

Declaration on Plagiarism

Assignment Submission Form

This form must be filled in and completed by the student(s) submitting an assignment

Name(s): Eoin Holland

Programme: CA

Module Code: CA214

Assignment Title: SSADM

Submission Date: 10 - 12 2017

Module Coordinator: Renaat Verburgen

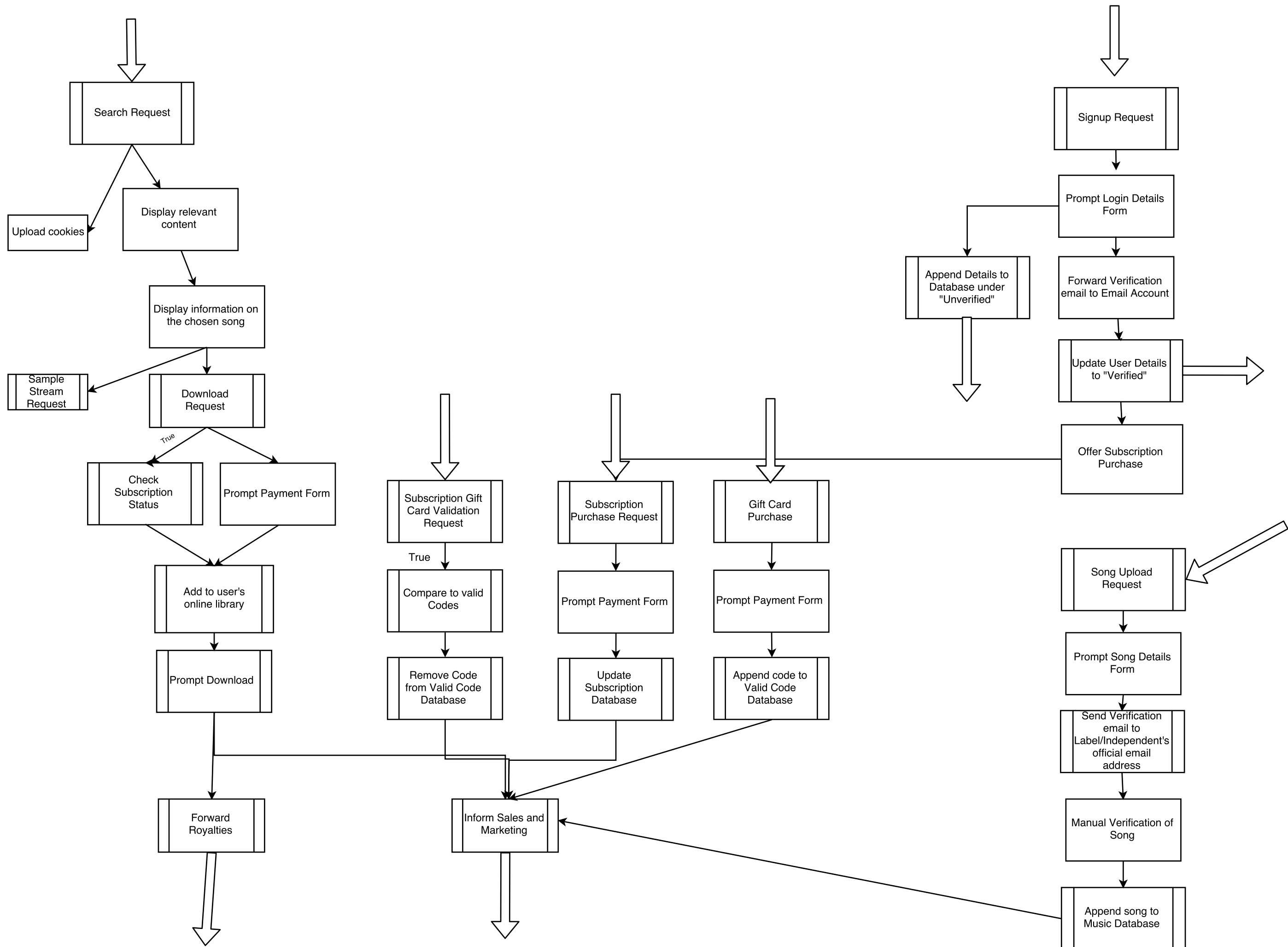
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I/We have read and understood the referencing guidelines found at

