ATOMIC VIDEO

VISION DOCUMENT

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REVISION HISTORY

Row #	DOCUMENT & Version, Release or Build Number	REVISION DATE	REVISION DESCRIPTION	REVISION TRACKING NOTES
1	1.0	01/30/2023	Created the vision document	Outline learned in class
2	2.0	02/13/2023	Edited table of contents, changed date of the front page	RE: Feedback received on 02/13/2023
3	3.0	02/28/2023	Removed duplicates, edited in scope, Updated use case diagram	RE: Feedback received on 02/28/2023
4	4.0	04/09/2023	Revise and corrected document, added ACD, DCD, and Sequence Diagrams	RE: Final submission of the vision document

CONTENTS

VISION DOCUMENT 1

REVISION HISTORY 2

CONTENTS 3

GOALS, PROBLEM STATEMENT & OBJECTIVES 4

STAKEHOLDERS / ACTORS ANALYSIS 4

HIGH-LEVEL REQUIREMENTS 5

PROJECT SCOPE 5

IN SCOPE 5
OUT OF SCOPE 5

USE CASE NAMES (PRIORITIZED) 5

USE CASES 6

USE CASE: CREATE MEMBERSHIP 6
USE CASE: RENT VIDEO 7
USE CASE: PURCHASE ITEM 8
USE CASE: CHECK OVERDUE VIDEOS 12
USE CASE: RETURN VIDEO 13
USE CASE: ADD VIDEO 14

USE CASE DIAGRAM 15

RISK LIST 15

BUSINESS GLOSSARY 16

BUSINESS RULES CATALOG 17

PROJECT PHASE PLAN 20

ITERATION PLAN: E1 21

SEQUENCE DIAGRAMS 22

(SD) CREATE MEMBERSHIP 22
(SD) RENT VIDEO 23
(SD) PURCHASE ITEM 24

ANALYSIS CLASS DIAGRAMS 25

(ACD) CREATE MEMBERSHIP 25
(ACD) RENT VIDEO 26
(ACD) PURCHASE ITEM 27

DESIGN CLASS DIAGRAM (E1) 28

GOALS, PROBLEM STATEMENT & OBJECTIVES

The problem of: Loss of market share and revenue due to outdated technologies and time-consuming paper-based processes.

Affects: Customers, Owners and Staff

The impact of which:

- Slow-moving lines during peak business hours,
- Time-consuming sign-up process for new members,
- Significant loss of income for store owners,
- Difficulty attracting and retaining new customers

A successful solution would:

- Introduce a fast and efficient sign-up process,
- Incorporate an online streaming platform,
- Create a simple and efficient method for electronically contacting customers,
- Accept all major methods of payment (credit, debit, Interac, digital and cash)

STAKEHOLDERS / ACTORS ANALYSIS

TYPE	ROLE	NOMINATIONS	RESPONSIBILITIES
Internal	Owner	John McGarnagle, Arthas Stormrage	• Coordinate with 3rd parties, • Main point of contact, • Determining inventory, • Determining content to list on the streaming service, • Contacting customers
Internal	Clerk	John McGarnagle, Arthas Stormrage	• Operating terminal(s), • Processing applications, • Validating member(s), • Printing membership card(s), • Processing video returns, • Customer service • Point-of-sale transactions, • Verifying customer age
External	Payment Processor		• Processing digital payments for streaming service • Processing digital point-of-sale payments for rentals and merchandise
External	Customer/Member		• Renting/returning movies, • Making purchases, • Providing/updating contact information, • Streaming/watching movies, • Paying account balance
External	Film Distributor		• Providing physical copies of movies for the company to rent
External	Streaming Service Partner		• Providing content for streaming service
External	Accountant		• Bookkeeping and accounting

HIGH-LEVEL REQUIREMENTS

- To Create Membership(s)
- To Rent Video(s)
- To Return Video(s)
- To Verify Member(s) Age
- To Purchase Item(s)
- To Send a Reminder for Return(s)
- To Send Overdue Notice(s)
- To Process Payment(s)
- To Process Refund(s)
- To Track Inventory
- To Search Movie(s)
- To View Movie Details
- To Print Membership Card(s)
- To Update Member(s) Information
- To Search for Member(s) Account(s)

PROJECT SCOPE

IN SCOPE

- Creating/Updating Memberships
- Processing Rentals/Returns
- Purchasing Items
- Printing Membership Cards
- Sending Electronic Communications to Customers
- Online Streaming Platform (Search, View, Sign-In and Stream Movies)
- Digital Payment Processing
- Verifying Age

OUT OF SCOPE

- Physical Movie Distribution
- Providing Movies for Streaming Service
- Generating In-Depth Reports
- Accounting Services

USE CASE NAMES (PRIORITIZED)

- Create Membership (H)
- Rent Video (H)
- Check Overdue Videos (H)
- Return Video (H)
- Add Video (M)
- Update Membership (M)
- Purchase Item (M)
- Update Video (L)
- Archive Membership (L)
- Authenticate Member (L)

USE CASES

USE CASE: **CREATE MEMBERSHIP**
DATE: **02/06/2023**
ITERATION: **E1**
VERSION: **5**
PRIORITY: **HIGH**
DESCRIPTION: A Customer wishes to become a Member. The Customer provides their personal information, which is recorded. The member information is verified. The new member is provided with their unique membership identifier and will then be permitted to Rent videos.
ACTORS: Customer/Member, Clerk

Pre-Conditions: The Clerk must be logged into the system.

Typical Course of Events:
This use case begins when a customer wishes to become a member.

1. The customer is prompted with a request for information required to create a new membership.
2. The customer provides the required personal information, which comprises: First Name, Last Name, Middle Name or Initial (optional), Street Address, City, State/Province, Country, Postal Code, Phone Number, Email Address (optional) and Date of Birth***001 *002** and proof of identity ***003 *014**
3. The information is saved within the system.***004**
    a. **SYSTEM RESPONSE:** Data is validated, and a message displays that the entry is complete.
    B. **SYSTEM RESPONSE:** Data is verified, and a verification email (optional) is sent to the customer/member. ***004**
4. The customer provides Government-issued identification for the verification process.
    a. **SYSTEM RESPONSE:** A Unique membership ID is generated by the System.
5. The unique membership identifier is provided to the new member.
6. The new member may now rent movies.

Alternative Course of Events:
Line 3 – The applying Customer is not of legal age. The use case ends without the customer being able to create a membership.
Line 3 – The customer information cannot be verified. The verification failure is communicated to the customer to allow them an opportunity to rectify it and try again.
Line 4 – The customer does not have the ability to properly provide their required proof of identity. The use case ends without the customer being given a membership.
Line 4 – The customer cannot complete the verification process. Although the customer data has been saved, they may not rent until verification has been fully completed.

Error Conditions:
Line 3 – Invalid or Absent Data. Prompt for re-entry and resubmission.

Business Rule Applications:
001 – Proof of Age Required
002 – Legal Age Legislation
003 – Proof of Identity Required
014 – Membership Information Requirements

USE CASE: **RENT VIDEO**
DATE: **02/17/2023**
ITERATION: **E1**
VERSION: **5**
PRIORITY: **HIGH**
DESCRIPTION: A Member wishes to rent one or more videos. The Clerk verifies the membership details and confirms no outstanding charges or returns exist on the Member's account. The Clerk then records each of the Member's desired rentals. The Member pays for their rentals, receives their rented videos and transaction record, and is informed of their return date.
ACTORS: Member, Clerk, External Bank System

Pre-Conditions: The Clerk must be logged into the system and a valid Membership must exist for the Member.

Typical Course of Events:
This use case begins when a Member wishes to rent one or more videos.

1. The Member indicates which video(s) they wish to rent. ***006*007*009**
2. The Clerk verifies the Member's membership details.
    a. **SYSTEM RESPONSE:** The Member's details are displayed to the clerk, including their Full Name, Membership ID, Rental history and Account Balance. ***005**
3. The Clerk records each video(s) to be rented into the system.
    a. **SYSTEM RESPONSE:** The Video(s) details are displayed on the screen.
    b. **SYSTEM RESPONSE:** The following items are calculated: Subtotal, taxes and fees, video Return date and Total. ***019**
4. The Clerk relays the total price and Return Date for their rental(s) to the Member.
5. The Member provides payment for their rental(s).
    a. **SYSTEM RESPONSE:** A Transaction Record is generated for the rental that includes: Unique transaction identifier, Date of transaction, Return Date, Membership ID, Store/Location details, Cashier/Terminal details, Payment method, item details/quantity and prices, subtotal, taxes and fees, total, as well as method(s) of payment.
    b. **SYSTEM RESPONSE:** Available rental inventory is updated in the system, and the videos are marked as rented. ***008**
6. The Clerk provides the transaction record, the rented video(s) and any change owed to the Member.

