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Group Information

Member name	Percent contribution	Activities completed by the member
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Jonathan Brown	33%	1,3,8
Sarah Paulsen	33%	1,2,5,8
Total	100%	

Evaluation Summary

Section	Target %	Comments	Evaluation
Goal model	60		
Positioning	10		
Stakeholder	10		
Introduction	10		
Fit & finish	10		
Total	100		

Evaluation Guidelines (M1)

1. Goal model
    a. Goals shall be in the form of goal pattern (achieve, avoid, cease, maintain)
    b. Goals shall be structured as a tree (or hierarchy)—indicated with TOC numbering (e.g., 1, 1.1, 1.1.1) or graphically.
    c. Both soft goals (non-functional, qualities) and functional goals shall be represented
    d. Goals shall mainly concern the how the system meets users needs, and less about how the system is implemented (e.g., protocols, frameworks, programming languages)
2. Positioning
    a. This section shall be completed according to IBM Rational guidelines. Complete all columns in the table.
3. Stakeholder
    a. This section shall be completed according to IBM Rational guidelines. Complete all columns in the table.
4. Introduction
    a. Use the IBM Rational template as guide. Complete sufficient information to enable an executive to understand the purpose of the document and an overview of your system.
5. Professionalism
    a. Ensure spelling, grammar, font, style, and overall look of the document is unquestionably professional.
    b. Do not include IBM Rational guidance (the blue text) or sample text
    c. Do not delete section headings. Leave the sections blank if so desired.
    d. Place your names in section 1.5.

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Evaluation Summary (M1)

Section	Target %	Comments	Evaluation
Goal model	60		
Positioning	10		
Stakeholder	10		
Introduction	10		
Professionalism	10		
Total	100	Good	**0**

Evaluation Summary (M2)

Section	Target	Comments	Exal
Update (repair) of the prior Vision Document	10		
Context diagram	5		
Workflow (BPMN) diagram • Some actions in the BPMN are the use cases you specify	10		
Use case diagram Showing which actors can access which use cases	10		
Use cases • Ensure traceability to goals • Clearly written • Summary, sequence of events, Exceptions/Alternative sections	45		
Professionalism	10		
Fit & finish	10		
Total	100		**0**

Evaluation Summary (M3)

Section	Percent	Comments	Eval
Update (repair) of the prior Vision Document	25		
Class diagram • Min of 10 • Specify all attributes, operations, and associations (including multiplicity)	45		
Storyboard for 1 use case	20		
Professionalism	10		
Extra credit (max is 10%)			
Total	**100**		**0**

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DeKalb County Public Library Mobile Application Vision

Version 1.4

Revision History

Date	Version	Description	Author
22/1/14	1.0	IBM Rational Template downloaded Positioning Section filled out	Jonathan Brown Darrell Hareford Sarah Paulsen
5/2/14	1.1	Goals Section filled out	Jonathan Brown Darrell Hareford Sarah Paulsen
17/2/14	1.2	Sections 1 – 5 completed	Jonathan Brown Darrell Hareford Sarah Paulsen
25/3/14	1.3	Section 8 completed	Jonathan Brown Darrell Hareford Sarah Paulsen
2/5/14	1.4	Class Diagram and Sequence Diagram completed	Jonathan Brown Darrell Hareford Sarah Paulsen

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Table of Contents

1. Introduction 8
   - 1.1 Purpose 8
   - 1.2 Scope 8
   - 1.3 Definitions, Acronyms, and Abbreviations 8
   - 1.4 References 8
   - 1.5 Analyst Certifications 8
   - 1.6 Overview 8

2. Positioning 8
   - 2.1 Business Opportunity 8
   - 2.2 Problem Statement 9
   - 2.3 Product Position Statement 9

3. Stakeholder and User Descriptions 9
   - 3.1 Stakeholder Summary 9
   - 3.2 User Summary 10
   - 3.3 User Environnent 10

