Chocoholics Anonymous

Caffeinated Coders

Summer 2022 - CIS 572/IMSE 5725
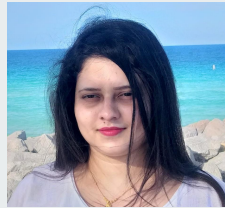
Team Introduction

Connor Przybyla

Fadly Lubis

Britta Chowdhury

Satish Kumar Potru

Sai Prathyusha Haridasu

Team Structure

Connor Przybyla - Team Lead

- Mobile Software Engineer
- B.S. Computer Science - Michigan Technological University
- Current Master's student studying Software Engineering

Sai Prathyusha Haridasu - Project Manager

- Worked as Sr. Software Engineer in IT Company
- Current Master's student in Computer and Information Science
- Experienced in .Net Technology and SQL Management

Team Structure - continued

Fadly Lubis - Project Manager

- Machine Learning Engineer in Data Management Company
- B.S Information System Management - University of Maryland
- M.Sc Candidate in Information System and Technology with Data Analytics concentration
- Experienced in Software Development Consultancy and Programming

Britta Chowdhury - QA Analyst

- Pursuing Master's in Information Systems
- General Bachelor's of Science

Satish Kumar Potru - Solution Analyst

- Worked as software engineer in IT industry
- Current Master's student in Computer and Information Science
- Experienced in Java, Python, automation testing, and manual testing

Communication Strategy

- Primary: Whatsapp for asynchronous communication
- Primary: Google Meet for synchronous communication
- Secondary: Email

Work Strategy

Artifact repository: Google Shared Drive

Software tools used: Lucidchart, Google Docs, Google Sheets, Google Slides, SmartDraw, Visual Paradigm

Meeting schedule: Initial meetings on every Monday at 6 PM EST and Meetings at 6 PM EST to finalize the assignments day before submission
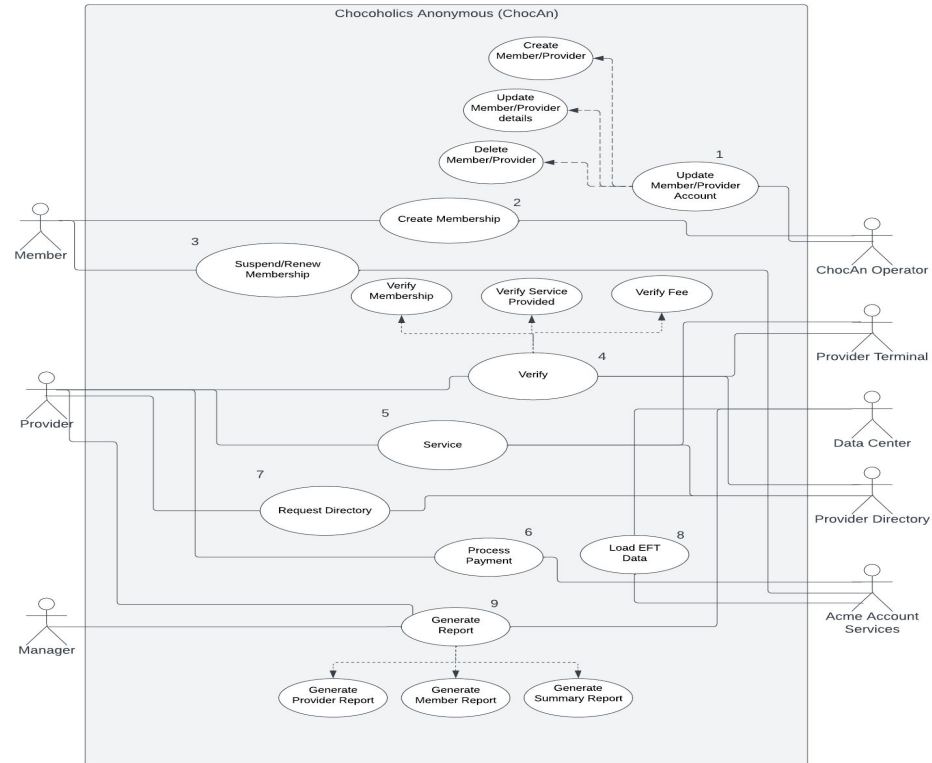
Assignments: Each team member elects a section they would like to complete. Final review with team to address issues and concerns