Alternative Course of Events:
Line 1 – The Customer requesting to Rent Videos is not a Member. The Clerk directs the Member to complete the Membership Application before processing the Rental.
Line 2 – The Member has an outstanding balance on their account or has Overdue Videos that have not been returned. Videos must be returned, and balance paid before Rental proceeds.

Error Conditions:
Line 2 – Invalid or Absent Data. Prompt for re-entry and resubmission.

Business Rule Applications:

- **005** – Overdue Returns and Fees
- **006** – Customers require membership to rent
- **007** – Rentals Require Clerks
- **008** – Rentals and Returns Update Inventory
- **009** – Maximum Concurrent Rentals
- **019** – Calculated Age Requirements

USE CASE: **PURCHASE ITEM**

DATE: **03/03/2023**
ITERATION: **E1**
VERSION: **5**
PRIORITY: **MEDIUM**
DESCRIPTION: A potential customer wishes to purchase one or more items. The Clerk records each of their items to purchase. The Customer then pays for their purchase, receives their transaction receipt and their purchased item(s).

ACTORS: Customer, Clerk, External Bank System

Pre-Conditions: The Clerk must be logged into the system.

Typical Course of Events:

This use case begins when a potential Customer wishes to purchase one or more items.

1. The Customer indicates which item(s) they wish to purchase.
2. The Clerk records each item(s) to be purchased into the system and any quantities if applicable.
    a. **SYSTEM RESPONSE:** A Default quantity of one is provided for the entered item, which the Clerk may modify.
    b. **SYSTEM RESPONSE:** Item details display on the screen.
    c. **SYSTEM RESPONSE:** The following items are calculated: Subtotal, taxes and additional fees, and Total.
3. The Clerk relays the Purchase Total to the Customer.
4. The Customer provides payment for their purchase(s).
    a. For **Cash Payment**, see section **Pay By Cash**
    b. For **Credit Payment**, see section **Pay by Credit Card**
    c. For **Debit Payment**, see section **Pay by Debit**
    d. **SYSTEM RESPONSE:** A Transaction Record is generated for the purchase that includes: Unique transaction identifier, Date of transaction, Store/Location details, Clerk/Terminal details, Payment method, item details/quantity and prices, subtotal, taxes and fees, total, as well as method(s) of payment.
5. The Clerk provides the transaction record and purchased item(s) to the Customer, as well as any change owed.

Alternative Course of Events:

Line 2 – The selected item cannot be found. The Clerk manually enters the Product Identifier into the system or finds it using the Product Search.

Line 2 – The system was unable to read the Product Identifier successfully. The Clerk manually enters the Product Identifier into the System or finds it using the Product Search.

Line 2 – The Quantity for the item requires modification, which the Clerk adjusts for the specific item.

Line 3 – The Customer identifies that the total appears incorrect due to more items than being purchased. The Clerk finds the issue and corrects the Quantity of items.

Line 3 – The Customer realizes they do not have enough funds to pay for the total assortment of items, and the Clerk removes specific items to lower the Total amount owed for the purchase.

Line 3 – Customer qualifies for a Discount (Retirement, etc.). The Clerk applies the discount to the purchase and indicates what the new Total amount is.

Line 4 – The Transaction Record is flawed in some fashion (Torn/Crumpled/Not correctly generated). The Clerk finds and corrects the issues, then regenerates the Transaction Record for the customer.

Error Conditions:

Line 2 – The incorrect items are in error. The Clerk sees the incorrect information and modifies it.

Line 4 – There was an error generating the Transaction Record. Prompt the user to correct the problem and retry.

SECTION – Pay by Cash

Typical Course of Events

1. The Customer provides a cash payment, which may exceed the Sales total.
2. The Clerk receives the payment, enters it into the system, and places the Cash within the Cash drawer.
    a. **SYSTEM RESPONSE:** Any change owing is calculated and displayed.

Alternative Course of Events

Line 1 – The customer has provided funds other than within a Canadian denomination. If the form is accepted, the clerk calculates the exchange rate and provides the calculated amount as the payment received. If the form is not accepted, the Clerk indicates this and asks for an alternative form of Cash/Payment.

Line 2 – There is insufficient cash within the drawer to provide the change due. The Clerk contacts their supervisor to receive additional funds or requests that the customer pays in smaller denominations.

Line 2 – The Customer has insufficient funds to pay the total. The system displays the remaining balance. The Clerk informs the Customer of the remaining balance, which the Customer can provide through Cash or another form of payment to complete the transaction.

SECTION – Pay by Credit Card

Typical Course of Events

1. The Clerk enters the amount of the transaction into the terminal and selects Credit Card payment before handing it to the Customer.
2. The Customer swipes their Credit Card within the card reader of the terminal.
    a. **SYSTEM RESPONSE:** The external payment provider authorizes the Credit Card for the amount indicated.
    b. **SYSTEM RESPONSE:** The Card Read requests the customer provide their signature.
    c. **SYSTEM RESPONSE:** A Transaction Record is generated for the Credit Card authorization for the Customer.
    d. **SYSTEM RESPONSE:** A separate Transaction Record is generated for the Credit Card authorization for the business.
3. The Clerk places the Business Transaction Record in the Cash Drawer.
4. The Clerk provides the Transaction Record to the Customer.

Alternative Course of Events

Line 2 – The Card could not be verified – indicate the problem. The Clerk informs the customer and asks for an alternative form of payment.

Line 2 – The amount of the transaction is not authorized – indicated the problem. The Clerk informs the customer and asks for an alternative form of payment.

Error Conditions

Line 2 – The Card cannot be read. Indicate the error and prompt for re-try. If the error persists, ask for an alternative method of payment.

SECTION – Pay by Debit Card (via Chip)

Typical Course of Events

1. The Clerk enters the amount of the transaction into the terminal and selects Debit payment before handing it to the Customer.
2. The Customer inserts their card (chip-end first) into the Card Reader.
    a. **SYSTEM RESPONSE:** The Card Reader prompts the Customer for the payment amount confirmation.
    b. **SYSTEM RESPONSE:** The Card Reader prompts the Customer for which account they wish to use for the transaction.
    c. **SYSTEM RESPONSE:** The Card Reader prompts the Customer for their Debit credentials (i.e: PIN)
3. The Customer confirms the amount, selects their desired account and provides their PIN to confirm the transaction to the Card Reader.
    a. **SYSTEM RESPONSE:** The Card Reader confirms that the credentials are correct.
    b. **SYSTEM RESPONSE:** The Card Reader confirms authorization by the Banking System.
    c. **SYSTEM RESPONSE:** The Card Reader Generates the Transaction Record of the Debit Interaction.
4. The Customer removes their card from the Card Reader.

Alternative Course of Events

Line 3 – The Credentials are rejected. The Card Reader asks to retry.

Line 3 – The Banking System does not authorize the Transaction. The customer must provide another form of payment.

Error Conditions

Line 2 – The Card cannot be read. Indicate the error and prompt for re-try. If the error persists, ask for an alternative method of payment.

USE CASE: **CHECK OVERDUE VIDEOS**
DATE: **02/13/2023**
ITERATION: **E2**
VERSION: **5**
PRIORITY: **HIGH**
DESCRIPTION: The clerk wishes to check overdue rental returns associated with a member. The clerk enters the member's information and a history of their rentals and return dates is displayed. Outstanding returns are highlighted, and the total late fee is displayed alongside them, if applicable.
ACTORS: Member, Clerk

Pre-Conditions: The Clerk must be logged into the system and a valid Membership must exist for the Member.

Typical Course of Events:
This use case begins when a clerk wishes to check a member's rental history and outstanding returns.

1. The clerk is prompted to enter the unique identifier of the member whose history they are viewing. *006
2. The clerk enters the information.
    a. **SYSTEM RESPONSE:** The Member ID is validated.
    b. **SYSTEM RESPONSE:** The data associated with that membership is retrieved.
    c. **SYSTEM RESPONSE:** The member's rental history and outstanding returns are displayed on the screen.
3. The clerk can update the status of returns from this screen. *008

Alternative Course of Events:
Line 2 – Member ID does not exist. The clerk must try again in the case of a typo or verify the information with the member.
Line 2 – The member has no rental history to display.

Business Rule Applications:
- **006** – Customers require membership to rent
- **008** – Rentals and Returns Update Inventory

USE CASE: **RETURN VIDEO**
DATE: **02/17/2023**
ITERATION: **E2**
VERSION: **5**
PRIORITY: **HIGH**
DESCRIPTION: A member wants to return a video they rented from Atomic Video. The clerk checks the videos condition and the rental period before accepting the return then updates the stores inventory.
ACTORS: Member, Clerk

Pre-Conditions: The member must have previously rented a video from the store and have a valid membership card.