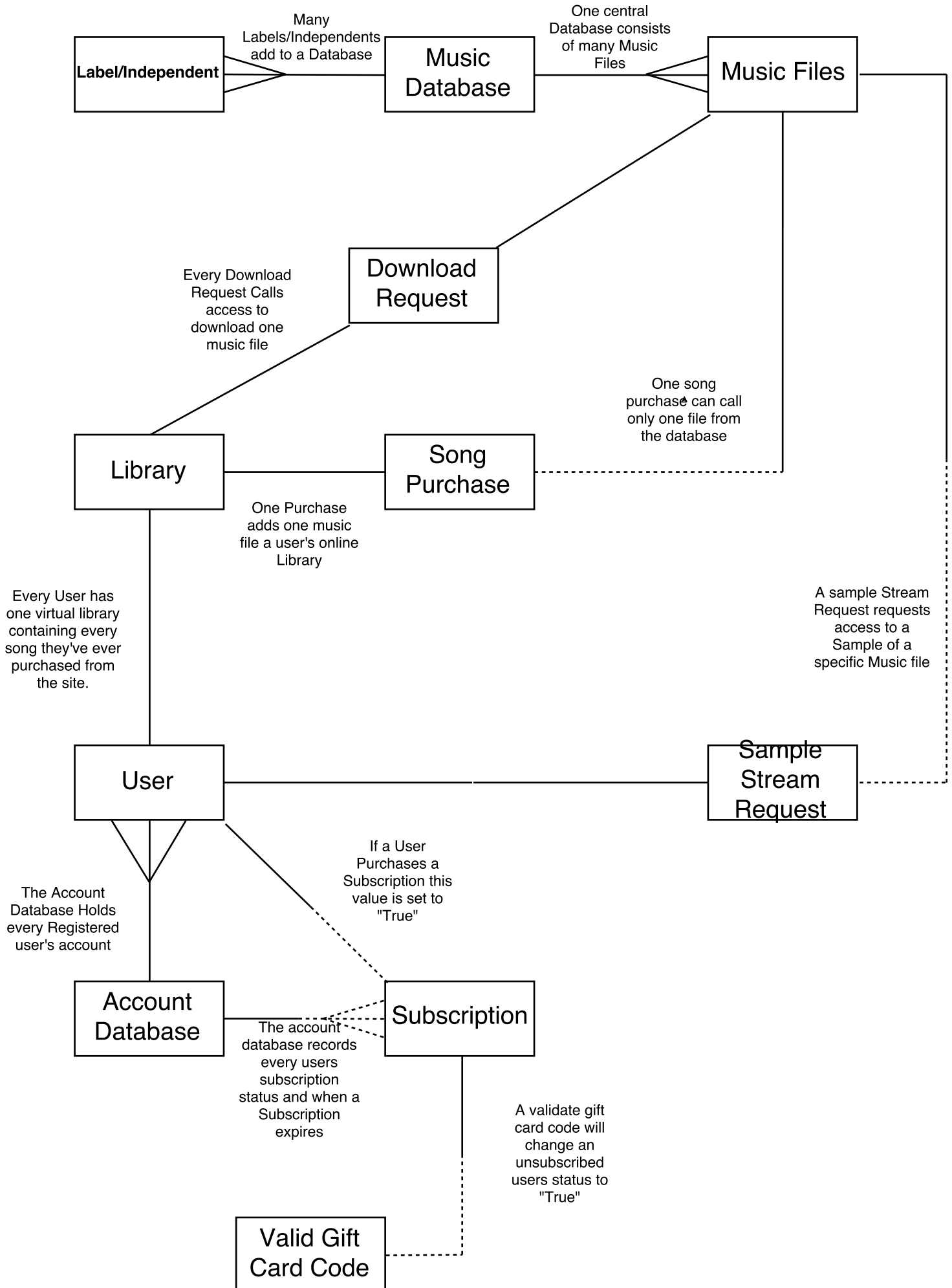
<http://www.dcu.ie/info/regulations/plagiarism.shtml> , <https://www4.dcu.ie/students/az/plagiarism>

and/or recommended in the assignment guidelines.