Complete ERD

- 6 iterations via LucidChart tabs

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Use case summary diagram

Use cases List

1. Update Member/Provide accounts
2. Create Membership
3. Suspend/Renew Membership
4. Verify
5. Service
6. Process Payment
7. Request Directory
8. Load EFT Data
9. Generate Reports

Working on Use cases

- Initially had a team discussion on analysing the initial requirement for identifying the actors and use cases
- Worked on identifying the Actors and Use cases
- Worked on constructing the use case diagram and iterations and then completed Final Use case diagram
- Had team discussion and finalized the Use case diagram and then worked on Use case specification document
- After completion of the specification document we finally completed the use case summary document.

Example artifacts

Robustness/Realization Diagram:
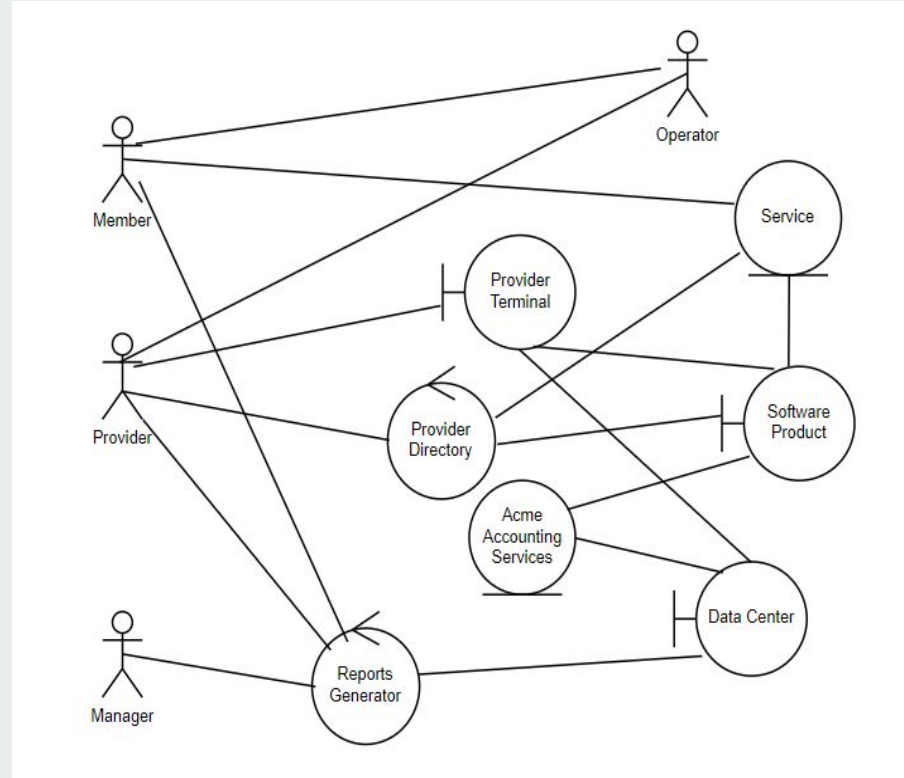
Example artifacts