Typical Course of Events:
This use case begins when a member wishes to return a rented video or videos.

1. The member enters the store with the returned video(s).
2. The member presents the video and membership card to the clerk. ***004**
    a. **SYSTEM RESPONSE:** Membership is verified, and the clerk can proceed with the return.
3. The clerk checks that the video is in good condition and within the rental period.
    a. **SYSTEM RESPONSE:** If the video is outside the rental period, the system informs the clerk that the member has an outstanding balance, and clerk notifies the member.
4. The clerk accepts the returned video and updates the store's inventory to reflect the returned video. ***005*008**
5. The clerk confirms the return with the member.

Alternative Course of Events:
Line 2 – Invalid membership card. The clerk prompts the member to present a valid membership card to verify.
Line 3 – The video is damaged. The clerk informs the member that they cannot accept the returned video and may charge them for the damaged video.

Error Conditions:
Line 4 – System error. Suppose there is a system error, such as the system not updating the inventory correctly or membership verification system not working correctly.

Business Rule Applications:
- **004** – Membership Verification Procedure
- **005** – Overdue Returns and Fees
- **008** – Rentals and Returns Update Inventory

USE CASE: **ADD VIDEO**
DATE: **02/13/2023**
ITERATION: **E2**
VERSION: **5**
PRIORITY: **MEDIUM**
DESCRIPTION: The clerk wishes to add one or more videos to the inventory list. Once Atomic Video receives new videos from their distributor, the clerk records each of their added videos and updates the store's inventory.
ACTORS: Owner, Clerk

Pre-Conditions: The clerk must be logged into the system.

Typical Course of Events:
The use case begins when the clerk wishes to add one or more video(s) to the system.

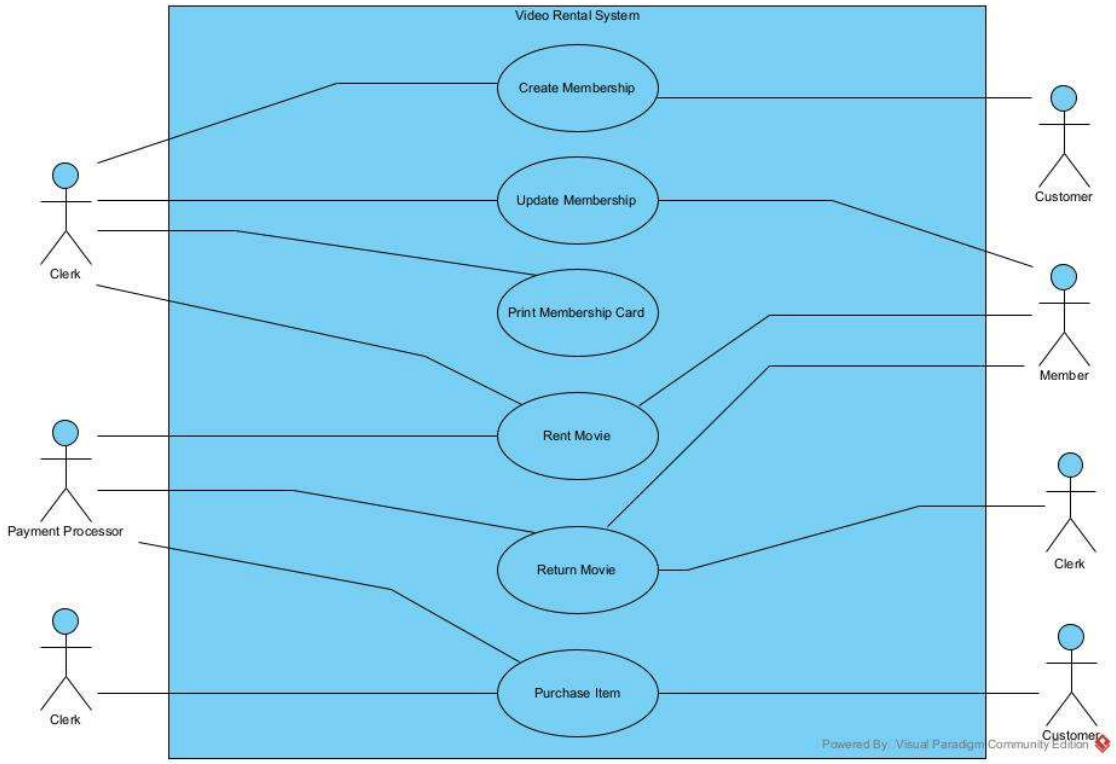
1. The Owner indicates to the Clerk which video(s) they wish to add.
2. The clerk records each video(s) to be added to the system.
    a. **SYSTEM RESPONSE:** The added video(s) details display on the screen.
3. The Clerk verifies the information, and the inventory list is updated with the video(s). ***010**

Alternative Course of Events:
Line 2 – The video already exists in the system. The use case ends here.
Line 2 – The added video(s) information is inaccurate and must be overwritten. Once the video details are corrected, the video is added to inventory.

Error Conditions:
Line 2 – Invalid entry. Item already exists in the system.

Business Rule Applications:
- **010 –** Update Video(s) Inventory

USE CASE DIAGRAM



RISK LIST

RISK RANKING	RISK DESCRIPTION	RISK IMPACT	MITIGATION STRATEGY
5	Customers unable or unwilling to use the new self-serve system	Customers may choose not to create a membership	Clerks can still process applications and assist customers if an issue arises with the self-serve system.
5	The customer provides invalid data during the membership application.	Inaccurate records; inability to contact members about overdue fees.	Ensure that the data entered is in a valid format and verify the information with the member.
4	Clerks/staff not tech-savvy or are apprehensive about new technologies	Inefficiencies in the new workflow; inability to assist customers with self-serve	Schedule training sessions and provide documentation on operating/troubleshooting the new system
3	Changes to legislation for the age of majority	Loss or increase of potential customers	Stay up to date with legislation regarding the age of majority and rentals.
2	Customers create duplicate memberships to avoid late fees	Loss in revenue, inaccurate reporting, and projections	Add features to the system to aid in avoiding duplicate membership profiles. Clerks may also recognize customers, as the business operates in a small town.

BUSINESS GLOSSARY

CLERK – The person handling in-store services and transactions. Clerks will take care of day-to-day business within the store and handle customer payments. Either an employee or the store owners may act as a clerk.

CUSTOMER – Anyone who makes a purchase or rental with Atomic Video

SELF-SERVE KIOSK – A self-serve terminal adjacent to the front counter that allows customers to register for an Atomic Video membership without the aid of a clerk. New memberships must still be validated at checkout.

MEMBER – A customer who has a membership with Atomic Video for movie rentals. The clerk must validate memberships.

DISTRIBUTOR – A 3rd party providing Atomic Video with their physical movies.

RENTAL – A movie being rented to a customer for a fixed period.

RETURN – The act of bringing back a movie that has been rented.

LATE FEE – A fee incurred at a set rate after the rental period for a customer's movie has expired without being returned.

BUSINESS RULES CATALOG

001 – Proof of Age Required **Date:** 02/10/2023

Category: Structural Fact **Type:** Static

Description: A potential member must provide a valid government-issued, photo-identification (such as provincial driver's license and/or passport) to demonstrate their Date of Birth.

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

002 – Legal Age Legislation **Date:** 02/10/2023

Category: Action Restricting **Type:** Dynamic

Description: All potential members must be of the age of majority for the jurisdiction of operation for Atomic Video (NB), which is 19 years of age.

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

003 – Proof of Identity is Required **Date:** 02/10/2023

Category: Structural Fact **Type:** Static

Description: A potential member must provide the details of their home address, in the form of a valid government-issued photo identification (such as provincial driver's license and/or passport) to confirm their personal details

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

004 – Membership Verification Procedure **Date:** 02/10/2023

Category: Structural Fact **Type:** Static

Description: The potential member must provide their valid, approved identification so that an employee of Atomic Video can confirm the details of their Full name, Date of Birth, Address information, as well as confirm their identity visually (per the photo identification).

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

005 – Overdue Returns and Fees **Date:** 02/10/2023

Category: Action Restricting **Type:** Static

Description: A member who has an overdue movie is not eligible to rent another movie until the overdue movie is returned or the member has paid the charges for the lost item.

Discovery Details: Interview with project sponsors (**01/16/2023**)

006 – Customers require a membership to rent **Date:** 02/10/2023

Category: Action Restricting **Type:** Static

Description: To rent movies, the customer must complete a membership application and become a registered member of the store.

Discovery Details: Interview with project sponsors (**01/16/2023**)

007 – Rentals Require Clerks **Date:** 02/10/2023

Category: Structural Fact **Type:** Static

Description: Once customers have selected the movie(s) they want to rent, they must bring them to the clerk, who will process the rental according to the customer's membership details.