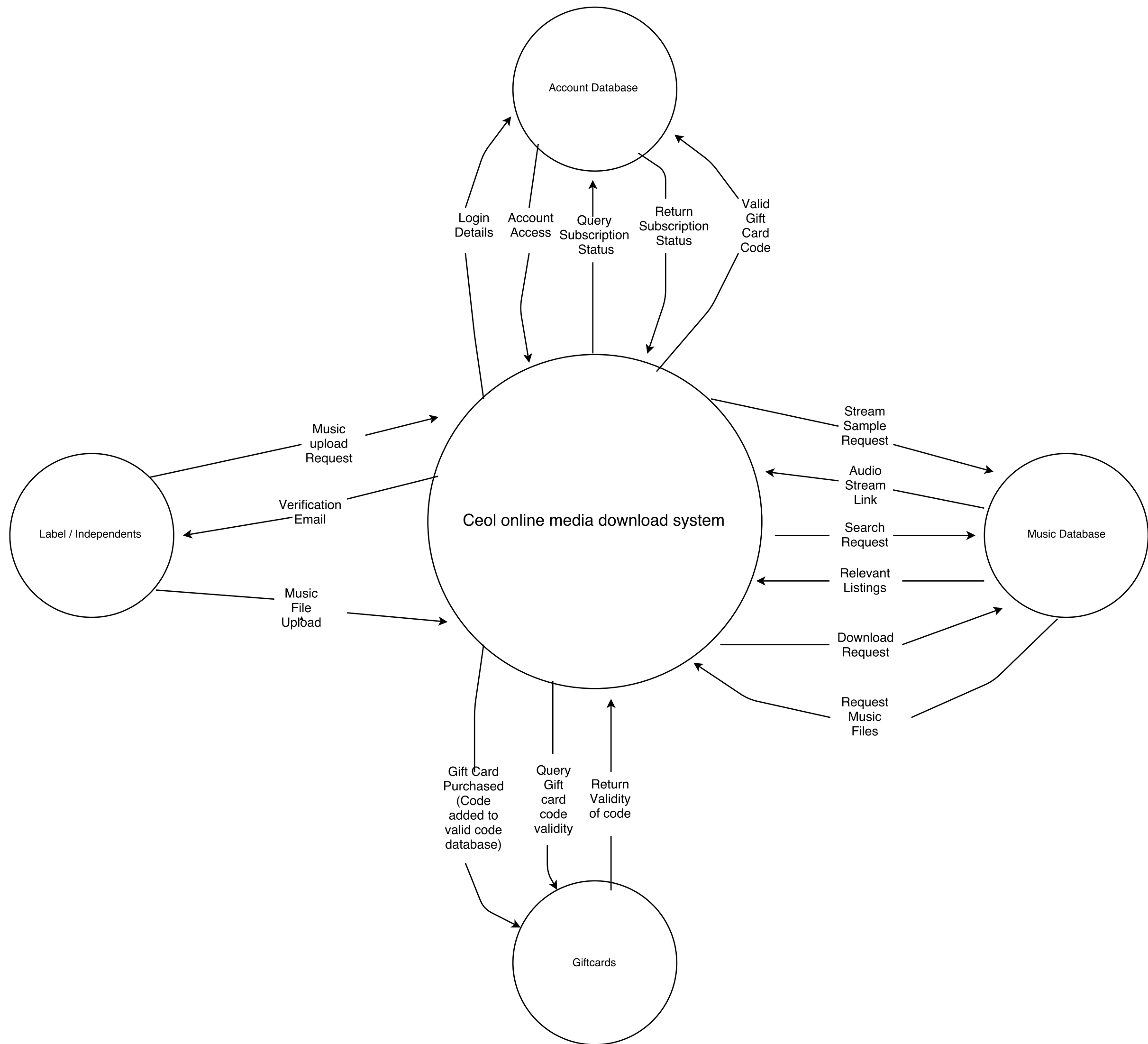
Name(s): *Eoin Holland* Date: **10 - 12 -**
2017



