</li> </ul>	22/09/24	Muhammad Bodhania

## 24 September 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thipe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
Form Validation	<ul style="list-style-type: none"> <li>Input validation code and ensure the login page functionality is correct.</li> </ul>	03/10/24	Yu-Hsin Chen
Login Page	<ul style="list-style-type: none"> <li>Create login page and potentially two separate navigation systems, one for the administrator, and one for the technician.</li> <li>Add login page to the UI.</li> </ul>	03/10/24	Philani Mkalipi, Thipe Phasha
Diagram Update	<ul style="list-style-type: none"> <li>Update diagrams in the use case document based on feedback received in previous iteration.</li> </ul>	03/10/24	Muhammad Bodhania
Document Update	<ul style="list-style-type: none"> <li>Update other documents based on feedback and scope change.</li> </ul>	03/10/24	Yaaseen Hassim

Testing documentation	<ul style="list-style-type: none"> <li>Draft the testing document, with discussed test ideas.</li> </ul>		
Minutes	<ul style="list-style-type: none"> <li>Document the meetings</li> </ul>	3/10/24	Muhammad Bodhania

#### 4 October 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Muhammad Bodhania, Lebohang Sebiloane, Philani Mkalipi, Thihe Phasha, Yu-Hsin Chen

Agenda Item	Action point	Due date	Person responsible
View Tabs	<ul style="list-style-type: none"> <li>Add view tabs to the UI, for all the applicable entities.</li> </ul>	07/10/24	Philani Mkalipi, Thihe Phasha
Input Validation	<ul style="list-style-type: none"> <li>Continue working on validation for input in the forms.</li> </ul>	07/10/24	Yu-Hsin Chen
Update Customer Image	<ul style="list-style-type: none"> <li>Fix the image issues discovered during the testing.</li> </ul>	07/10/24	Philani Mkalipi
Combo Box Update	<ul style="list-style-type: none"> <li>Update the loading process for the combo box.</li> </ul>	07/10/24	Yu-Hsin Chen
Database Records	<ul style="list-style-type: none"> <li>Add 12 records for each database table</li> </ul>	07/10/24	Philani Mkalipi
Password Attribute	<ul style="list-style-type: none"> <li>Add password attribute in Staff entity; include in Create and Update Staff pages.</li> </ul>	07/10/24	Philani Mkalipi
Testing Document	<ul style="list-style-type: none"> <li>Test the current version of the program and document findings.</li> </ul>	07/10/24	Yaaseen Hassim
Minutes	<ul style="list-style-type: none"> <li>Document the meetings.</li> </ul>	07/10/24	Muhammad Bodhania

#### 9 October 2024 Meeting Minutes

Attendees: Yaaseen Hassim, Yu-Hsin Chen, Lebohang Sebiloane, Muhammad Bodhania, Philani Mkalipi, Thihe Phasha

Agenda Item	Action Points	Person Responsible
Presentation Practice	<ul style="list-style-type: none"> <li>The team gathered to practice the presentation.</li> <li>Reviewed and rehearsed the script prepared by Yaaseen.</li> <li>Practiced for the presentation</li> </ul>	All Team Members

	<ul style="list-style-type: none"> <li>Made final adjustments to the presentation.</li> </ul>	
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## Work Breakdown

### Iteration 1

<u>Member</u>	<u>Work Done</u>	<u>Hours</u>
Yaaseen Hassim	Compiled all documentation	2
	Edited presentation video	4
	Drafted and completed vision document	3
	Listed use cases	2
	Created team logo	1
	Part of the glossary	2
	<b>TOTAL</b>	<b>14</b>
Yu-Hsin Chen	Described system boundary	1
	Drafted non-functional requirements of the system	2
	Risk analysis	2
	<b>TOTAL</b>	<b>5</b>
Philani Mkalipi	Drafted reports section of the system.	2
	Drafted team rules and mission statement	2
	<b>TOTAL</b>	<b>4</b>
Lebohang Nkateko Sebiloane	Drafted system feature list	1
	<b>TOTAL</b>	<b>1</b>
Muhammad Bodhania	Edited documents	1
	Created PowerPoint for video	3
	Drafted overview of actors and system goals	2
	Meeting minutes	2
	Drafted the constraints	2
	<b>TOTAL</b>	<b>10</b>
Phasha Thipe	Created use case diagram and narrative	3
	Industry analysis	2
	<b>TOTAL</b>	<b>5</b>

### Iteration 2

<u>Member</u>	<u>Work Done</u>	<u>Hours</u>
Yaaseen Hassim	Recorded video	2
	Compiled all documentation	5
	Create Repair Use Case	1
	Reporting prototypes	4
	Entity Relationship Diagram	3
	Architecture development	2
	Miscellaneous administration work	2
	<b>TOTAL</b>	<b>19</b>
Yu-Hsin Chen	User interface prototype	4
	Activity diagram development	1
	Create Job Use Case	2