Discovery Details: Interview with project sponsors (**01/16/2023**)

008– Rentals and Returns Update Inventory **Date:** 02/10/2023

Category: Action Triggering **Type:** Static

Description: Once a movie has been rented or returned, the system must update the available inventory to track what is currently available to rent from the store.

Discovery Details: Interview with project sponsors (**01/16/2023**)

009 – Maximum Concurrent Rentals **Date:** 02/10/2023

Category: Structural Fact **Type:** Static

Description: Members can rent up to a maximum of 5 videos at one time if they are currently in good standing (no overdue fees).

Discovery Details: Interview with project sponsors (**01/16/2023**)

010 – Update Video(s) Inventory **Date:** 02/18/2023

Category: Structural Fact **Type:** Static

Description: When a Clerk or the Owner adds new Videos to the system, the inventory must be updated in the system to reflect the changes

Discovery Details: Interview with project sponsors (**01/16/2023**)

014 – Membership Information Requirements **Date:** 02/10/2023

Category: Structural **Type:** Static

Description: A potential member must provide the following information to obtain/maintain their membership with Atomic Video: First name, Last name, Street Address, City, State/Province, Country or origin, Postal Code, Phone Number, an Date of Birth. Optionally, they may also provide their Middle name or Initial and Email address.

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

019 – Calculated Age Requirements **Date:** 02/10/2023

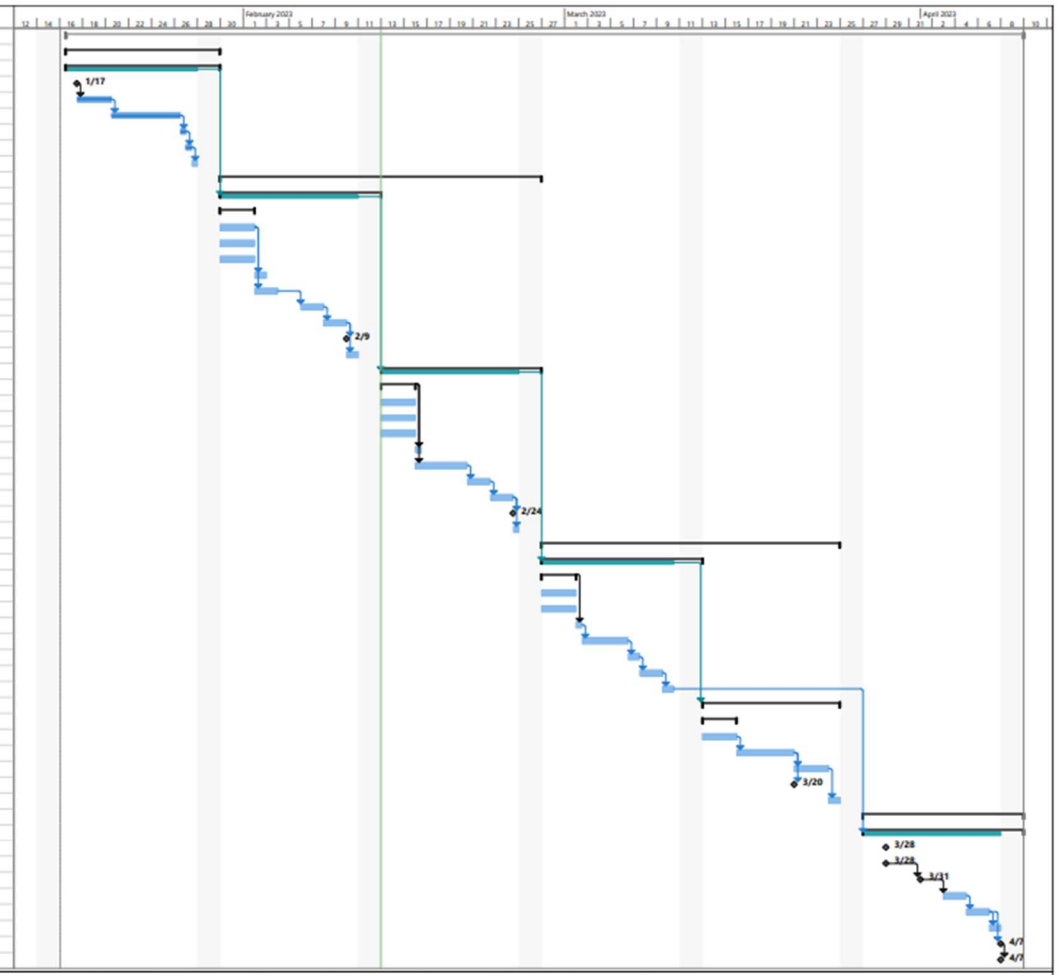
Category: Structural **Type:** Static

Description: Based upon the member's age, they can qualify for discounts of 10% when they have achieved the age of seniority (65) for the jurisdiction of New Brunswick.

Discovery Details: Initial interview with John McGarnagle / Arthas Stormrage (**01/16/2023**)