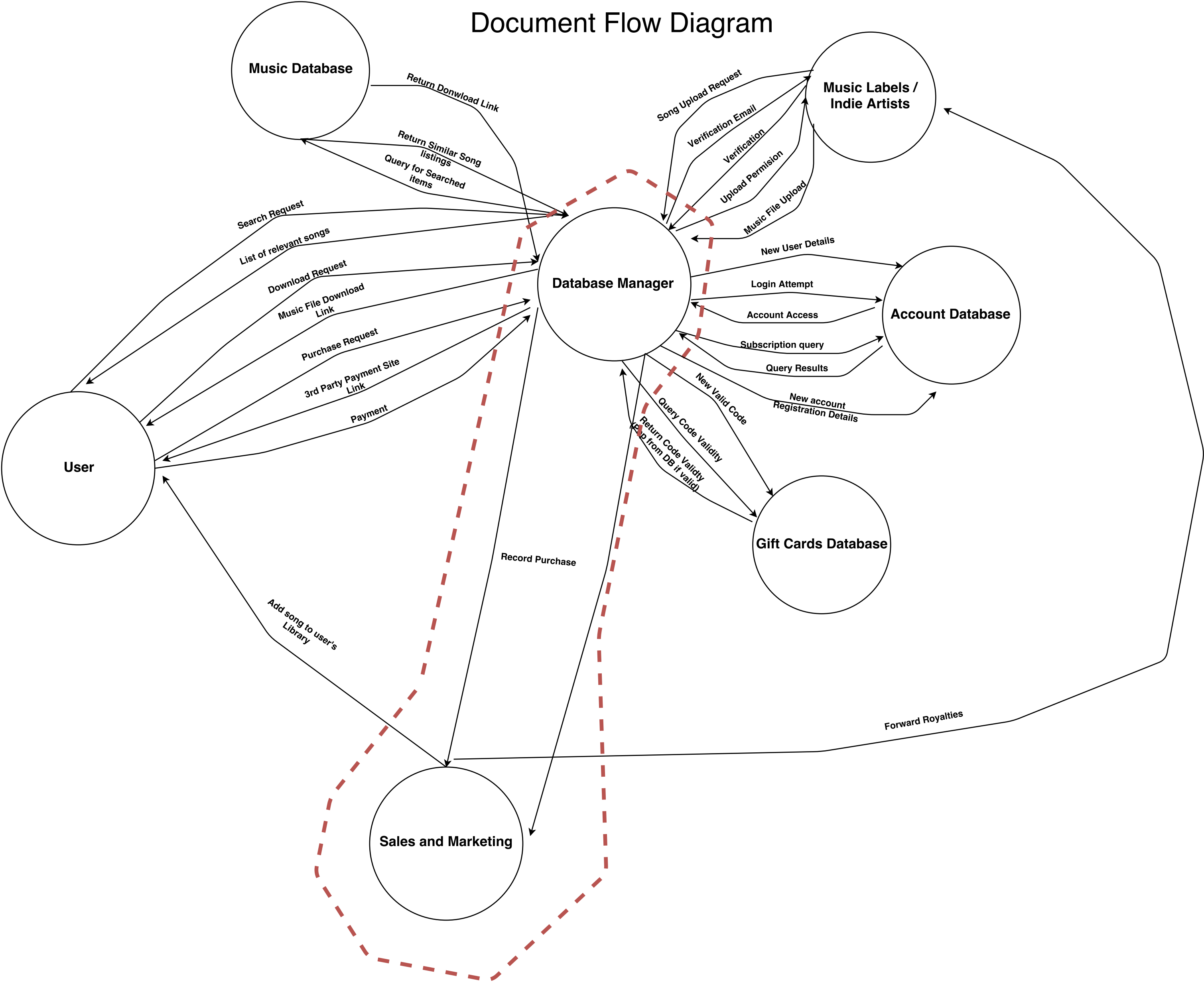
Logical Data Model



[illegible]

