Visual Basic - Final Project

Video Store Application

Document Specifications
Version 4

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Nov-2022

Contents

Introduction

The purpose of this specification is to define the requirements and developments of the video store application. This application will keeps track of employees, customers and movies in a video store. Your program will allow employees to add customers to the database, to add movies, to change the status of a movie (from available to rented), to search for a movie, etc.

You will not be provided with any support infrastructure for this project. You will design and implement all the classes needed to complete the video store application.

(More details about the program are provided in the Specifications section.)

THESE SPECIFICATIONS ARE GUIDE LINES OF HOW TO

IMPLEMENT THE APPLICATIONAND MOSTLY HOW I AM

TO TEST IT.YOU SHOULD DO EXACTLY AS STATED UNLESS DISCUSSED OTHERWISE.

IF YOU WISH TO CHANGE ANYTHING, PLEASE SEE US FIRST.

Specification

You must design a solution to the Video Store application. The design will reflect everything you have learned during this Block both SQL and VB.net. You are expected to implement this application using Object Oriented Programming and to design your own classes in order to represent the basic entities the application has. You will document your design in a report after completing it. The number of classes you decide to use is totally up to you; however, you have to follow a set of restrictions specified below .The program should be very user friendly and Good Look (SWAG) is a MUST. The program should be very user friendly.

Good look is a must.

Requirements

Admin Menu

1. File
   - Change password
   - Logout
   - Exit
2. Employee
   - List
   - Create
   - Edit
   - Delete
3. Video
   - List
   - Create
       - Edit
       - Delete

4. Search
   - Quick
   - Advance
5. Rent
   - Rent Video

Employee Menu

1. File
   - Change password
   - Logout
   - Exit
2. Video
   - List
   - Create
   - Edit
   - Delete
3. Search
   - Quick
   - Advance

4. Rent
   - Rent Video

Employee Level:

1. Low – View, Create

2. Mid – View, Create, Edit

3. High – View, Create, Edit, Delete

Employee form field

1. Primary Information

- First name

- Last name

- DoB

- Age

- Address

- City

- Province

- Postal Code

- Home phone

- Cell phone

2. Human Resources

- Employee Number

- NAS

- Salary

- Date Started

- Schooling (DES, AEC, DEC, Certificate, BAC, Master, Doc)

3. System information

- Access Level

- Default Password

- Inactive (yes/no)

1. Client Form field

1. Primary Information

- First name
- Last name
- Email
- Telephone
- DoB
- Address
- City
- Province
- Postal Code

2. Credit information

- Type of Card
- Card number
- Month expire
- Year expire

3. System information

- Client number
- Videos rented

Advance Search Field

1. Search by

- Title
- Year
- Country
- Language
- Length
- Resume
- Genre
- Actors
- Director

Video Information

1. Primary information

- Photo
- Title
- Year
- Country
- Language
- Length
- Resume
- Genre
- Actors
- Director

2. System information

- Video Id

Use Case Scenarios

Use Case 1: Change default password

Primary Actor	Administrator Employee
Pre-Condition	System is running
Post-Condition	Default password have been changed
Main Success Scenario	1. System Starts 2. Admin or Employee log in with default password 3. System asks to change default password 4. System saves new password and logout.

Extensions	2b) Passwords don't match
	    1. System display error
	    2. Return to MSS # 2

Use Case 2: List of Employee

Primary Actor	Administrator
Pre-Condition	System is running Administrator is logged Employees exist in Database
Post-Condition	List of all the Employee is showing
Main Success Scenario	1. Admin clicks on Menu (Employee > List) 2. System shows the list of all the employees in the database sorted by last added.
Extensions	

Use Case 3: Add new employee

Primary Actor	Administrator
Pre-Condition	System is running Administrator is logged
Post-Condition	New employee have been created
Main Success Scenario	2. Admin clicks on Menu (Employee > Create) 3. System displays a new employee form 4. Admin fills out the form properly 5. System displays the added employee info 6. Admin confirms 7. System confirms addition and displays employee's number 8. Admin click OK 9. System returns to Main Page

Extensions	3b) Form Field Error
	  1. System shows errors message
	  2. System displays form with errors
	  3. Return to MSS # 3
	  3 c) Admin Cancel form
	  4. System returns to Main Page
	  5 b) Admin deny confirmation
	1. Return to MSS # 3