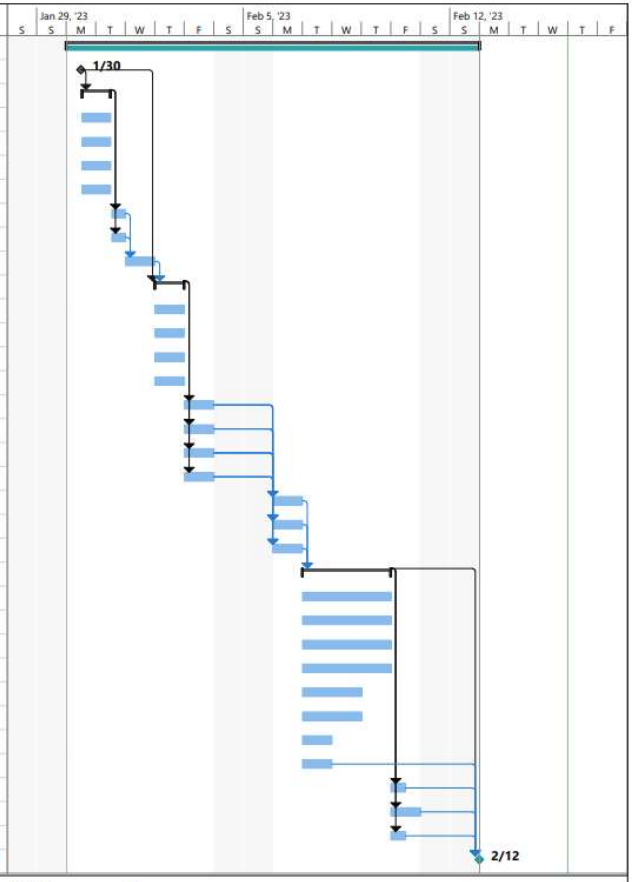
PROJECT PHASE PLAN

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
0		**Atomic Video Project Phase Plan**	**59.5 days?**	**Mon 1/16/23**	**Sun 4/9/23**	
1		**Inception**	**9.5 days**	**Mon 1/16/23**	**Sun 1/29/23**	
2		**Iteration I1**	**10.5 days**	**Mon 1/16/23**	**Sun 1/29/23**	
3		Initial Stakeholders Interview	1 day	Mon 1/16/23	Tue 1/17/23	
4		Report on Stakeholders Interview	3 days	Tue 1/17/23	Fri 1/20/23	3
5		Create Initial Vision Document	4 days	Fri 1/20/23	Thu 1/26/23	4
6		Use Case: CREATE MEMBERSHIP(H)	0.5 days	Thu 1/26/23	Thu 1/26/23	5
7		Deliver Vision Document	0.5 days	Fri 1/27/23	Fri 1/27/23	6
8		Create Iteration Plan for Elaboration 1	0.5 days	Fri 1/27/23	Fri 1/27/23	7
9		**Elaboration**	**20 days**	**Mon 1/30/23**	**Sun 2/26/23**	
10		**Iteration E1**	**11 days**	**Mon 1/30/23**	**Sun 2/12/23**	**2**
11		**Detail high priority use cases**	**3 days**	**Mon 1/30/23**	**Wed 2/1/23**	
12		Use Case: RENT VIDEO (H)	3 days	Mon 1/30/23	Wed 2/1/23	
13		Use Case: CHECK OVERDUE VIDEOS (H)	3 days	Mon 1/30/23	Wed 2/1/23	
14		Use Case: RETURN VIDEO (H)	3 days	Mon 1/30/23	Wed 2/1/23	
15		Create UML Diagrams	1 day	Thu 2/2/23	Thu 2/2/23	12
16		Develop Baseline Architecture for high priority items	2 days	Thu 2/2/23	Fri 2/3/23	12
17		System Integration and Testing	2 days	Mon 2/6/23	Tue 2/7/23	16
18		Complete required additions/revisions	2 days	Wed 2/8/23	Thu 2/9/23	17
19		Baseline Architecture created for most critical items	0 days	Thu 2/9/23	Thu 2/9/23	18
20		Create Iteration Plan for Elaboration 2	1 day	Fri 2/10/23	Fri 2/10/23	18
21		**Iteration E2**	**11 days**	**Mon 2/13/23**	**Sun 2/26/23**	**10**
22		**Detail next highest priority use cases**	**3 days**	**Mon 2/13/23**	**Wed 2/15/23**	
23		Use Case: ADD VIDEO (M)	3 days	Mon 2/13/23	Wed 2/15/23	
24		Use Case: UPDATE MEMBERSHIP (M)	3 days	Mon 2/13/23	Wed 2/15/23	
25		Use Case: BUY ITEMS (M)	3 days	Mon 2/13/23	Wed 2/15/23	
26		Create UML Diagrams	0.5 days	Thu 2/16/23	Thu 2/16/23	22
27		Code/implement use cases	2.5 days	Thu 2/16/23	Mon 2/20/23	22
28		System Integration and Testing	2 days	Mon 2/20/23	Wed 2/22/23	27
29		Complete required additions/revisions	2 days	Wed 2/22/23	Fri 2/24/23	28
30		Lifecycle Architecture	0 days	Fri 2/24/23	Fri 2/24/23	29
31		Create Iteration Plan for Construction 1	0.5 days	Fri 2/24/23	Fri 2/24/23	29
32		**Construction**	**20 days?**	**Mon 2/27/23**	**Fri 3/24/23**	
33		**Iteration C1**	**11 days?**	**Mon 2/27/23**	**Sun 3/12/23**	**21**
34		**Detail next highest priority use cases**	**3 days**	**Mon 2/27/23**	**Wed 3/1/23**	
35		Use Case: UPDATE VIDEO (L)	3 days	Mon 2/27/23	Wed 3/1/23	
36		Use Case: ARCHIVE MEMBERSHIP (L)	3 days	Mon 2/27/23	Wed 3/1/23	
37		Create UML Diagrams	0.5 days	Thu 3/2/23	Thu 3/2/23	34
38		Develop/implement required items	2 days	Thu 3/2/23	Mon 3/6/23	37
39		Receive and Review User Feedback	1 day	Mon 3/6/23	Tue 3/7/23	38
40		System Integration and Testing	2 days	Tue 3/7/23	Thu 3/9/23	39
41		Create Iteration Plan for Construction 2	1 day	Thu 3/9/23	Fri 3/10/23	40
42		**Iteration C2**	**10 days**	**Mon 3/13/23**	**Fri 3/24/23**	**33**
43		**Detail remaining use cases**	**3 days**	**Mon 3/13/23**	**Wed 3/15/23**	
44		Use Case: AUTHENTICATE MEMBER (L)	3 days	Mon 3/13/23	Wed 3/15/23	
45		Develop/implement required items	3 days	Thu 3/16/23	Mon 3/20/23	44
46		System Integration and Testing	3 days	Tue 3/21/23	Thu 3/23/23	45
47		Initial Operational Capability	0 days	Mon 3/20/23	Mon 3/20/23	45
48		Create Iteration Plan for Construction 2	1 day	Fri 3/24/23	Fri 3/24/23	46
49		**Transition**	**10 days?**	**Mon 3/27/23**	**Sun 4/9/23**	
50		**Iteration T1**	**11 days?**	**Mon 3/27/23**	**Sun 4/9/23**	**41**
51		Unit Testing	2 days	Mon 3/27/23	Tue 3/28/23	
52		System Testing	2 days	Mon 3/27/23	Tue 3/28/23	
53		Beta Testing	3 days	Wed 3/29/23	Fri 3/31/23	52
54		User Compliance Testing	2 days	Mon 4/3/23	Tue 4/4/23	53
55		Fix known issues/bugs	2 days	Wed 4/5/23	Thu 4/6/23	54
56		Train Users	1 day	Fri 4/7/23	Fri 4/7/23	55
57		System installed and tested on-site	1 day	Fri 4/7/23	Fri 4/7/23	55
58		Product Release Milestone	0 days	Fri 4/7/23	Fri 4/7/23	57



ITERATION PLAN: E1

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Elaboration - E1**	**11 days?**	**Mon 1/30/23**	**Sun 2/12/23**	
2		Modify Vision Document based on stakeholder feedback	0.5 days	Mon 1/30/23	Mon 1/30/23	
3		**Document any newly discovered use cases and prioritize them**	**1 day**	**Mon 1/30/23**	**Tue 1/31/23**	**2**
4		Use Case: RENT VIDEO (H) - Sacha Davison	1 day	Mon 1/30/23	Tue 1/31/23	
5		Use Case: CHECK OVERDUE VIDEOS (H) - James Hare	1 day	Mon 1/30/23	Tue 1/31/23	
6		Use Case: Return Video (H) - Chad Fancy	1 day	Mon 1/30/23	Tue 1/31/23	
7		Use Case: Add Video (M) - Vladimir Banaag	1 day	Mon 1/30/23	Tue 1/31/23	
8		Document any discovered business rules	0.5 days	Tue 1/31/23	Tue 1/31/23	3
9		Update the glossary as needed	0.5 days	Tue 1/31/23	Tue 1/31/23	3
10		Get feedback from users on business rules and glossary	1 day	Wed 2/1/23	Wed 2/1/23	8,9
11		**Complete detailed version use cases, business rules and glossary based on stakeholder feedback**	**1 day**	**Thu 2/2/23**	**Thu 2/2/23**	**10,2**
12		Use Case: RENT VIDEO (H) - Sacha Davison	1 day	Thu 2/2/23	Thu 2/2/23	
13		Use Case: CHECK OVERDUE VIDEOS (H) - James Hare	1 day	Thu 2/2/23	Thu 2/2/23	
14		Use Case: Return Video (H) - Chad Fancy	1 day	Thu 2/2/23	Thu 2/2/23	
15		Use Case: Add Video (M) - Vladimir Banaag	1 day	Thu 2/2/23	Thu 2/2/23	
16		Create iteration object model	1 day	Fri 2/3/23	Fri 2/3/23	11
17		Create iteration analysis class diagram	1 day	Fri 2/3/23	Fri 2/3/23	11
18		Create iteration design class diagram	1 day	Fri 2/3/23	Fri 2/3/23	11
19		Decide on the application architecture	1 day	Fri 2/3/23	Fri 2/3/23	11
20		Create Ntier Diagram	1 day	Mon 2/6/23	Mon 2/6/23	16,17,18,19
21		Create Componant Diagram	1 day	Mon 2/6/23	Mon 2/6/23	16,17,18,19
22		Create Deployment Diagram	1 day	Mon 2/6/23	Mon 2/6/23	16,17,18,19
23		**Develop Baseline Architecture for high priority items**	**3 days**	**Tue 2/7/23**	**Thu 2/9/23**	20,21,22
24		Code the functionality for typical course of events of CREATE MEMBERSHIP (H)	3 days	Tue 2/7/23	Thu 2/9/23	
25		Code the functionality for typical course of events of RENT VIDEO (H)	3 days	Tue 2/7/23	Thu 2/9/23	
26		Code the functionality for typical course of events of CHECK OVERDUE VIDEOS (H)	3 days	Tue 2/7/23	Thu 2/9/23	
27		Code the functionality for typical course of events of RETURN VIDEO (H)	3 days	Tue 2/7/23	Thu 2/9/23	
28		Create the database objects required for the current iteration	2 days	Tue 2/7/23	Wed 2/8/23	
29		Test the iteration code	2 days	Tue 2/7/23	Wed 2/8/23	
30		Get Feedback from users/stakeholders	1 day	Tue 2/7/23	Tue 2/7/23	
31		Make required additions/changes based on feedback	1 day	Tue 2/7/23	Tue 2/7/23	
32		Develop Supplementary Specification Document if needed	0.5 days	Fri 2/10/23	Fri 2/10/23	23
33		Get feedback on detailed use cases	1 day	Fri 2/10/23	Fri 2/10/23	23
34		Revise Risk List as needed	0.5 days	Fri 2/10/23	Fri 2/10/23	23
35		Create iteration plan for Elaboration 2 (E2)	1 day	Sun 2/12/23	Sun 2/12/23	23,31,32,33,34