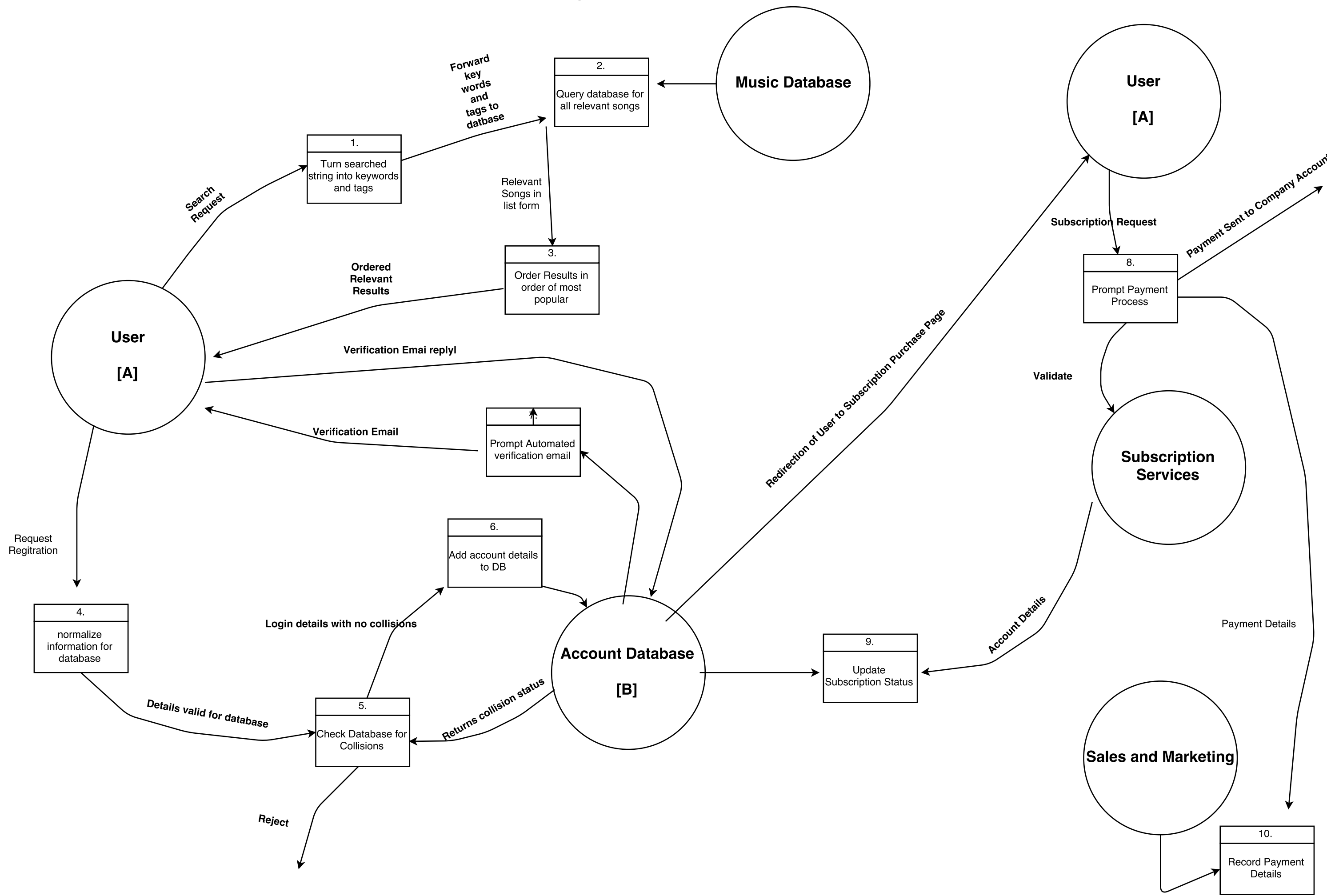


Document Flow Diagram

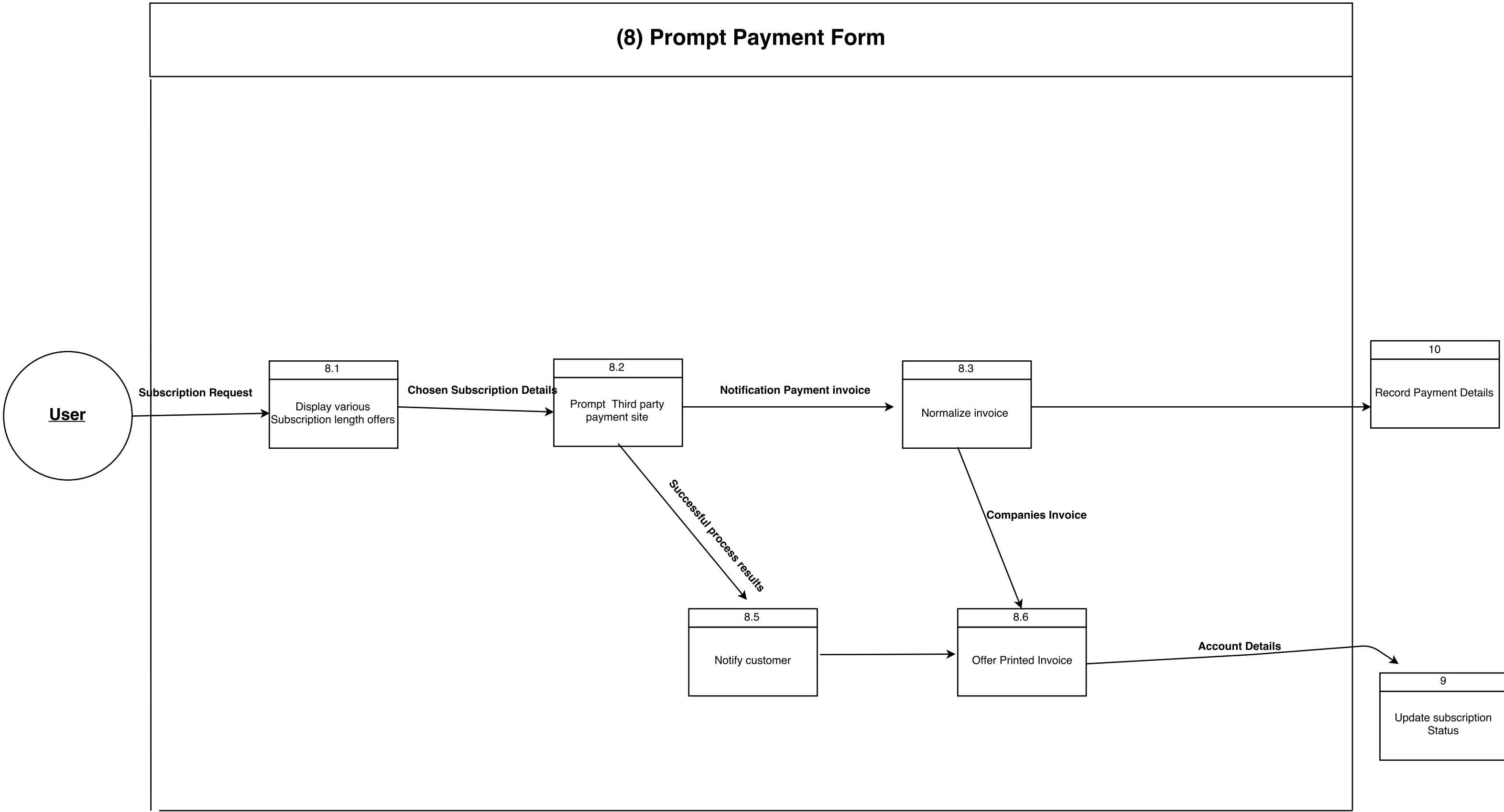