	Glossary	2
	<b>TOTAL</b>	<b>9</b>
Philani Mkalipi	User interface prototype – main developer	6
	Class diagram	2
	<b>TOTAL</b>	<b>8</b>
Lebohang Nkateko Sebiloane	Glossary	3
	<b>TOTAL</b>	<b>3</b>
Muhammad Bodhania	Update Repair Use Case	2
	Assisted in compilation of models document (Document 2)	3
	Sequence diagrams for create job and update repair	1
	Business rules	0.5
	Meeting minutes	2
	Plan for next iteration	2
	State machine diagram	1
	<b>TOTAL</b>	<b>11.5</b>
Phasha Thipe	User interface prototype	4
	Use case diagram	3
	State machine diagram	1
	<b>TOTAL</b>	<b>8</b>

### Iteration 3

<u>Member</u>	<u>Work Done</u>	<u>Hours</u>
Yaaseen Hassim	Compiled all documentation	5
	Created the Create RepairPart Use Case description	2
	Reporting prototypes	4
	Created all 6 activity diagrams	3
	Miscellaneous administration work	2
	<b>TOTAL</b>	<b>16</b>
Yu-Hsin Chen	Coded backend of prototype	12
	Worked on frontend visual design of system	3
	<b>TOTAL</b>	<b>15</b>
Philani Mkalipi	Created database for system	8
	Aided in frontend and backend design	1
	<b>TOTAL</b>	<b>9</b>
Lebohang Nkateko Sebiloane	Glossary	2
	<b>TOTAL</b>	<b>2</b>
Muhammad Bodhania	Update Part use case and sequence diagram	1
	Assisted in compilation of models document (Document 2)	2
	Update Job use case and sequence diagram	1
	Update ERD and Class Diagram	0.5
	Meeting minutes	2
	Plan for next iteration	2
	Team file	1.5
	<b>TOTAL</b>	<b>10</b>
Phasha Thipe	Assisted in backend development	4

	Assisted in front end development	3
	<b>TOTAL</b>	<b>7</b>

#### Iteration 4

<b>Member</b>	<b>Work Done</b>	<b>Hours</b>
Yaaseen Hassim	Compiled all documentation	2
	Updated documents from iteration 3	2
	Compiled testing report document	6
	Tested the system and reported on it	4
	Miscellaneous administration work	2
	<b>TOTAL</b>	<b>16</b>
Yu-Hsin Chen	Coded entire backend of the system	12
	Validation for inputs across the system	4
	<b>TOTAL</b>	<b>16</b>
Philani Mkalipi	Updated database for system	3
	Aided in frontend design	3
	Updated UI components as required	1
	<b>TOTAL</b>	<b>7</b>
Lebohang Nkateko Sebiloane	Drafted testing ideas	1
	<b>TOTAL</b>	<b>1</b>
Muhammad Bodhania	Completion of the team file (Document 5)	2
	Assisted in testing document – came up with testing ideas and edited	1
	Update of diagrams based on feedback from iteration 3	2
	Meeting minutes	2
	Plan for next iteration	1
	<b>TOTAL</b>	<b>8</b>
Phasha Thipe	Assisted in frontend development – designed new pages	4
	Updated elements of UI design where required	2
	<b>TOTAL</b>	<b>6</b>

#### Iteration 5

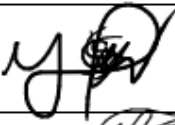



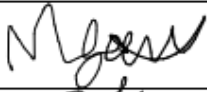

<b>Member</b>	<b>Work Done</b>	<b>Hours</b>
Yaaseen Hassim	Compiled all documentation	2
	Updated documents	2
	Completed new testing phase	2
	Tested the system and reported on it	2
	Miscellaneous administration work	2
	Recorded video of system	1
	<b>TOTAL</b>	<b>11</b>
Yu-Hsin Chen	Updated bugs of system	4
	<b>TOTAL</b>	<b>4</b>

### Team Sign-Off

My opinion of the contribution of the team members is stated below.

Team Number: 1

Iteration no.: 5

Team Member Name	Contribution (as %)	Signed
Yaaseen Hassim	18	
Yu-Hsin Chen	18	
Philani Mkalipi	17	
Lebohang Nkateko Sebiloane	15	
Muhammad Bodhania	16	
Phasha Thipe	16	
<b>TOTAL must add up to</b>	<b>100%</b>	

Submitted by: Yaaseen Hassim

Date: 28/10/2024

## Detailed Work Breakdown – All Iterations

### Iteration 1

#### Yaaseen Hassim

Took on project manager role, compiled documents, edited video, drafted and completed document 1 – vision. Listed use cases, created team logo. Drafted part of the glossary.

#### Muhammad Bodhania

Edited documents, listed use cases, created PowerPoint presentation for video. Drafted early versions of documents. Drafted business rules. Drafted the overview of the actors and system goals. Compiled the Team File document. Drafted the constraints. Took down minutes for meetings.

#### Yu-Hsin Chen

Described the system boundary. Drafted the non-functional requirements of the system. Did a risk analysis of the project. Compiled the glossary document.