Page 9

VB Final Project   Video Application   Nima Tahriri

Use Case 4: Edit employee

Primary Actor	Administrator
Pre-Condition	System is running Administrator is logged Employees exist in Database
Post-Condition	Employee have been edited
Main Success Scenario	1. Admin clicks on Menu (Employee > Edit) 2. System asks for the employee number 3. Admin enters the employee number 4. System displays the corresponded employee information 5. Admin makes changes and save 6. System displays the added employee's information 7. Admin confirms 8. System confirms addition and displays employee number 9. Admin clicks OK 10. System returns to Main Page

Extensions	3b) Wrong employee number
	  1. System displays an error
	  2. Return to MSS # 2 5b) Form Field Error
	    1. System shows errors message
	    2. System displays form with errors
	    3. Return to MSS # 4 5c) Admin Cancel form
	1. System returns to Main Page 7b) Admin deny confirmation
	1. Return to MSS # 3

Use Case 5: Delete employee

Primary Actor	Administrator
Pre-Condition	System is running Administrator is logged Employee exist in Database
Post-Condition	Employee have been deleted
Main Success Scenario	1. Admin clicks on Menu (Employee > Delete) 2. System ask for employee number 3. Admin enters employee number 4. System displays the corresponded employee's information with the delete button 5. Admin clicks on Delete 6. System asks for confirmation 7. Admin confirms 8. System confirms deletion 9. Admin click OK 10. System returns to Main Page

Extensions	3b) Wrong employee number
	  1. System displays an error
	  2. Return to MSS # 2 5b) Admin Cancel form
	1. System returns to Main Page 7b) Admin deny confirmation
	1. Return to MSS # 3

Use Case 6: List of Client

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Client exist in Database
Post-Condition	List of all the Client is showing
Main Success Scenario	10. Admin click on Menu (Client > List) 1. System show the list of all the Clients in the database sorted by last added.
Extensions	

Use Case 7: Add new Client

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged
Post-Condition	New Client have been created
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Client > Create) 2. System display a new Client form 3. Admin or Authorized Employee fills out the form properly 4. System displays the added Client info 5. Admin or Authorized Employee confirms 6. System confirms addition and display client's number 7. Admin or Authorized Employee clicks OK 8. System returns to Main Page

Extensions	3b) Form Field Error
	    1. System shows errors message
	    2. System displays form with errors
	    3. Return to MSS # 3
	3c) Admin or Authorized Employee Cancel form
	    1. System returns to Main Page
	5b) Admin or Authorized Employee deny confirmation
	    1. Return to MSS # 3

Use Case 8: Edit Client

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Client exist in Database
Post-Condition	Client have been edited
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Client > Edit) 2. System asks for the Client number 3. Admin or Authorized Employee enters the Client number 4. System displays the corresponded Client's information 5. Admin or Authorized Employee makes changes and Save 6. System displays the edited Client's information 7. Admin or Authorized Employee confirms 8. System confirms addition and display the Client number 9. Admin or Authorized Employee click OK 10. System returns to Main Page

Extensions	3b) Wrong Client number
	  1. System displays an error
	  2. Return to MSS # 2 5b) Form Field Error
	    1. System shows errors message
	    2. System displays form with errors
	    3. Return to MSS # 4
	5c) Admin or Authorized Employee Cancel form
	1. System returns to Main Page
	
	7b) Admin or Authorized Employee deny confirmation
	1. Return to MSS # 3

Use Case 9: Delete Client

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Client exist in Database
Post-Condition	Client have been deleted
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Client > Delete) 2. System asks for the Client number 3. Admin enters Client's number 4. System displays the corresponded Client's information with delete button 5. Admin or Authorized Employee clicks on Delete 6. System asks for confirmation 7. Admin or Authorized Employee confirms 8. System confirms deletion 9. Admin or Authorized Employee clicks OK 10. System returns to Main Page

Extensions	3b) Wrong Client number
	    1. System displays an error
	    2. Return to MSS # 2
	5b) Admin or Authorized Employee Cancel form
	1. System returns to Main Page
	7b) Admin or Authorized Employee deny confirmation
	1. Return to MSS # 3

Use Case 10: List of Video

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Videos exist in Database
Post-Condition	List of all the Video is showing
Main Success Scenario	9. Admin click on Menu (Video > List) 1. System show the list of all the Video in the database sorted by last added.
Extensions	

Use Case 11: Add new Video

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged
Post-Condition	New Video have been created
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Video > Add) 2. System display a new Video form 3. Admin or Authorized Employee fills out the form properly 4. System displays the added Video information 5. Admin or Authorized Employee confirms 6. System confirms addition and display Video ID 7. Admin or Authorized Employee clicks OK 8. System returns to Main Page

Extensions	3b) Form Field Error
	    1. System shows errors message
	    2. System displays form with errors
	    3. Return to MSS # 3
	3c) Admin or Authorized Employee Cancel form
	    1. System returns to Main Page
	5b) Admin or Authorized Employee deny confirmation
	    1. Return to MSS # 3

