

BTEC Level 2 Certificate in ICT

Unit 10: Database Development

Assignment: 2

Designing a Database

Resubmission

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Introduction

Designs will be created as Gamer Zone require the development of a database to replace the paper based system used with a spreadsheet. This will enable Gamer Zone to manage the stock levels of the retro games that they sell.

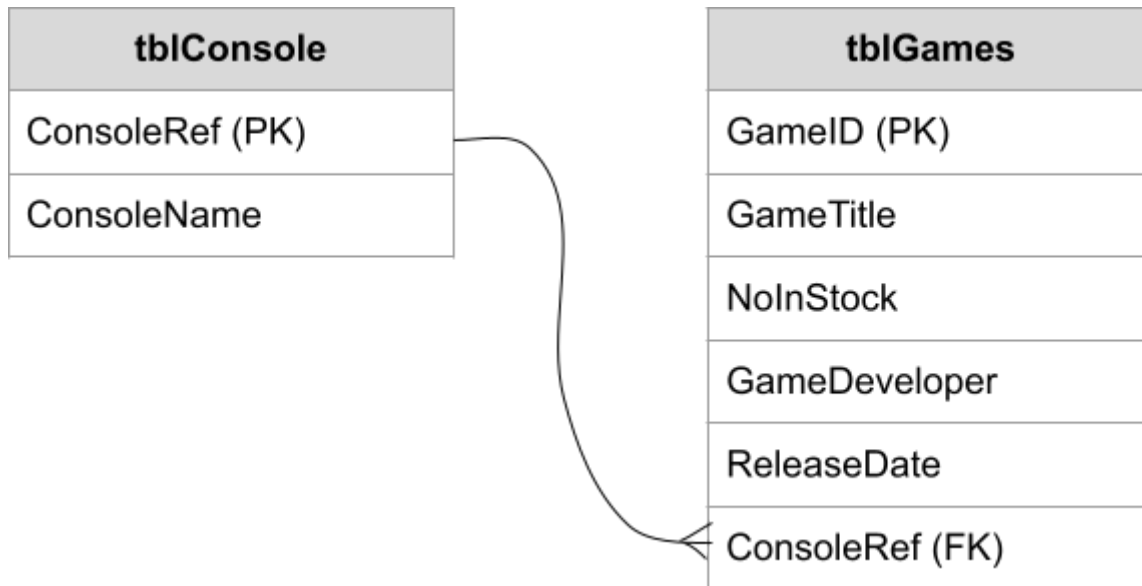
The Intended Purpose and User Requirements for the Database

Gamer Zone would like to upgrade their current systems to have a database that securely records details of their computer game stock. They also want to be able to add, edit and delete computer game details and computer console details using forms. They want to have a menu form with buttons that automate tasks via macros such as opening already prepared reports, run queries that will provide search results that select meaningful data. Gamer Zone also wants at least three customised reports to present information.

Hardware, Software, and Other Resources Required

Computers, Windows 10 operating system, keyboards, mouse, Local Network Server (storage & access),

Entity Relationship Diagram and Description of the Tables Relationship



The above Entity Relationship Diagram represents how the database will be set up. With a One-To-Many relationship type between the tables **tblConsole** and **tblGames**, the records in the **tblConsole** table will be linked to multiple records within the **tblGames** table. Staff will be able to input data into the **tblGames** form and the **ConsoleRef** will be used to get the console information from the **tblConsole** table.