4. Product Overview 11
   - 4.1 Assumptions and Dependencies 11
   - 4.2 Licensing and Installation 11

5. Goal Model 12
   - 5.1 Mobile access to the DeKalb County Public Library Homepage 12
     - 5.1.1 When application is launched, then connect to DeKalb County Public Library (DCPL) mobile homepage 12
     - 5.1.2 When DCPL mobile homepage accessed, then enable database queries 12
     - 5.1.3 When mobile site opens, always show login dialog 12
     - 5.1.4 When user leaves session, then auto log out and close window 12
   - 5.2 Allow secure login 12
     - 5.2.1 When credentials not authenticated, then do not allow user to reserve or renew books or other materials 12
     - 5.2.2 When credentials authenticated, then allow full access to DCPL database and mobile homepage functions 12
     - 5.2.3 When login ID and password are incorrect, then always show access denied screen with login menu for re-attempt of login 12
     - 5.2.4 Maximum login attempts limited to 5 before requirement of login password change 12
     - 5.2.5 Maximum idle time limited to 30 minutes on mobile website before auto logout 12
     - 5.2.6 Minimum password length required will be 8 characters including 1 capital letter and 1 number 12
   - 5.3 Secure Account details 12
     - 5.3.1 When user requests account termination, then remove account ID, account password, and delete all user history and information 12
     - 5.3.2 When primary card holder request de-linking of accounts, then remove account links (require de-linked account to create new separate account 12
   - 5.4 Mobile application should support existing library homepage functions 12
     - 5.4.1 When user is logged in, then allow user to reserve and renew books 12
     - 5.4.2 When more than 1 item overdue, then do not allow additional reservation requests 12
     - 5.4.3 When user is logged in, maintain current account details by refreshing 12

5.4.4 When user is logged in, then allow user to subscribe to podcasts 12
5.4.5 When user is logged in, then allow user to pay fines 12
5.4.6 When user is logged in, then allow user to view currently checked-out books and their corresponding due dates 12
5.4.7 When user is logged in, then allow user to view reserved books and their locations 12
5.5 Maximize Search Function 12
5.5.1 When user selects search link, then open search field and allow user to select search criteria 12
5.5.2 When search criteria displayed, then allow user to search by keyword/title/author or search within categories including popular titles, kids' titles, DVD/audio titles, or newspaper/magazine titles 12
5.5.3 When user initiates a search, do not display results with less than a 50% match 12
5.5.4 When displaying search results, always display book or media title, author, and copyright date 12
5.5.5 When user selects a search result, then display a summary of the book or media item and a list of locations where the item is available for check-out 12
5.6 Physical Location Search 12
5.6.1 When branch locator hyperlink clicked, then system identifies user location 13
5.6.2 If system cannot identify location, then system requests user location 13
5.6.3 When location identified, then system provides map of closest locations 13
5.6.4 When location icon clicked, then system provides directions to selected location from current location 13
5.6.5 When all branch locations hyperlink clicked, then system provides map of all locations 13

6. Constraints 13

7. Precedence and Priority 13

8. Use-Case Model 13
8.1 System Context Diagram 13
8.2 Use Case Diagram 13
8.3 Goal Use-Case Traceability 14
8.4 Business Process Model Diagram 15
8.5 Use-Case 001_Join Podcasts 15
8.6 Use-Case 002_View Checked-Out Books 16
8.7 Use-Case 003_Pay Fines 16
8.7.1 Sequence Diagram 17
8.8 Use-Case 004_Select Search 18
8.9 Use-Case 005_Display Search Results 19
8.10 Use-Case 006_Display Media Summary 19
8.11 Use-Case 007_Get Directions 20
8.12 Use-Case 008_Show All Locations 20
8.13 Use-Case 009_Identify Location 20
8.14 Object Model 21
8.14.1 Class Diagram 21
8.14.2 State Diagrams [GSU.CIS:Optional] 22

9. Design Model [GSU.CIS:Only for design course] 22

10. Stakeholder Requests 22

Vision

1. Introduction

The purpose of this document is to collect, analyze, and define high-level needs and features of the DeKalb County Public Library Mobile Application (DLibApp). It focuses on the capabilities needed by the stakeholders and the target users, and why these needs exist. The details of how the DLibApp fulfills these needs are detailed in the use-case and supplementary specifications.