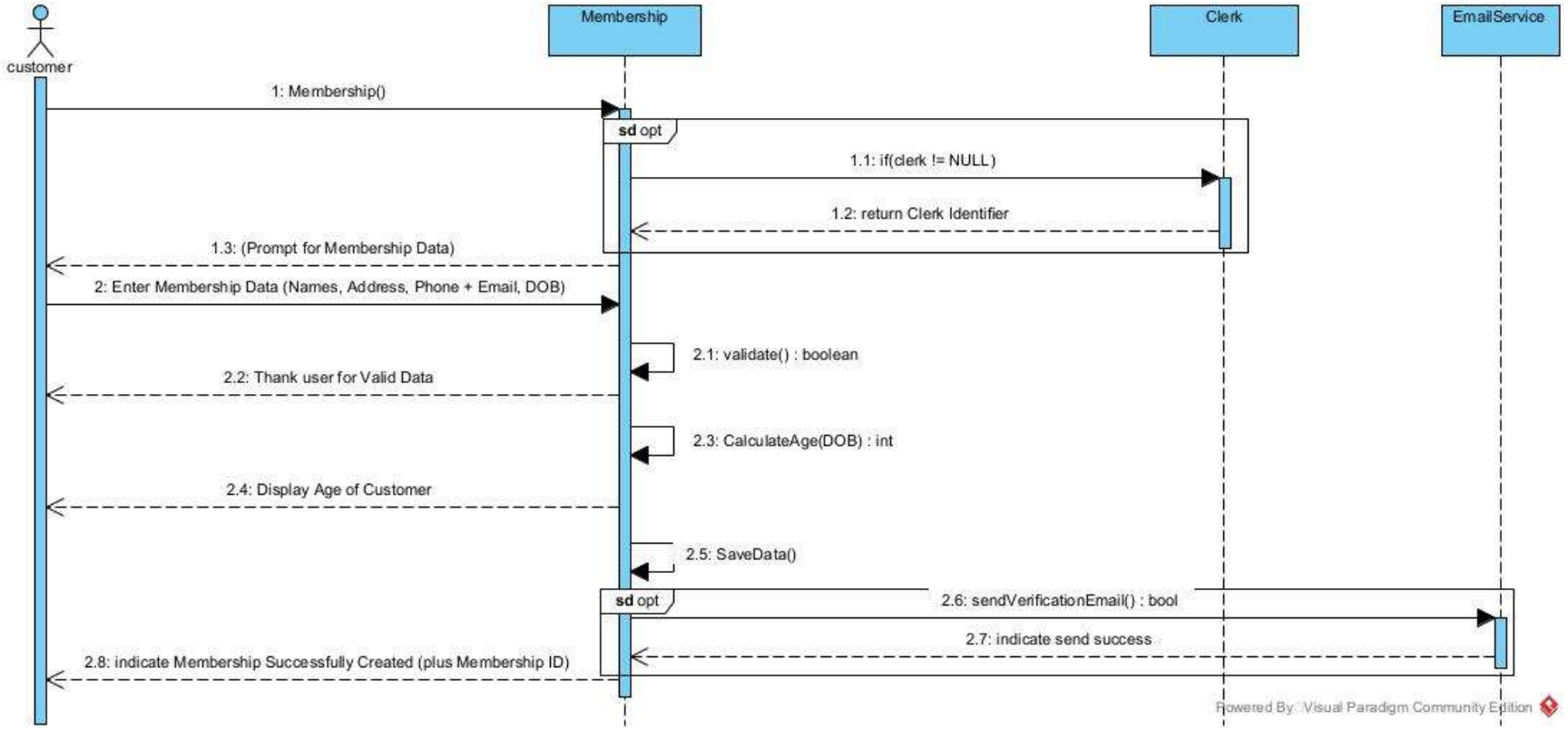
Project: AtomicVideo-IterationP
Date: Thu 2/16/23

Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Progress, Manual Progress

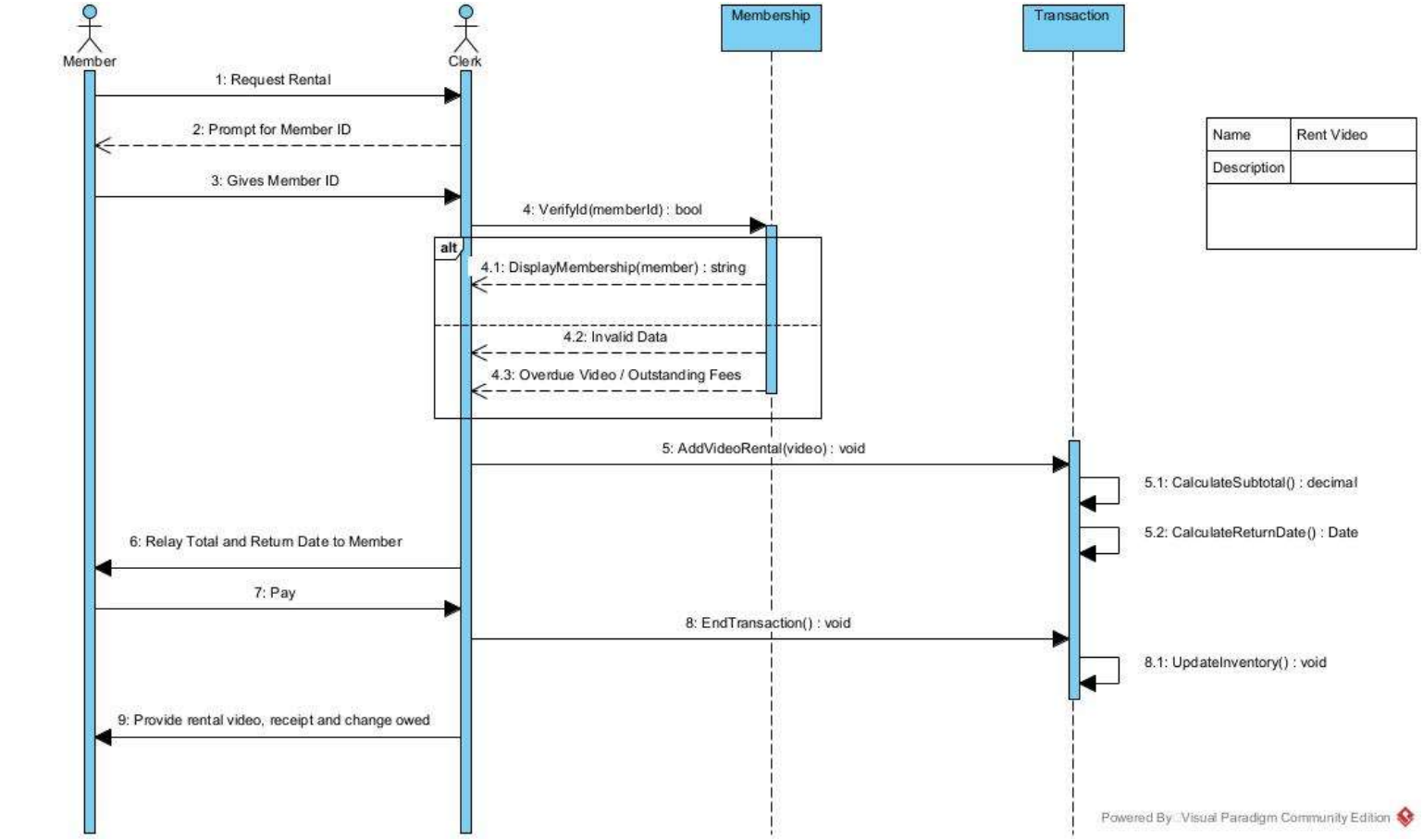
Page 1

SEQUENCE DIAGRAMS

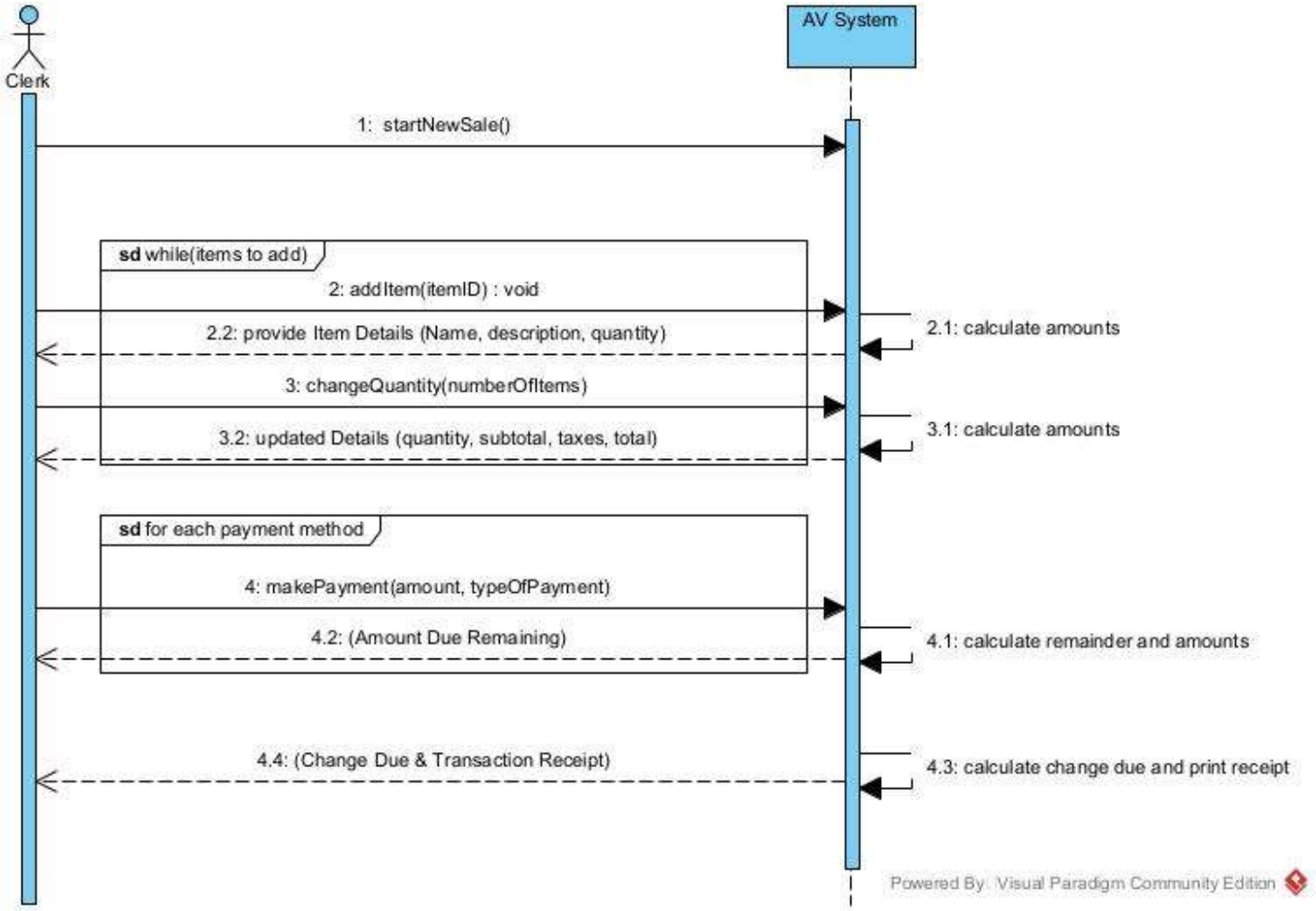
(SD) CREATE MEMBERSHIP



(SD) RENT VIDEO

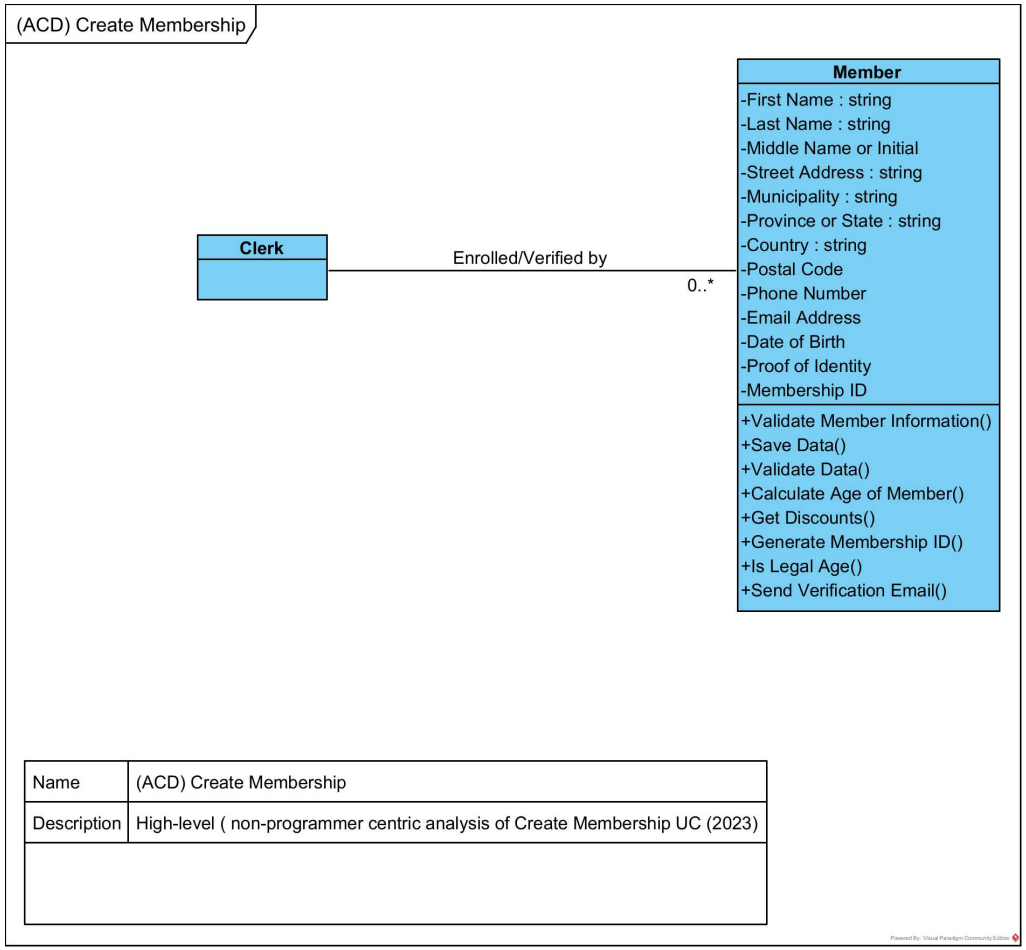