Design: Data Dictionaries

Table Name:	tblConsole		Description:		List of game platforms	
Field Name	Data Type	Primary Key Yes/No	Foreign Key Yes/No	Field Size (if applicable)	Format/Input Mask	Validation Rule and Message
ConsoleRef	Short Text	yes	no	N/A		N/A
ConsoleName	Short Text	no	no	25		Is No Null - "Please Input A Console Name"

Table Name:	tblGames		Description:		Data of stocked games	
Field Name	Data Type	Primary Key Yes/No	Foreign Key Yes/No	Field Size (if applicable)	Format/Input Mask	Validation Rule and Message
GameID	Auto Number	Yes	no	N/A		N/A
GameTitle	Short Text	No	No	100		Is Not Null - "Please Input A Game Title"
NoInStock	Number	No	No	3	Integer	Is Not Null - "Please Input Stock Count"
GameDeveloper	Short Text	No	No	45		Is Not Null - "Please Input Game Developer"

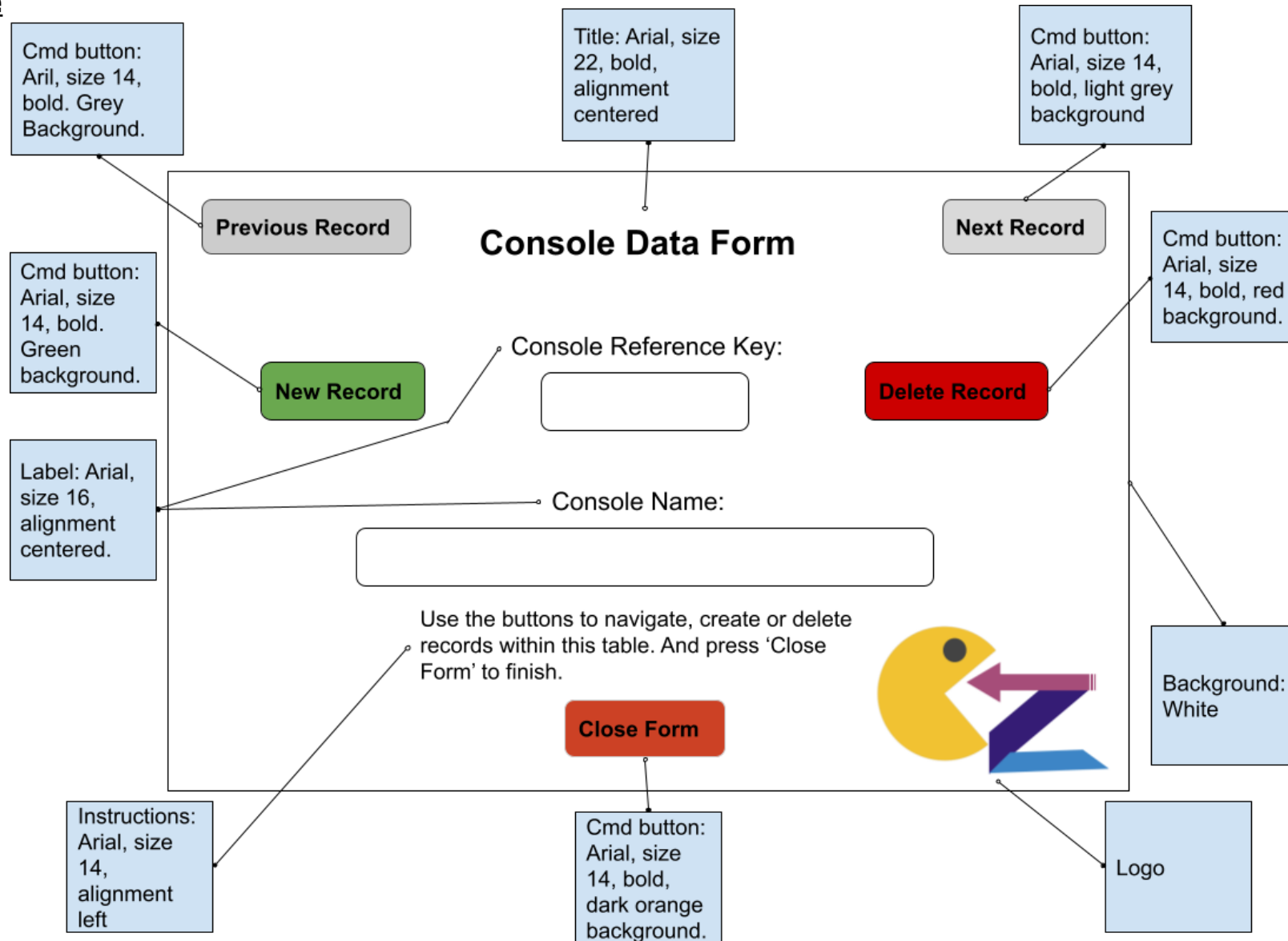
ReleaseDate	Date	No	No	N/A		Is Not Null - "Please Input The Game's Release Date"
ConsoleRef	Short Text	No	Yes	N/A		Is Not Null - "Please Input Console Reference Key"