1.1 Purpose

The purpose of this Vision document is to determine the Scope, Stakeholder and User needs, and Goals of the DLibApp. This documents constitutes an agreement between the Stakeholders/Customers and the Developers about the specifications of the DLibApp.

1.2 Scope

The Scope of this Vision document includes the identification of Stakeholders and their needs, as well as the high-level goals and sub goals that the DLibApp will fulfill.

1.3 Definitions, Acronyms, and Abbreviations

DeKalb County Public Library Mobile Application – DLibApp
Operating System -- OS

1.4 References

1.5 Analyst Certifications

We, **Jonathan Brown, Darrell Hareford, Sarah Paulsen**, have analyzed these documents and believe that they:

- Comply with current UML syntax and best practices.
- Are internally consistent
- Meet the stakeholder needs, as we understand them

1.6 Overview

2. Positioning

2.1 Business Opportunity

In today's fast-paced society, many people rely on applications on their smartphones to schedule and keep on top of their activities and responsibilities. People use their smartphones for research (Google Search), to socialize (Facebook, Twitter, Instagram, etc.), to entertain (YouTube, games, music, movies, etc.), and much more. Every day, new apps become available for download, each seeking to fulfill an unmet need. One of these unmet needs is the ability to effectively use the functionalities of the DeKalb County Public Library's website with a mobile device. Most commercial bookstores have mobile applications to make it easy for customers to find and purchase books and other media on the go. In order for the DeKalb County Public Library to meet customer needs, they will need to do the same.

The DLibApp will allow library members improved access to the DeKalb County Library and its services. Previously, members could only check out books in person. Members could only access the DeKalb County Library homepage from their home computer or at a library branch. Books could not be renewed or placed on hold without calling the correct library branch and speaking to a librarian. The DLibApp will be the first mobile application to support a public library in Georgia. This will increase the appeal of the DeKalb County Public Library and increase membership. Because the DLibApp will allow members access to books and media at all branch locations for free, the DeKalb County Public Library will meet more customer needs.

The DLibApp provides a mobile application for users to search for, reserve, renew, and locate books, videos and other documents and media available for checkout from Georgia's DeKalb County Public Library. This new mobile application will allow the DeKalb County Public Library to satisfy customer needs in today's technologically-savvy society.

2.2 Problem Statement

The problem of	Offsite determination of availability and location of resources at the DeKalb County Public Library
affects	Georgia taxpayers and library members and staff
the impact of which is	Library members do not have mobile access to the DeKalb County Public Library's system in order to search for, reserve, renew, and locate books and other media available for checkout. The library system must adapt to a more mobile society.
a successful solution would be	• Development of a mobile application designed for the smaller screens of mobile devices to access the DeKalb County Public Library database • Provide access to the DeKalb County Public Library resources with a minimum of key strokes or "taps". • Allow reservations and search through entire network of DeKalb County Public Library.

2.3 Product Position Statement

For	DeKalb County Public Library members
Who	Who need easier access to their library accounts and the DeKalb County Public Library's resources
The DLibApp	is a Mobile Application
That	Provides mobile access to the free books and media available from the DeKalb County Public Library.
Unlike	Main web site designed for larger screens and high speed DSL / Cable access
Our product	Designed to reduce access time and work with smaller mobile devices. Formatting will be designed for mobile screens

3. Stakeholder and User Descriptions

3.1 Stakeholder Summary

Name	Description	Responsibilities
Application Developer	The application developer assists in development of the DeKalb County Public	The application developer is responsible for programming and debugging of the application.

	Library Mobile Application.	
Tax Payers	Tax payer's money helps fund the development and upkeep of the application.	Taxpayers fund government projects like the DeKalb County Public Library Mobile Application.
IT Manager	IT Managers are in charge of managing the application developers.	The IT Manager makes sure that the project is on time, on budget, and that it meets requirements.