#### Philani Mkalipi

Drafted the reports section of the system. Drafted the team rules and mission statement. Played important role in drafting basic understanding of the system.

### Lebohang Nkateko Sebiloane

Drafted the system feature list of the system. Did a risk analysis of the system.

### Phasha Thiye

Created the use case diagram and a narrative therewith. Performed an industry analysis of SolarWay Suppliers.

## Iteration 2

### Yaaseen Hassim

Took on project manager role, compiled final documents, recorded video for prototype demonstration, did the Create Repair use case and sequence diagram, created the report prototypes, motivation and PowerBI file, created the ERD, administered the project.

### Muhammad Bodhanja

Did the Update Repair use case and sequence diagram, modelled the sequence diagram for Create Job, edited the state machine diagram, finalised the business rules, did minutes for all meetings, and drafted the plan for next iteration.

### Yu-Hsin Chen

Worked on a version of the user interface prototype, created the activity diagrams, did the Create Job use, worked on the glossary.

### Philani Mkalipi

Leader of prototype development and created the class diagram.

### Lebohang Nkateko Sebiloane

Worked on the glossary.

### Phasha Thiye

Heavily involved in prototype development, created the use case diagram, and began the work on the state machine diagram.

## Iteration 3

### Yaaseen Hassim

Took on project manager role, compiled final documents, did the Create RepairPart use case and sequence diagram, created the report prototypes, motivation and PowerBI file, administered the project, oversaw editing and updating of all documentation.

### Muhammad Bodhanja

Did the Update Part use case description and sequence diagram, did the Update Job use case description and sequence diagram, did minutes for all meetings, and drafted the team file. Also updated the ERD and Class Diagram.

### Yu-Hsin Chen

The main driver in the development aspect of this submission, worked in both frontend and backend to ensure a working prototype was produced by the end of this iteration.

### Philani Mkalipi

Leader of database design while also assisting in the development aspect with backend and some frontend.

### Lebohang Nkateko Sebiloane

Worked on the glossary.

### Phasha Thiye

Heavily involved in prototype development, assisting in backend design and more so in the front-end design, and largely responsible for the overall design of the web application

## Iteration 4

### Yaaseen Hassim

Took on project manager role, updated documents from iteration 3 with scope change and feedback received, compiled final documents, drafted majority of the testing document, administered the project, oversaw editing and updating of all documentation, tested the system and reported on it.

### Muhammad Bodhanja

Aided in the drafting of testing document with test ideas, did minutes for all meetings, and drafted the team file. Completed the next iteration plan.

### Yu-Hsin Chen

The main driver in the development aspect of this submission, completed all backend work to ensure the system was functional. Added functionality to all new pages added, ensured validation for all respective inputs was completed and functioning. Continuous adjustment and improvement made to the system based on testing results.

### Philani Mkalipi

Leader of database design adding new attributes and recorded as required, heavily involved in frontend design, including correcting any issues discovered in testing and creating new pages.

### Lebohang Nkateko Sebiloane

Drafted 3 ideas for testing to be implemented in the testing report.

### Phasha Thiye

Key to the frontend design of the system, ensuring the system is visually appealing. Created many new pages such as the view pages and made minor updates to the UI as revealed by the testing process.

## Iteration 5

### Yaaseen Hassim

Took on project manager role, updated documents from construction 1, completed new phase of updating testing, did the actual testing and reported on it, recorded video, final administration work.

### Yu-Hsin Chen

Fixed bugs in the system as well as completed system enhancements.

# Appendix

## Client Agreement

### Agreement Between SolarWay Suppliers and Hexatech

This agreement is between Hexatech, a group of six students at the University of the Witwatersrand, and SolarWay Suppliers for the creation of an information system for academic purposes for the fulfilment of the INFO3003A – Informations Systems Development Project module.

This project is part of Hexatech's university assignment and aims to provide practical experience in the development of an information system.

### Purpose

Hexatech will develop a web-based application to fulfil the requirements of SolarWay Suppliers for their repairs department. This development is done for academic purposes.

### Scope of Work

#### 1. Project Description

- Hexatech will develop an information system for SolarWay Suppliers tailored to the needs of the business.
- Hexatech will conduct requirements gathering and analysis processes for the design and development of the system.
- The development will happen in stages according to what is academically required by the project scope.
- The system will include features for tracking repairs done by SolarWay Suppliers – including status reports, technician tracking, and parts usage.
- Hexatech has discretion to design the system based on their observation of the current processes as well as their knowledge in addition to the basic requirements given by SolarWay Suppliers.

#### 2. Timeline

- The project will be completed in milestones with the final academic milestone due on the 28 October 2024.
- Upon completion of the academic process and submissions, SolarWay Suppliers has discretion to use the completed information system pending transfer.

### Academic Purpose:

It is understood that this project is being undertaken for academic purposes, and as such, SolarWay Suppliers acknowledges that Hexatech is comprised of students and a final, working system is not guaranteed.



20 may 2024

Signed by owner of SolarWay Suppliers – Riaz Moosajee