Explanation of How Data Validation Will Be Carried Out

In both tblGames and tblConsoles the validation rule 'Is Not Null' is being used in applicable fields. This is to prevent fields from being left blank when staff input data in either existing or new records. When data is missing from a field a message box would appear stating a message regarding the current field and to "Please Input" data.

Design: Data Entry Form for each Table

frmConsole



The diagram illustrates a 'Game Data Form' with various input fields and navigation buttons. Annotations provide specific details for each element:

- Previous Record**: Cmd button: Arial, size 14, bold. Grey Background.
- Instructions**: Arial, size 14, alignment left.
- Title**: Arial, size 22, bold, alignment centered.
- Next Record**: Cmd button: Arial, size 14, bold, light grey background.
- New Record**: Cmd button: Arial, size 14, bold. Green background.
- Delete Record**: Cmd button: Arial, size 14, bold, red background.
- Game ID Number**: Input field.
- Console Reference**: Input field.
- Stock Count**: Input field.
- Game Release Date**: Input field.
- Game Title**: Input field.
- Game Developer**: Input field.
- Close Form**: Cmd button: Arial, size 14, bold, dark orange background.
- Label**: Arial, size 16, alignment centered. (Points to the labels for Game ID Number, Console Reference, Stock Count, Game Release Date, Game Title, and Game Developer).
- Background**: White.
- Logo**: A Pac-Man character and a stylized 'Z' logo.

Game Data Form

Use the buttons to navigate, create or delete records within this table. And press 'Close Form' to finish.