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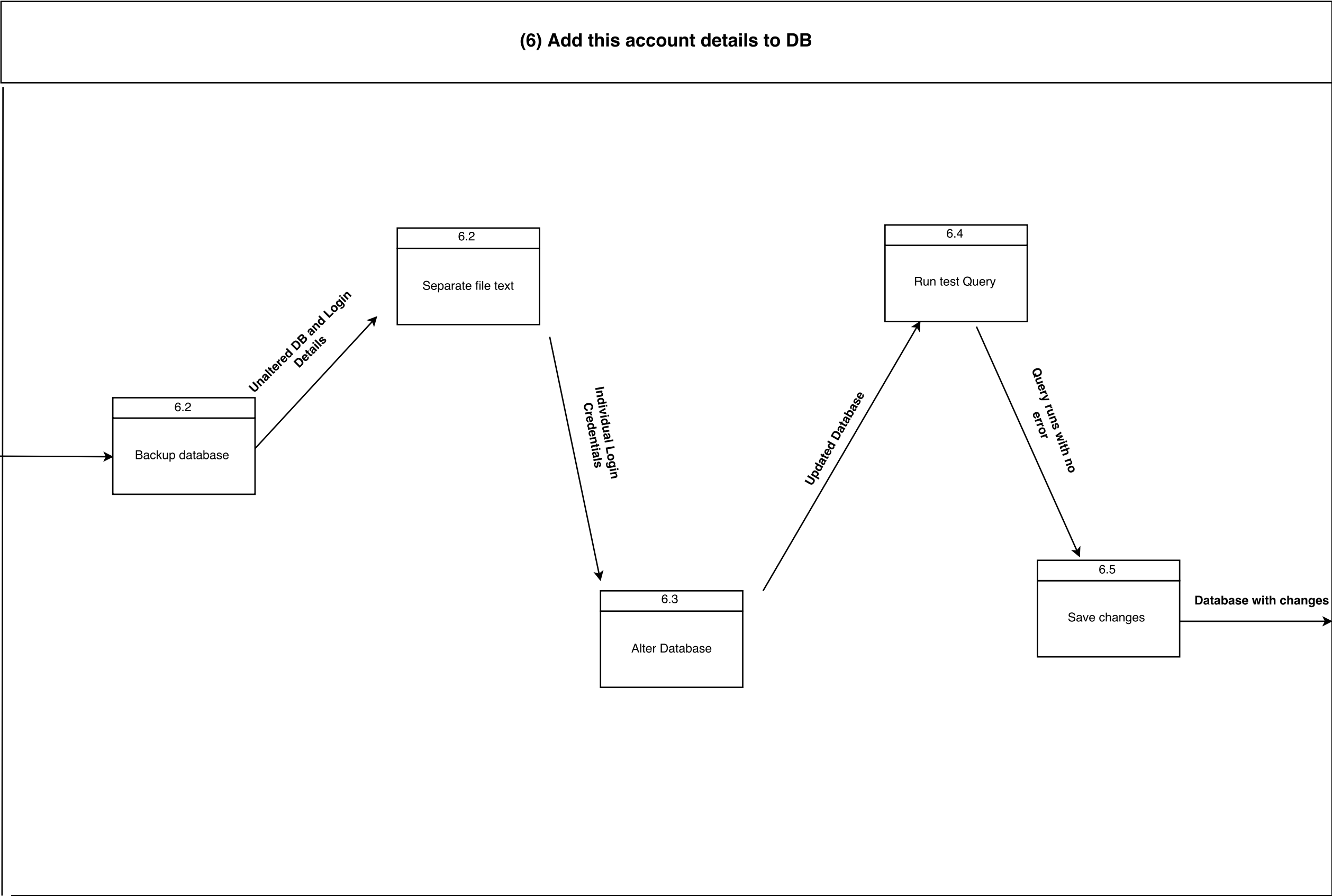
Physical Level 1