(SD) PURCHASE ITEM

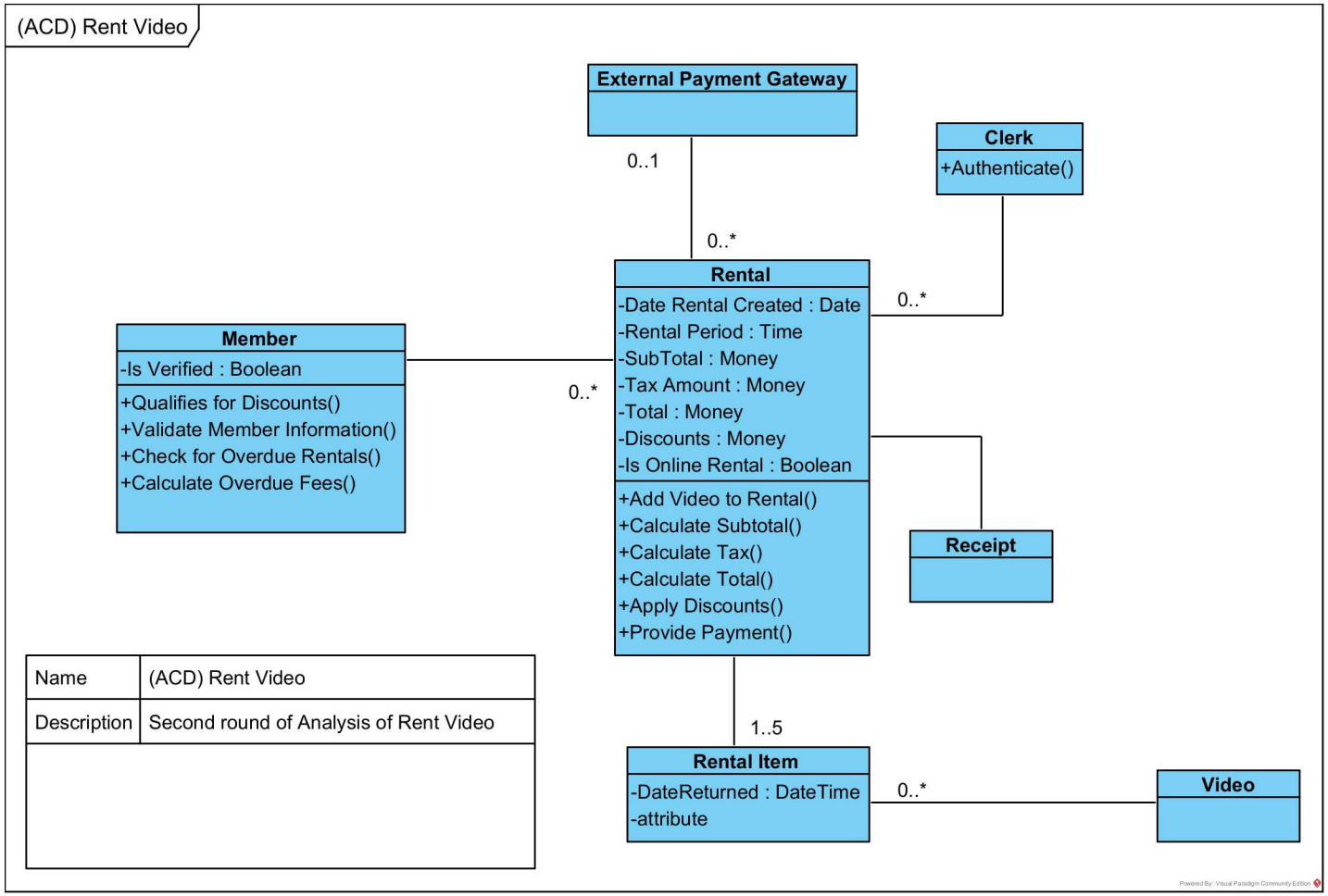


ANALYSIS CLASS DIAGRAMS

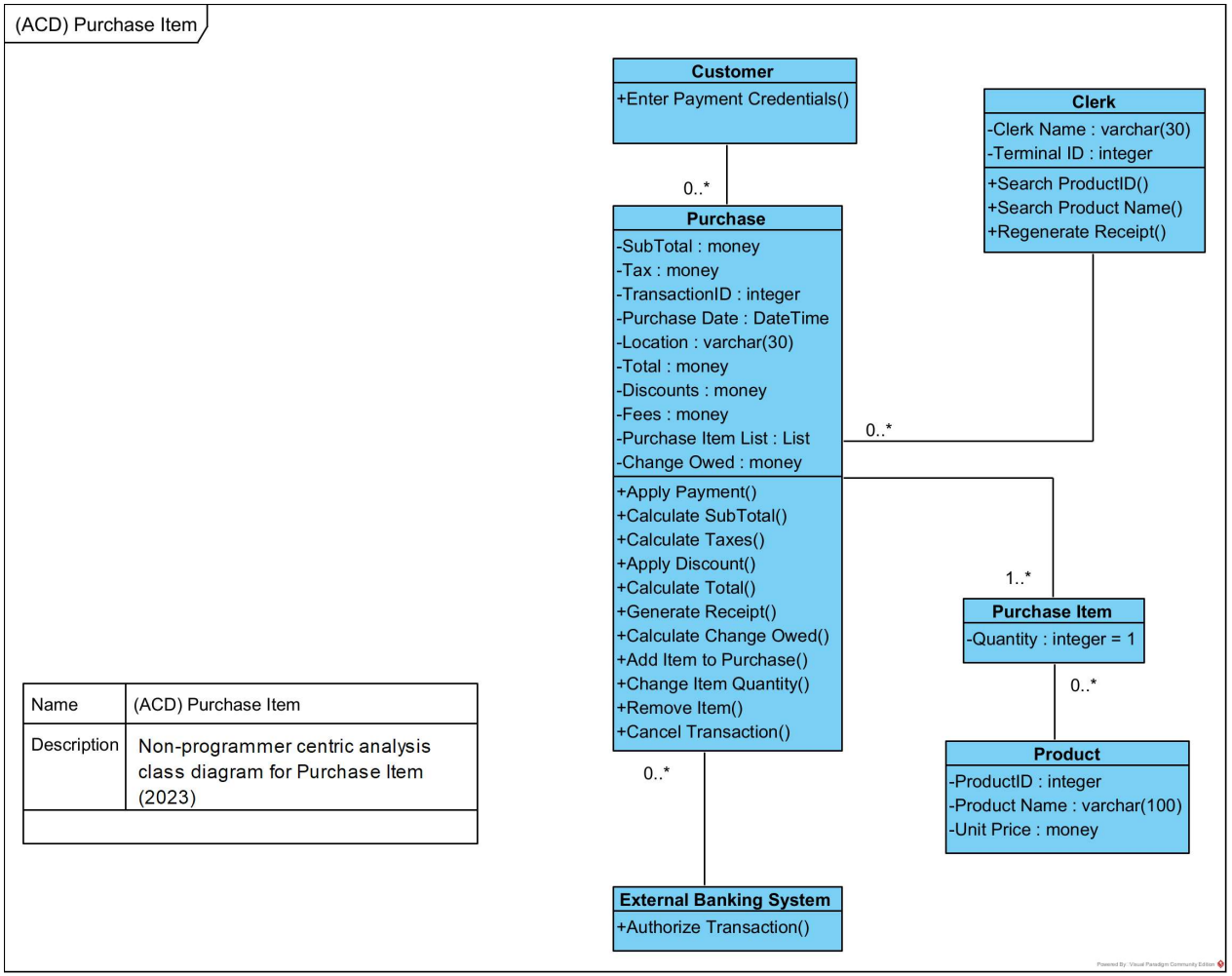
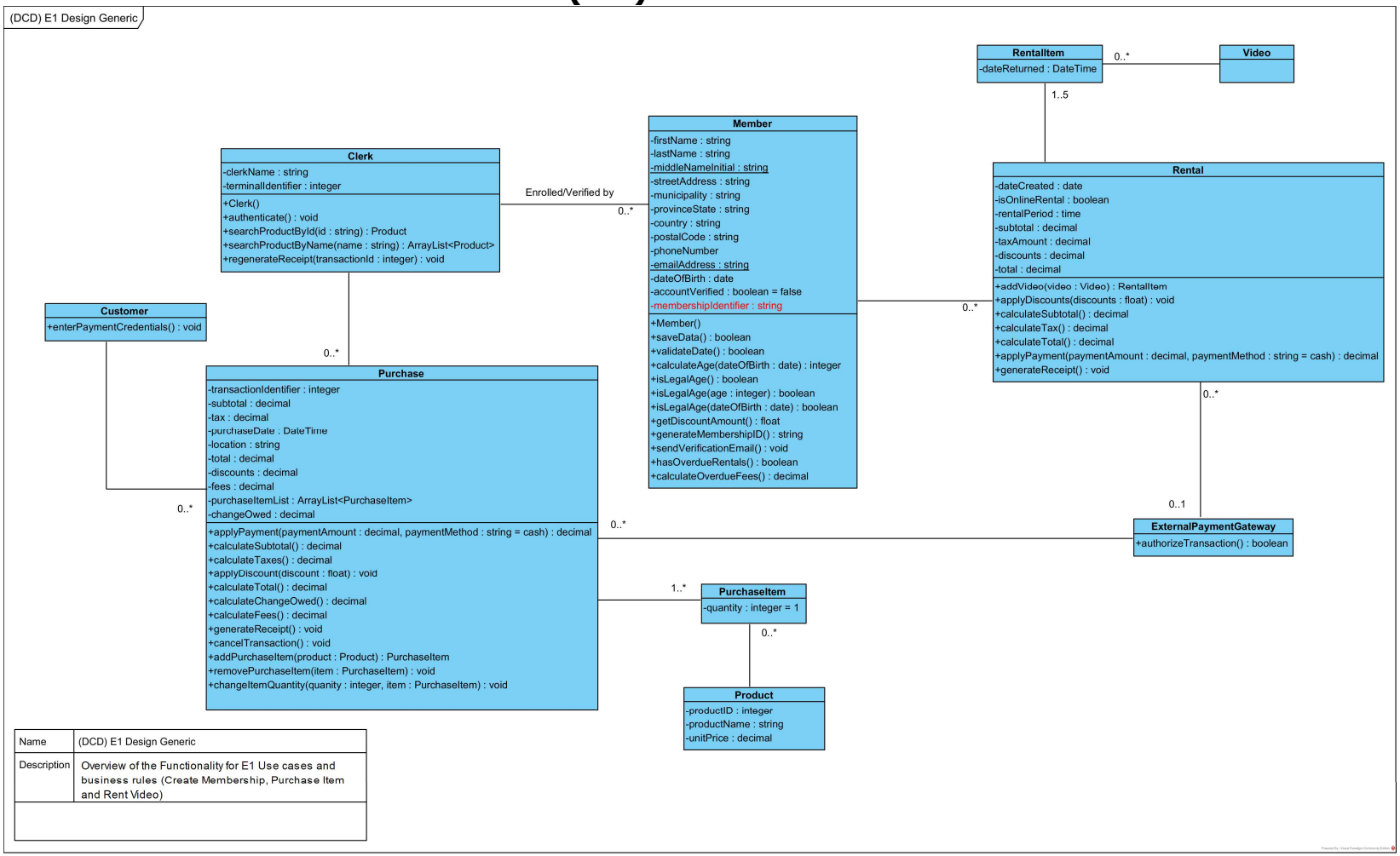
(ACD) CREATE MEMBERSHIP



(ACD) RENT VIDEO



(ACD) PURCHASE ITEM



DESIGN CLASS DIAGRAM (E1)