Design: 5 Queries with Explanations

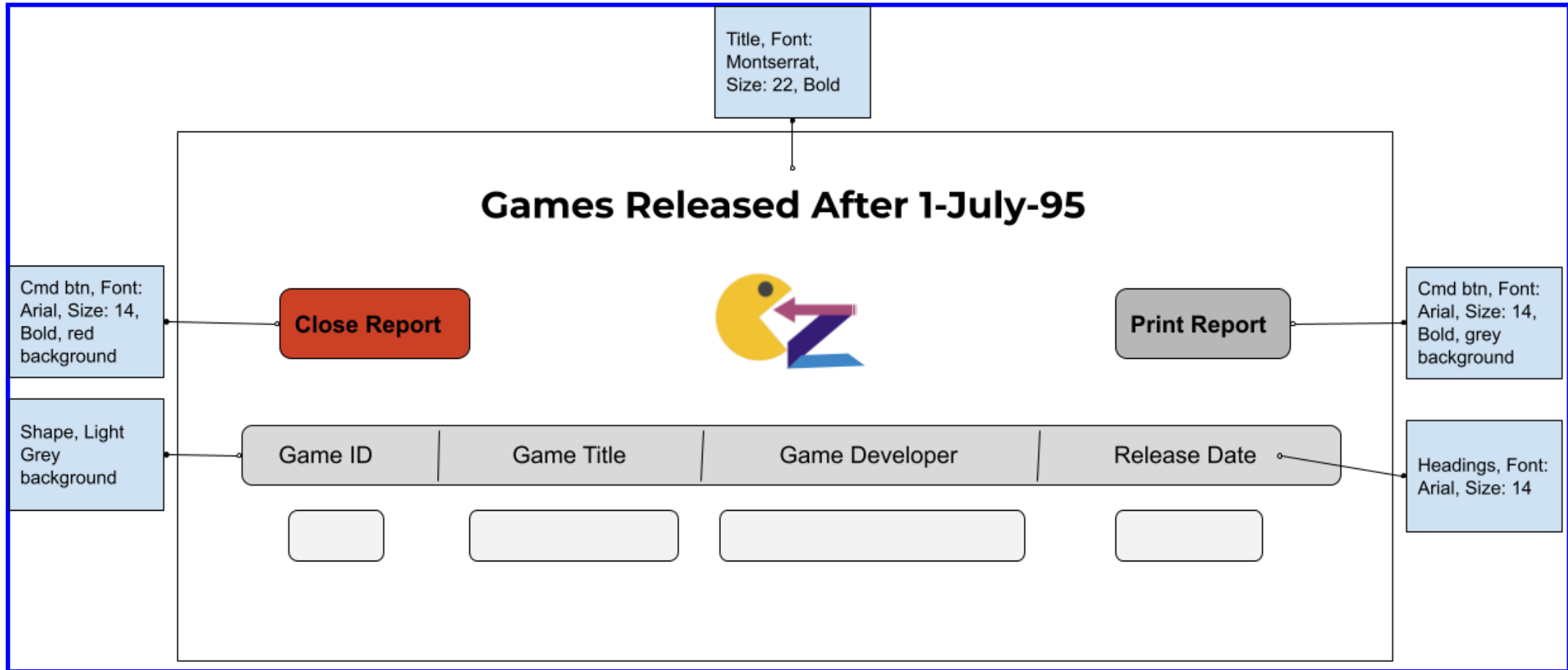
Description of Query: Number Of Games In Stock At 3 Or Below						
Query Name:		qryStockThreeBelow				
Field	GameID	GameTitle	GameDeveloper	NoInStock		
Table Name	tblGames	tblGames	tblGames	tblGames		
Sort Type				Descending		
Show	Yes	Yes	Yes	Yes		
Criteria				<= 3		
Explanation for selecting this query for Gamer Zone						
This query should be used to check on games that are low on stock. Giving them time to reorder games to restock.						