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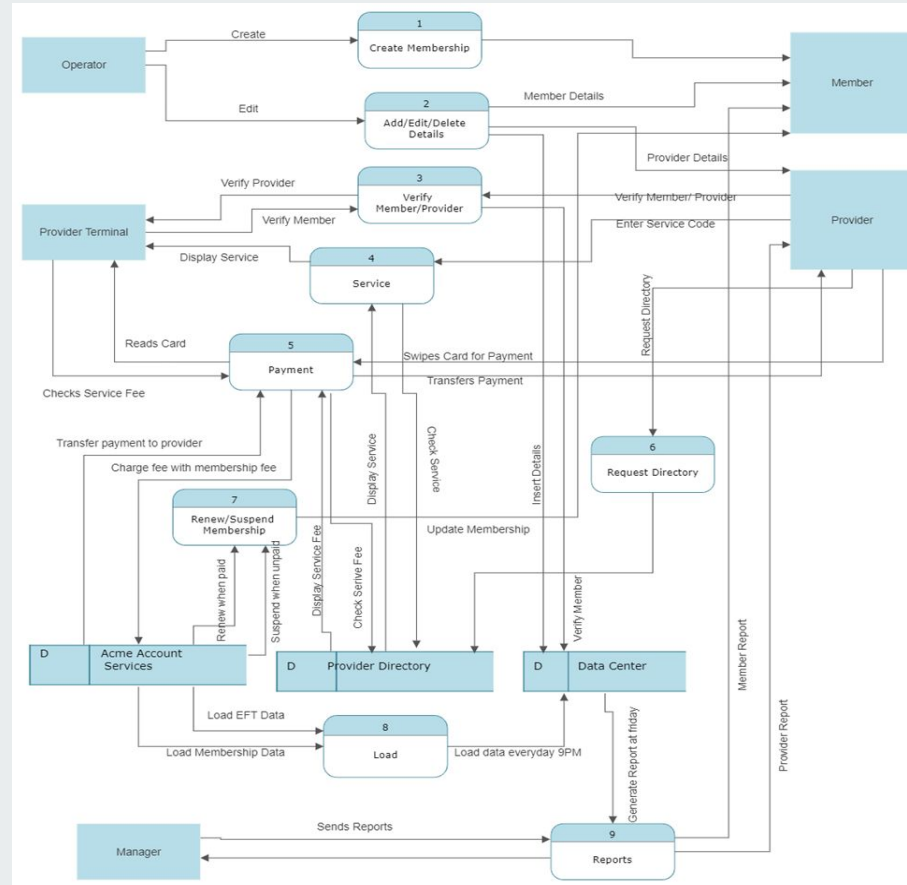
Example artifacts

Build ERD:

Chocoholics Anonymous -
Build ERD
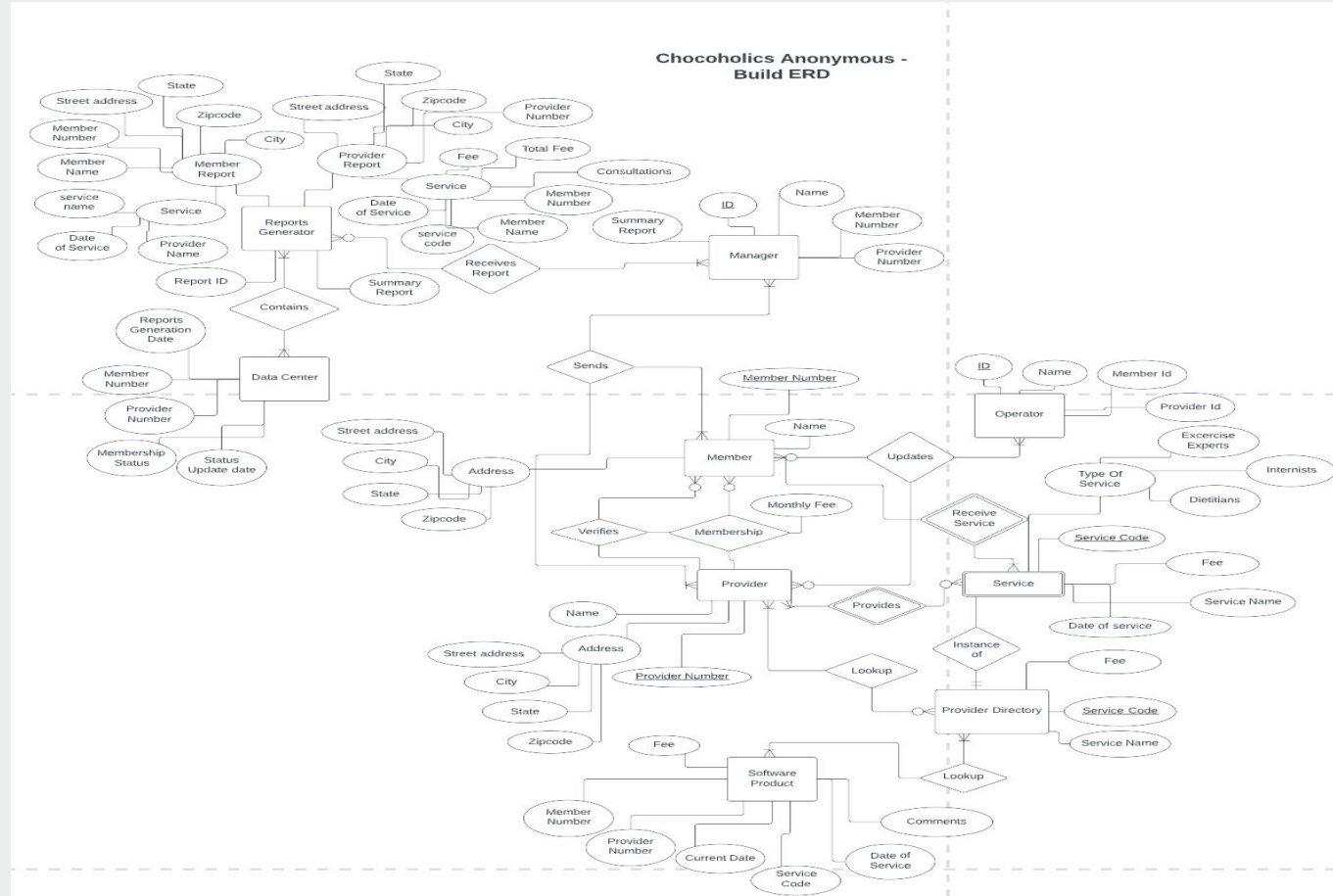
Example artifacts