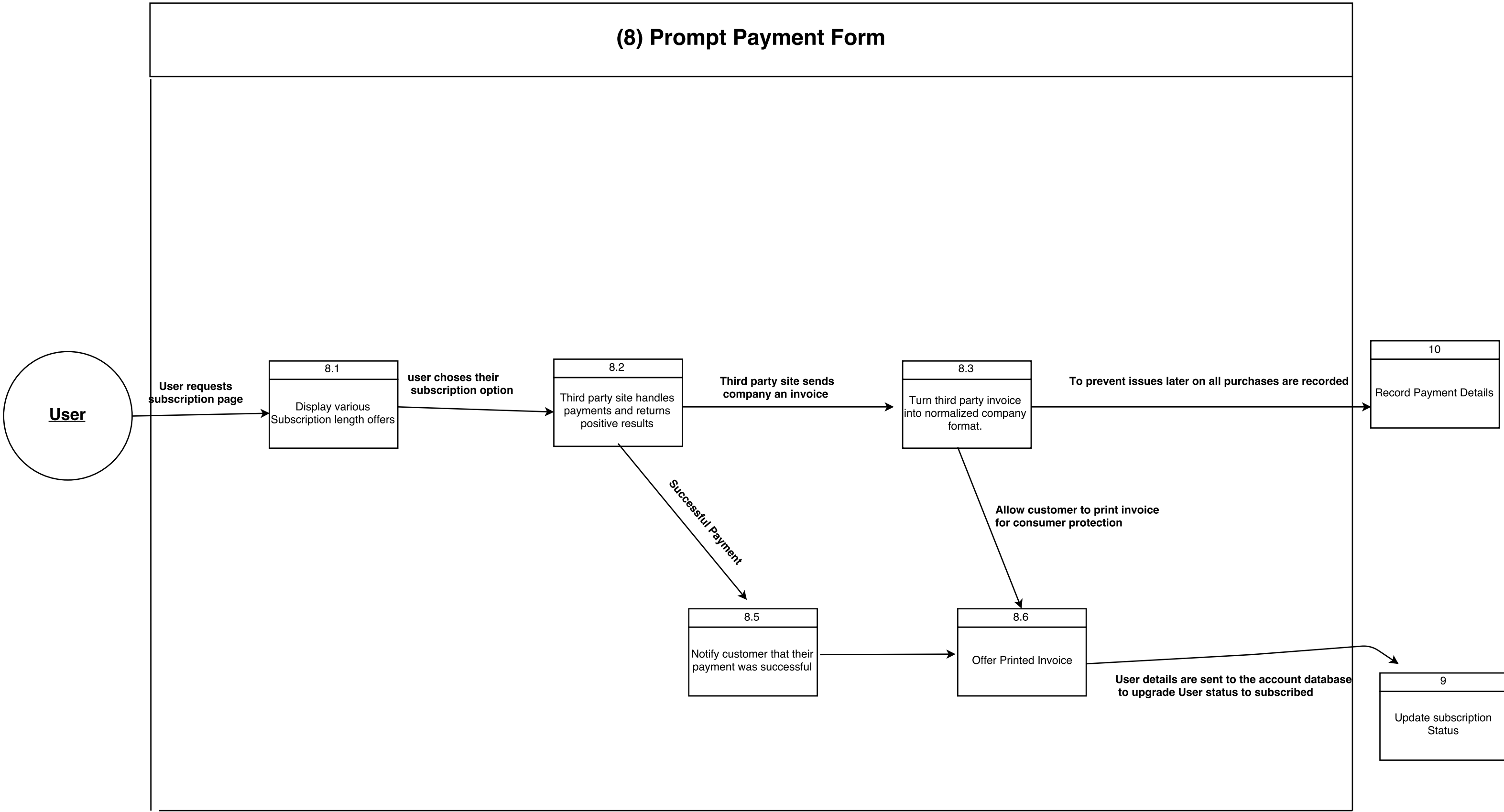
Physical Level 2



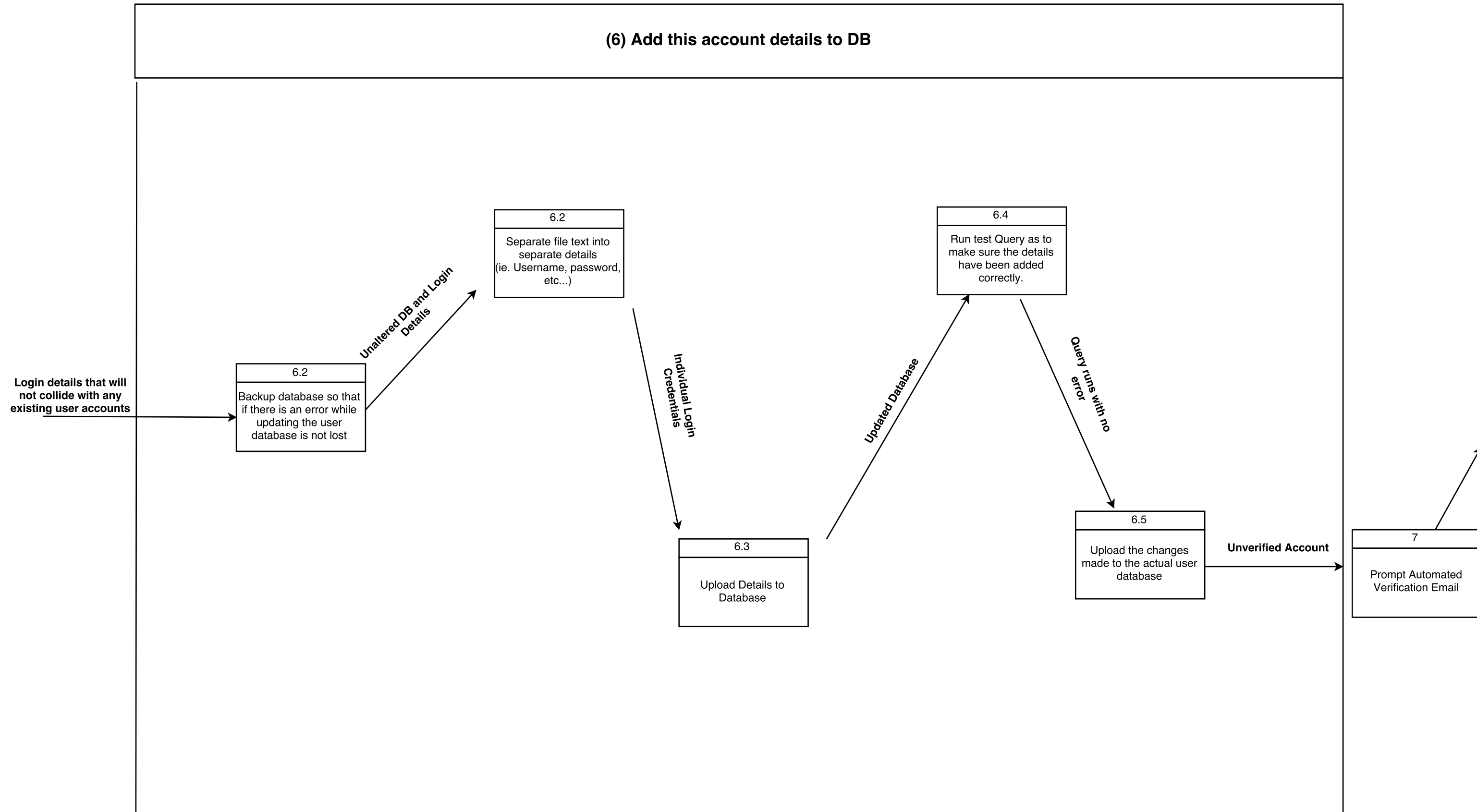
Physical Level 2



Physical Level 2 - Logical



Physical Level 2 - Logical



Function 1: Add this account details to DB

This function is used in order to add a new user's account details to the database without any irreversible damage to the database itself. First the database is backed up so that if there is somehow an error, (despite there being methods to prevent this) mistakes can be undone. Then the encrypted txt file that carries important private login details is unencrypted and normalized into a form that will work in the database. Then the user's login settings are appended. In order to double check no errors have been made the database is saved and a test query is ran to make sure the new users details have actually been appended. If there is an error then the backup is restored and the user is asked to fill in their details again.

Function 2: Prompt Payment Form

This function first lets the user choose which subscription suits them. Then a third party payment site (eg. xsolla) is used to carry out all of the payments securely and for convenience. If the payment is successful, then the third party invoice is converted into Ceol's personalized invoice format. Then the customer is notified their payment was processed successfully and they are given the chance to print their invoice. Then their specific details are forwarded off to another process to alter the "Subscribed" status to "True" in the Account Database, so that the user can access all subscriber benefits.

Entity Description

Name	Entity ID	Description
Account Database	B	This entity is where every user's login credentials are stored. Altering this allows us to add new users or delete accounts if requested. Subscription status is also recorded in this database.

Dataflow

Data Flow Title	Origin	Destination	Data content	Comments
Forward key words and tags to database.	1 - (Turn searched string into keyword and tags)	2 - (Query database for all relevant songs)	Array of tags and keywords generated by breaking down the original string.	
7 - (Prompt automated verification email)	[B] Account Database	[A] User	Email verification link.	

Dataflow

User				
Description: This is the details assigned to logged in user.				
Attribute		Primary Key	Foreign Key	Mandatory/ Optional
Account no.		X		Mand
UserName			X	Mand
Password			X	Mand
Subscription Status			X	Mand
Library no.		X		Mand
Region				Opt
Must/Maybe	Either/ Or	Link Phrase	One and only/ maybe more	Entity Name
Must			One	Account DB
User			Access	
User			Read, Write, Delete	