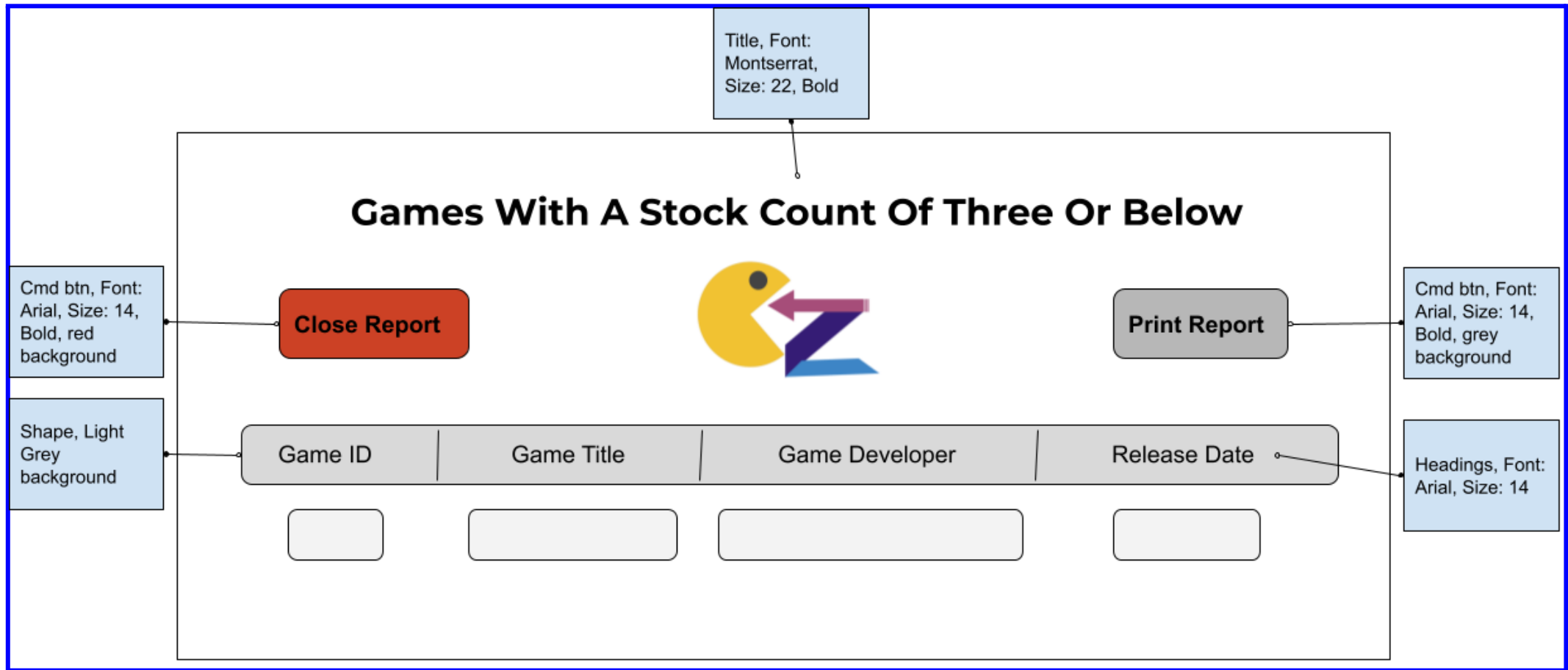
Description of Query: Games That Are For PC						
Query Name:		qryGamesPc				
Field	GameID	GameTitle	GameDeveloper	ConsoleName	ConsoleRef	
Table Name	tblGames	tblGames	tblGames	tblConsole	tblConsole	
Sort Type		Descending				
Show	Yes	Yes	Yes	Yes	No	
Criteria					= PC	
Explanation for selecting this query for Gamer Zone						