Analysis Class Diagram:

Example artifacts

Final Class Diagram:

Example artifacts

State Chart Diagram 1 - Member:

Example artifacts

State Chart Diagram 2 - Provider:

Example artifacts

State Chart Diagram 3 -Verification:

Example artifacts

State Chart Diagram 4 - Report Generation:

Traceability Matrix - Version 1.3

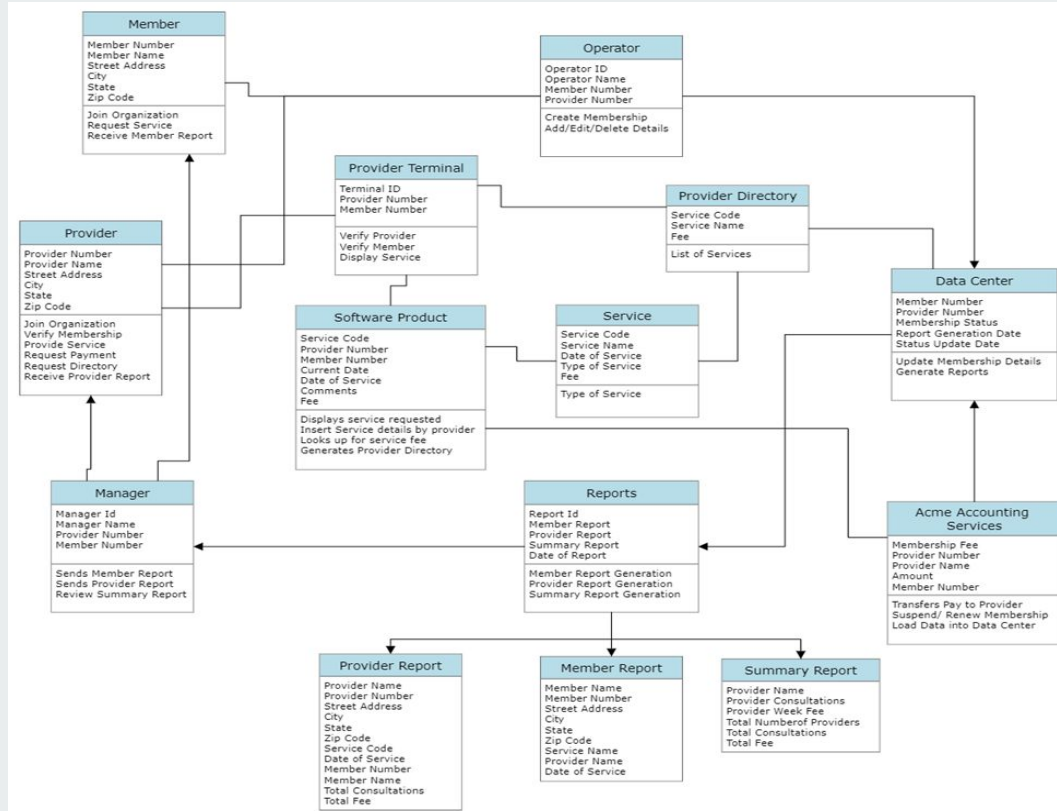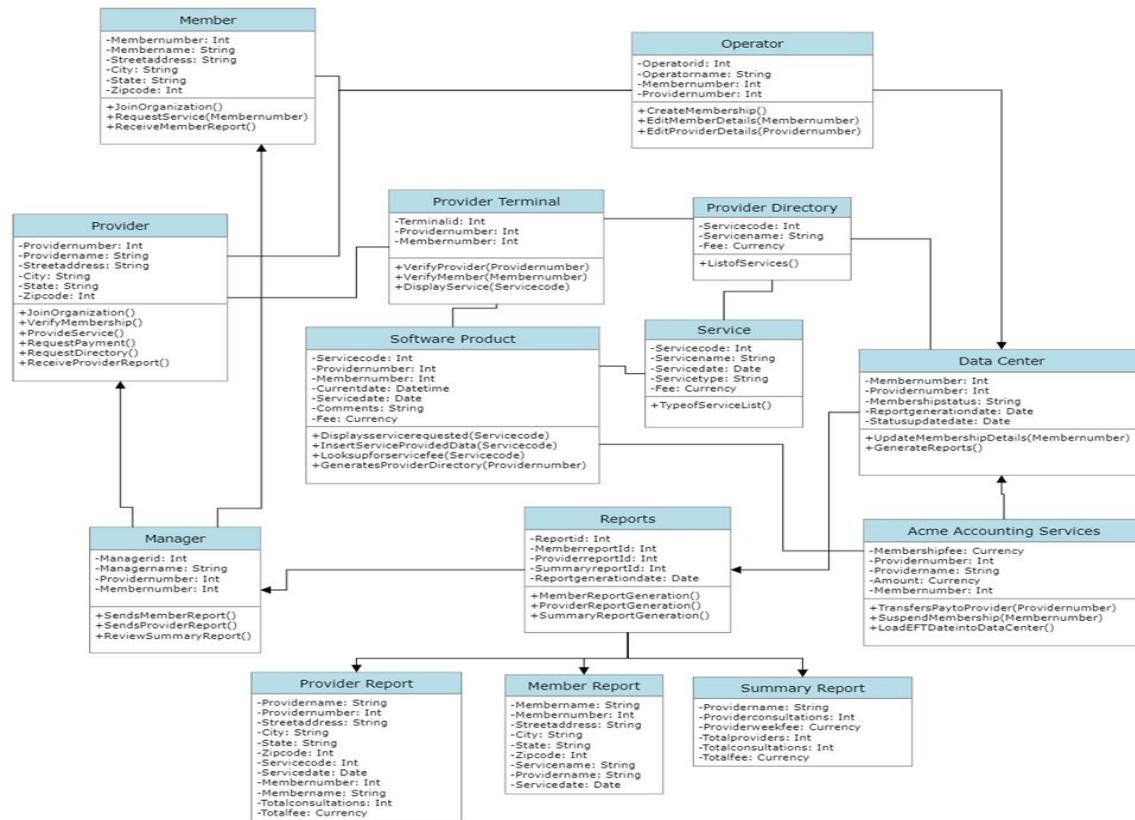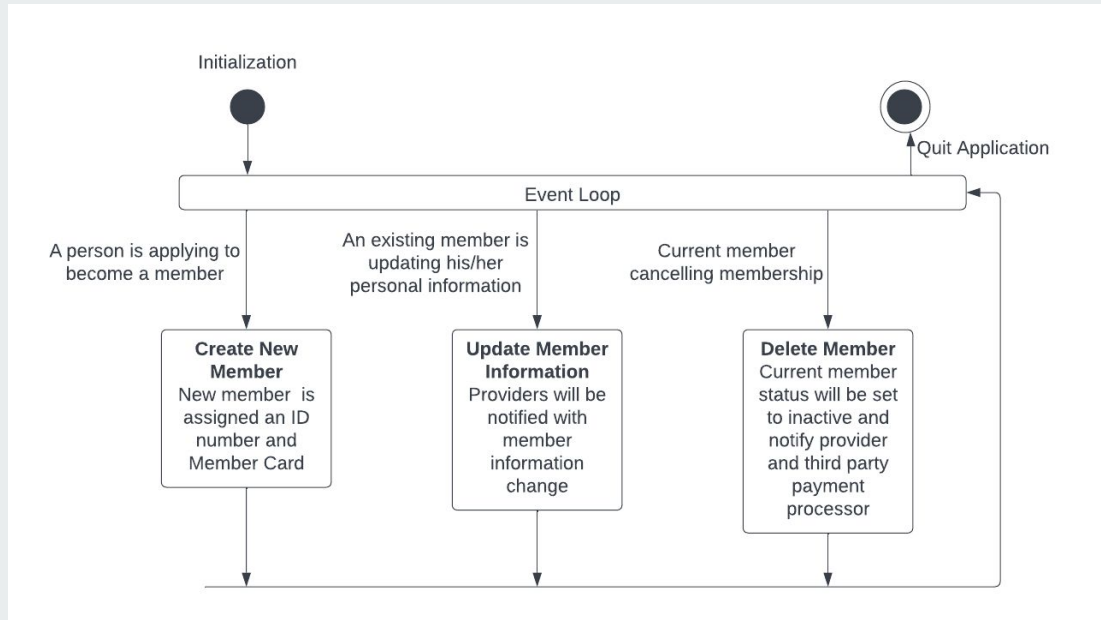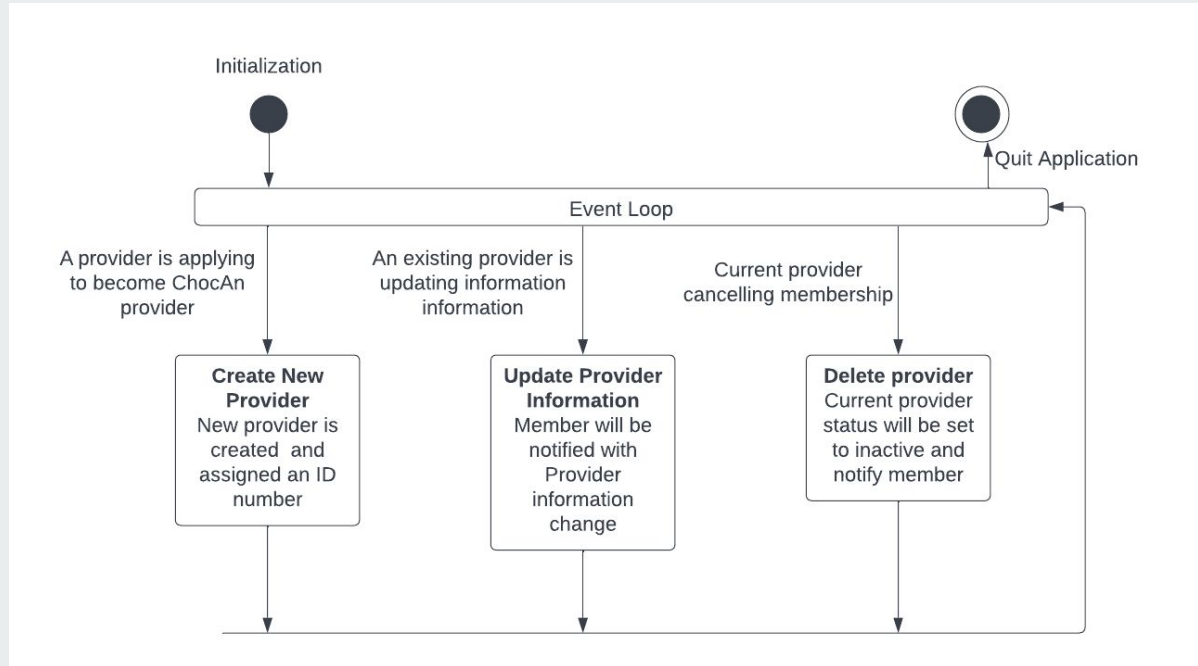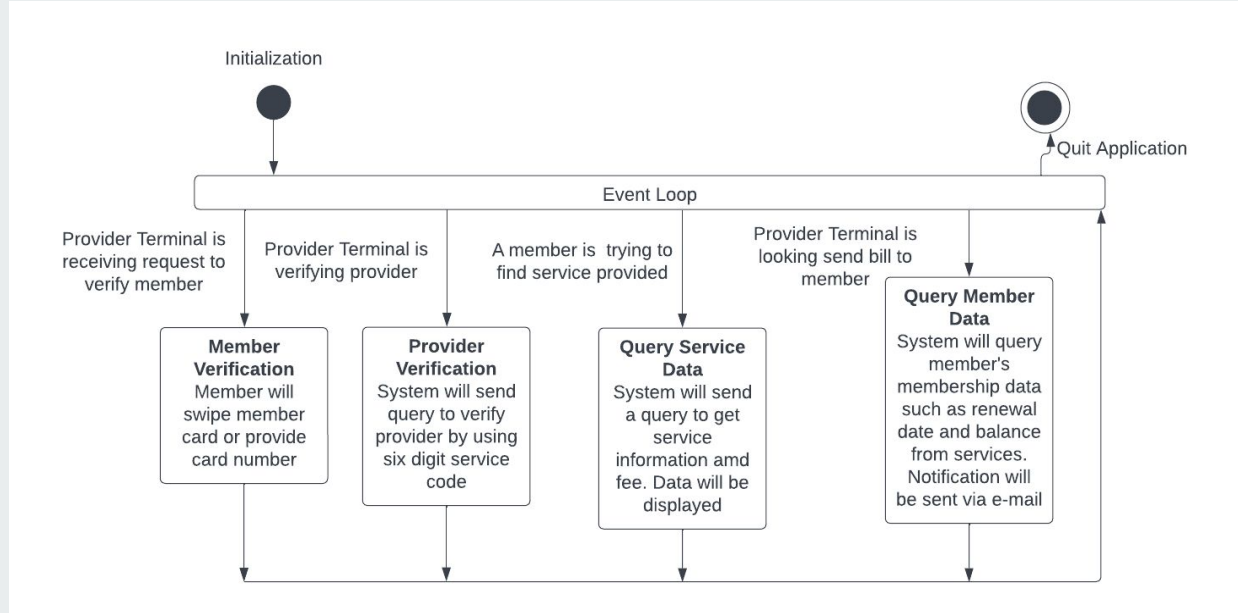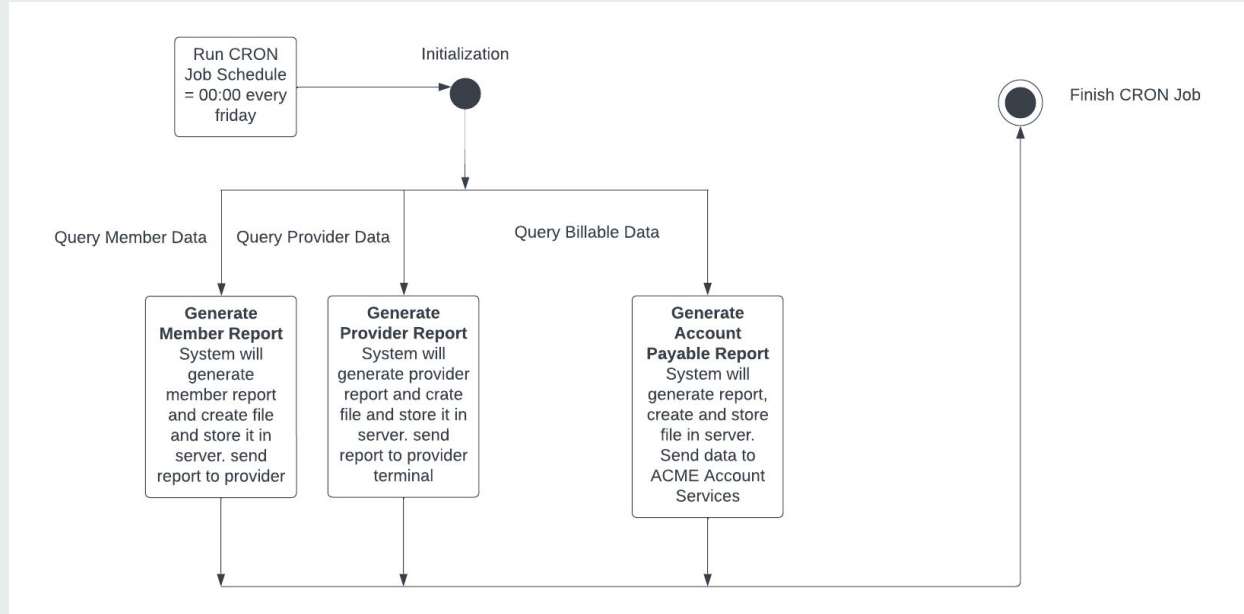| Artifact	Use Case 1 - Update Member/Provider Account	Use Case 2 - Create Membership	Use Case 3 - Suspend/Renew Membership	Use Case 4 - Verify Details	Use Case 5 - Service	Use Case 6 - Process