Use Case 12: Edit Video

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Video exist in Database
Post-Condition	Video have been edited
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Video > Edit) 2. System asks for the Video ID 3. Admin or Authorized Employee enters the Video ID 4. System displays the corresponded Video's information 5. Admin or Authorized Employee makes changes and Save 6. System displays the edited Video's information 7. Admin or Authorized Employee confirms 8. System confirms addition and display the Video ID 9. Admin or Authorized Employee click OK 10. System returns to Main Page

Extensions	3b) Wrong Client number
	   1. System displays an error
	   2. Return to MSS # 2
	5b) Form Field Error
	   1. System shows errors message
	   2. System displays form with errors
	   3. Return to MSS # 4
	
	5c) Admin or Authorized Employee Cancel form
	   1. System returns to Main Page
	7b) Admin or Authorized Employee deny confirmation
	   1. Return to MSS # 3

Use Case 13: Delete Video

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Video exist in Database
Post-Condition	Video have been deleted
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Video > Delete) 2. System asks for the Video ID 3. Admin enters Video ID 4. System displays the corresponded Video's information with delete button 5. Admin or Authorized Employee clicks on Delete 6. System asks for confirmation 7. Admin or Authorized Employee confirms 8. System confirms deletion 9. Admin or Authorized Employee clicks OK 10. System returns to Main Page

Extensions	3b) Wrong Video ID
	    1. System displays an error
	    2. Return to MSS # 2
	5b) Admin or Authorized Employee Cancel form
	    1. System returns to Main Page
	7b) Admin or Authorized Employee deny confirmation
	    1. Return to MSS # 3

Use Case 14: Quick Search

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Videos exist in Database
Post-Condition	Video have been retrieved
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Search > Quick Search) 2. System display search field 3. Admin or Authorized Employee enters either video ID or title. 4. System displays the corresponded Video's information

Extensions	3b) Video doesn't exist
	    1. System displays a message
	    2. Return to MSS # 2

Use Case 15: Advance Search

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Videos exist in Database
Post-Condition	Video have been retrieved
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Search > Advance Search) 2. System display advance search field 3. Admin or Authorized Employee fills fields to search. 4. System displays the corresponded Video's information with rent button.

Extensions	3b) Video doesn't exist
	    1. System displays a message
	    2. Return to MSS # 2
	4b) Admin or Authorized Employee rent
	    1. System ask for client id
	    2. Admin or Authorized Employee enters Client Number.
	    3. System asks for confirmation.
	    4. Admin or Authorized Employee confirms
	    5. System confirms Renting
	    6. Admin or Authorized Employee clicks OK
	    7. System returns to Video Form

Use Case 16: Rent a video

Primary Actor	Administrator Authorized Employee
Pre-Condition	System is running Administrator is logged Authorized Employee is logged Client exist in Database Videos exist in Database
Post-Condition	Video status is changed to "rented" Video is now rented to the giving client.
Main Success Scenario	1. Admin or Authorized Employee click on Menu (Rent > Rent Video) 2. System display field for client Number and Field for Video ID 3. Admin or Authorized Employee fills fields. 4. System displays the corresponded Video's information to be rented with Rent button. 5. Admin or Authorized Employee clicks on rent. 6. System asks for confirmation. 7. Admin or Authorized Employee confirms 8. System confirms Renting 9. Admin or Authorized Employee clicks OK 10. System returns to Main Page

Extensions	3b) Client doesn't exist
	    1. System displays a message
	    2. Return to MSS # 2
	3c) Video doesn't exist
	    1. System displays a message
	    2. Return to MSS # 2
	5b) Admin or Authorized Employee Cancel form
	    1. System returns to Main Page
	7b) Admin or Authorized Employee deny confirmation
	    1. Return to MSS # 3

Report

- Introduction
  - About the project?
  - About the report

- Analyse
  - How you plan on realizing the project?
  - Database Class Diagram
  - Program Class Diagram

- Implementation
  - How did you manage to realize the project?
  - Screenshots
  - Solution
  - Walkthrough

- Discussion
  - What happen throughout the project?
  - Problem encounter, solution?
  - Did you manage to finish the project?
  - What you would have done differently?

Correction Grid

Implementation – 90%

Code – 80%

- Each Use Case is worth 5%

Design – 10%

- User Friendly

- Comments

- Teacher's appreciation (SWAG)

Report – 10%

- Database Class Diagram

- OOP Class Diagram

- Introduction

- Analysis

- Implementation

- Discussion

- Conclusion