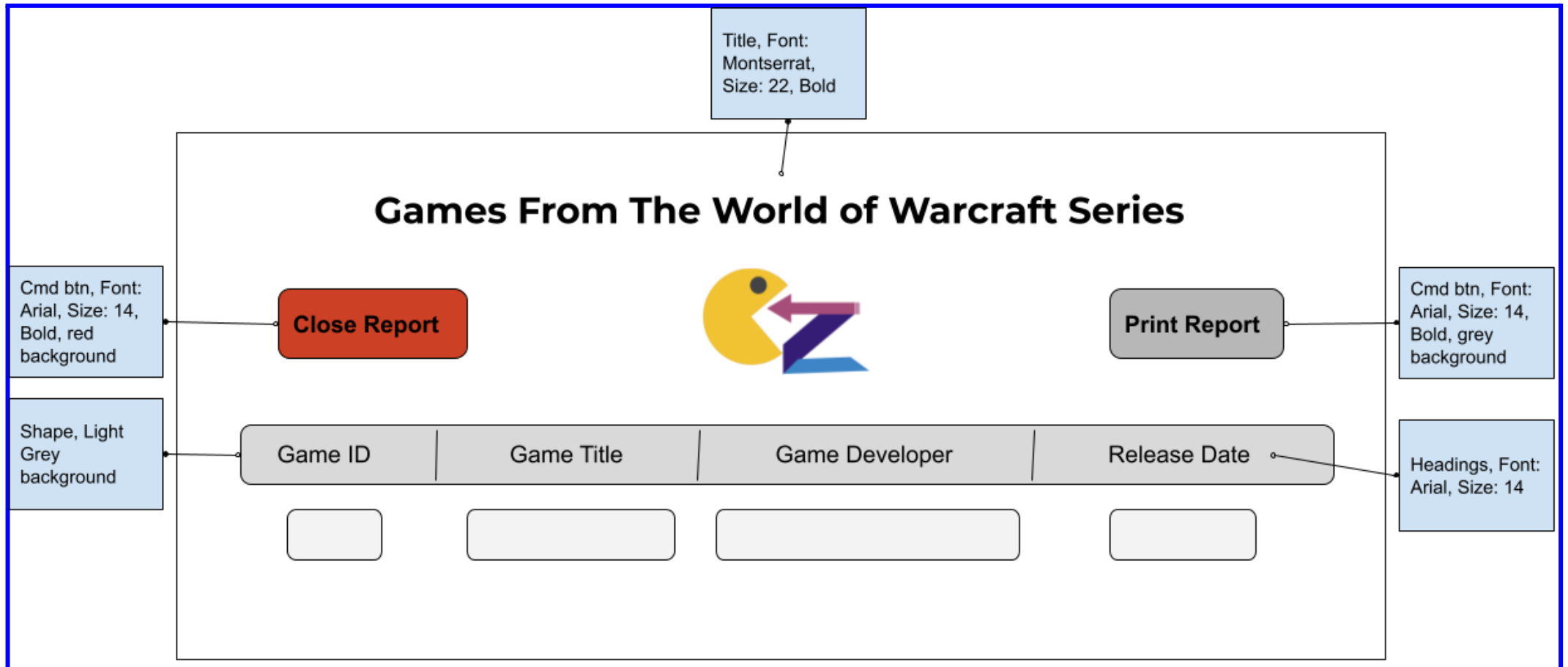
Description of Query: Games Released After 1-July-95						
Query Name:		qryAfter1July95				
Field	GameID	GameTitle	GameDeveloper	ReleaseDate		
Table Name	tblGames	tblGames	tblGames	tblGames		
Sort Type				Ascending		
Show	Yes	Yes	Yes	Yes		
Criteria				= #01/07/1995#		
Explanation for selecting this query for Gamer Zone						