Payment	Use Case 7 - Request Directory	Use Case 8 - Load EFT Data	Use Case 9 - Generate Report	Analysis Class Diagram	Final Class Diagram	Analysis Class Diagram	Build ERD	Complete ERD	Data Dictionary	Data Flow Diagram	Decomposition Diagram	Robustness/Realization Diagram	State Diagram 1 - Membership	State Diagram 2 - Provider	State Diagram 3 - Verification, Fee Lookup, Billing	State Diagram 4 - Reports	Sequence Diagram 1 - Update Member	Sequence Diagram 2 - Update Provider	Sequence Diagram 3 - Create Membership	Sequence Diagram 4 - Verify Membership	Sequence Diagram 5 - Service	Sequence Diagram 6 - Request Directory	Communication Diagram 1 - Suspend/Renew Membership	Comunication Diagram 2 - EFT Data	Communication Diagram 3 - Process Payment	Communication Diagram 4 - Generate Report
Use Case 1 - Update Member/Provider Account	x									x	x	x	x	x	x	x	x		x	x												
Use Case 2 - Create Membership		x								x	x	x	x	x	x	x	x		x				x	x	x							
Use Case 3 - Suspend/Renew Membership			x							x	x	x	x	x	x	x	x				x								x			
Use Case 4 - Verify Details				x						x	x	x	x	x	x	x	x	x								x						
Use Case 5 - Service					x					x	x	x	x	x	x	x					x						x					
Use Case 6 - Process Payment						x				x	x	x	x	x	x	x	x				x										x	
Use Case 7 - Request Directory							x			x	x	x	x	x	x	x	x											x				
Use Case 8 - Load EFT Data								x		x	x	x	x	x	x	x	x													x		
Use Case 9 - Generate Report									x	x	x	x	x	x	x	x	x	x				x										x
Analysis Class Diagram	x	x	x	x	x	x	x	x	x																							