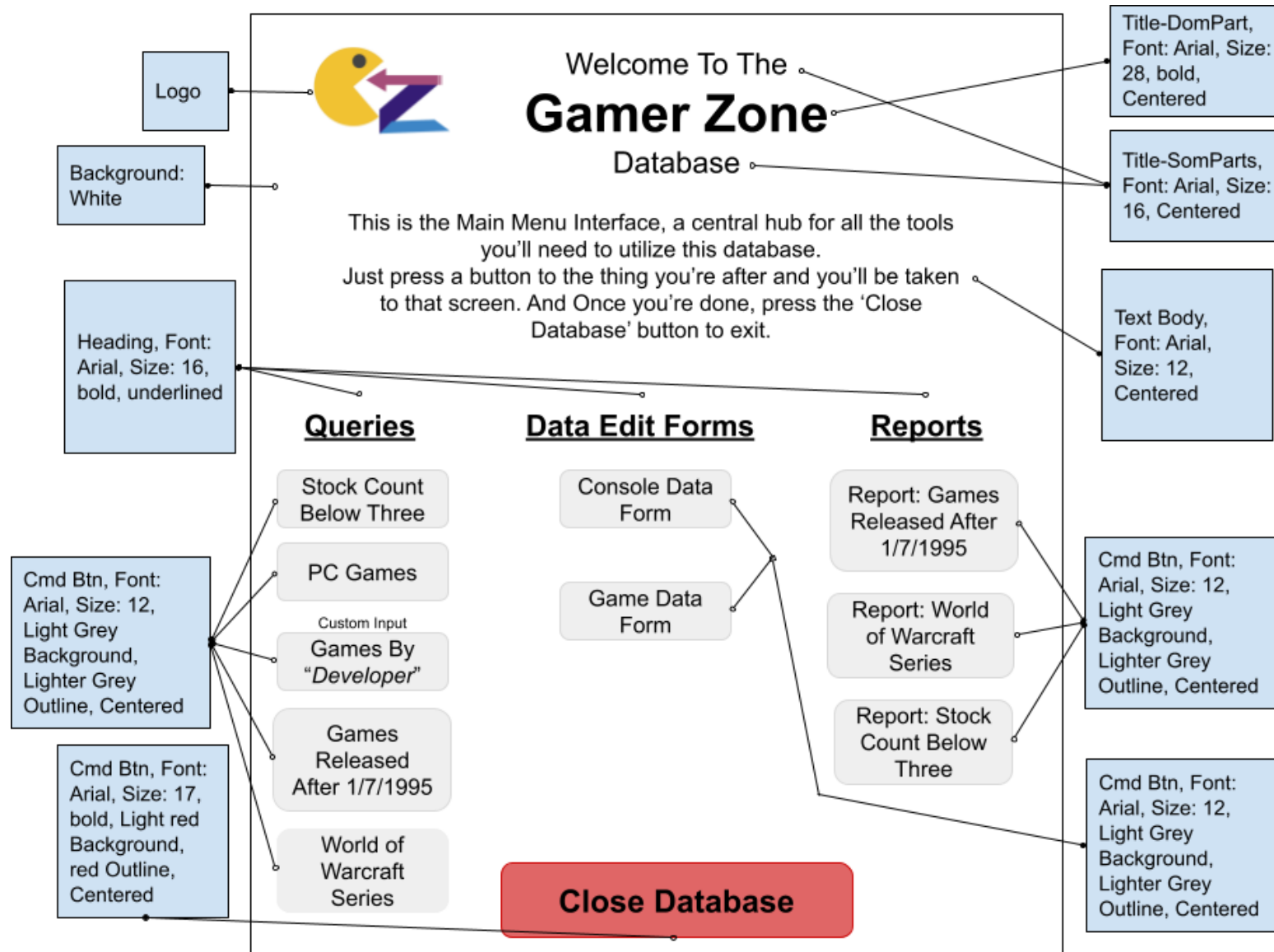
Description of Query: Games From the World Of Warcraft Series						
Query Name:		qrySeriesWow				
Field	GameID	GameTitle	GameDeveloper	ReleaseDate		
Table Name	tblGames	tblGames	tblGames	tblGames		
Sort Type				Descending		
Show	Yes	Yes	Yes	No		
Criteria		World of Warcraft*				
Explanation for selecting this query for Gamer Zone						

Description of Query: Game Developer Custom Input						
Query Name:		qryInputDeveloper				
Field	GameID	GameTitle	GameDeveloper			
Table Name	tblGames	tblGames	tblGames			
Sort Type						
Show	Yes	Yes	Yes			
Criteria			[Enter a Game Developer:]			
Explanation for selecting this query for Gamer Zone						

Design: Reports





Design: Menu Interface

Test Plan

Test No.	Test	Object Name	Expected Result	Actual Result	Pass/Fail	Changes Made
1	Closing the database (Command Button)	frmInterface	Microsoft Access closes			
2	Opening 'PC Games' query (Macro Button)	frmInterface	The query should open in 'Read Only' mode			
3	Testing 'Console Name' data validation	frmConsole	When attempting to input a blank field, should open a dialog box.			
4	Opening Print view in W.O.W. series report (Macro Button)	rptSeriesWOW	The Print Preview Screen should be shown.			
5	Opening report 'rptStockThreeBelow' (Macro Button)	frmInterface	The Report should open in report view.			
6	'Close Form' button in 'frmGames'	frmGames	The form should close returning to the homepage.			
7						
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11						

References

Source Name:	
Page Numbers/Web link:	
Date Accessed:	

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