Final Class Diagram	x	x	x	x	x	x	x	x	x																							
Build ERD	x	x	x	x	x	x	x	x	x																							
Complete ERD	x	x	x	x	x	x	x	x	x																							
Data Dictionary	x	x	x	x	x	x	x	x	x																							
Data Flow Diagram	x	x	x	x	x	x	x	x	x																							
Decomposition Diagram	x	x	x	x		x	x	x	x																							
Robustness/Realization Diagram				x					x																							
State Diagram 1 - Membership	x	x																														
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State Diagram 3 - Verification, Fee Lookup, Billing			x		x	x																										
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Communication Diagram 3 - Process Payment						x																										
Communication Diagram 4 - Generate Report									x																							

Hard/Easy Tasks

- Find some difficulty in understanding the Data Dictionary (hard)
- Cost estimations (hard)
- Conflict resolution (medium): Discussed issues in meetings and decided best approach as a group
- Handling tasks (easy): Divided tasks individually and met together to improve them

Do differently

- Work as pairs rather than individually to complete tasks
- Analysing and pre-planning of the upcoming tasks
- Pre-review other team members tasks will save time rather than having last minute works.

Lessons learned

- Estimating is difficult
- Pre-planning can save a lot of time
- Creating artifacts will help to have better understanding on the project requirements.

Questions?