3.2 User Summary

Name	Description	Responsibilities	Stakeholder
Library Members	Library members who use the application to look for materials, put materials on hold, and renew checked out materials.	Library members need to check for available books and media, put wanted materials on hold, and to renew books that they want to keep longer.	Stakeholder is directly represented.
Library Staff	Library staff that are in charge of checking in or out of books and media, renewing materials, and putting materials on hold.	Update the system when books or media are turned in, renewed, or put on hold.	Stakeholder is directly represented.

3.3 User Environnent

Need	Priority	Concerns	Current Solution	Proposed Solutions
Post updated information system hourly.	Medium	System is not updated regularly. Information provided is not accurate.	Library staff checks books and media in and out. Have to put material on hold with customer request. Renew materials for customers when the customers are present.	Library staff checks books and materials in and out. Library members use application to automatically hold or renew books and media.
Renew or hold books and media without having to travel to the library.	High	Library members do not want to travel to library for the sole purpose of putting materials on	Library members have to visit the library to renew the books and media that they have checked out. They have to do the same to ask for books and media to	Library members use the application to renew checked out material and to put material on hold from anywhere.

		hold or to renew checked out materials.	be put on hold.	

4. Product Overview

DLibApp will provide a mobile user interface to the DeKalb County Library System. This functionality will add a user experience previously unavailable. Utilization of library resources will be enhanced as a result of adding an additional "frictionless" method to access resources from anywhere.

4.1 Assumptions and Dependencies

Since DLibApp is a web based application targeted at mobile devices it is assumed that the user will have an internet connection through either Wi-Fi or a mobile service provider.

The DLibApp under this current development will operate on Apple mobile OS and Android mobile OS. Other OS are not supported at this time.

4.2 Licensing and Installation

System will support and use standard password security methods to access account

5. Goal Model

5.1 Mobile access to the DeKalb County Public Library Homepage

5.1.1 When application is launched, then connect to DeKalb County Public Library (DCPL) mobile homepage

5.1.2 When DCPL mobile homepage accessed, then enable database queries

5.1.3 When mobile site opens, always show login dialog

5.1.4 When user leaves session, then auto log out and close window

5.2 Allow secure login

5.2.1 When credentials not authenticated, then do not allow user to reserve or renew books or other materials

5.2.2 When credentials authenticated, then allow full access to DCPL database and mobile homepage functions

5.2.3 When login ID and password are incorrect, then always show access denied screen with login menu for re-attempt of login

5.2.4 Maximum login attempts limited to 5 before requirement of login password change

5.2.5 Maximum idle time limited to 30 minutes on mobile website before auto logout

5.2.6 Minimum password length required will be 8 characters including 1 capital letter and 1 number

5.3 Secure Account details

5.3.1 When user requests account termination, then remove account ID, account password, and delete all user history and information

5.3.2 When primary card holder request de-linking of accounts, then remove account links (require de-linked account to create new separate account

5.4 Mobile application should support existing library homepage functions

5.4.1 When user is logged in, then allow user to reserve and renew books

5.4.2 When more than 1 item overdue, then do not allow additional reservation requests

5.4.3 When user is logged in, maintain current account details by refreshing

5.4.4 When user is logged in, then allow user to subscribe to podcasts

5.4.5 When user is logged in, then allow user to pay fines

5.4.6 When user is logged in, then allow user to view currently checked-out books and their corresponding due dates

5.4.7 When user is logged in, then allow user to view reserved books and their locations

5.5 Maximize Search Function

5.5.1 When user selects search link, then open search field and allow user to select search criteria

5.5.2 When search criteria displayed, then allow user to search by keyword/title/author or search within categories including popular titles, kids' titles, DVD/audio titles, or newspaper/magazine titles

5.5.3 When user initiates a search, do not display results with less than a 50% match

5.5.4 When displaying search results, always display book or media title, author, and copyright date

5.5.5 When user selects a search result, then display a summary of the book or media item and a list of locations where the item is available for check-out

5.6 Physical Location Search

5.6.1 When branch locator hyperlink clicked, then system identifies user location

5.6.2 If system cannot identify location, then system requests user location

5.6.3 When location identified, then system provides map of closest locations

5.6.4 When location icon clicked, then system provides directions to selected location from current location

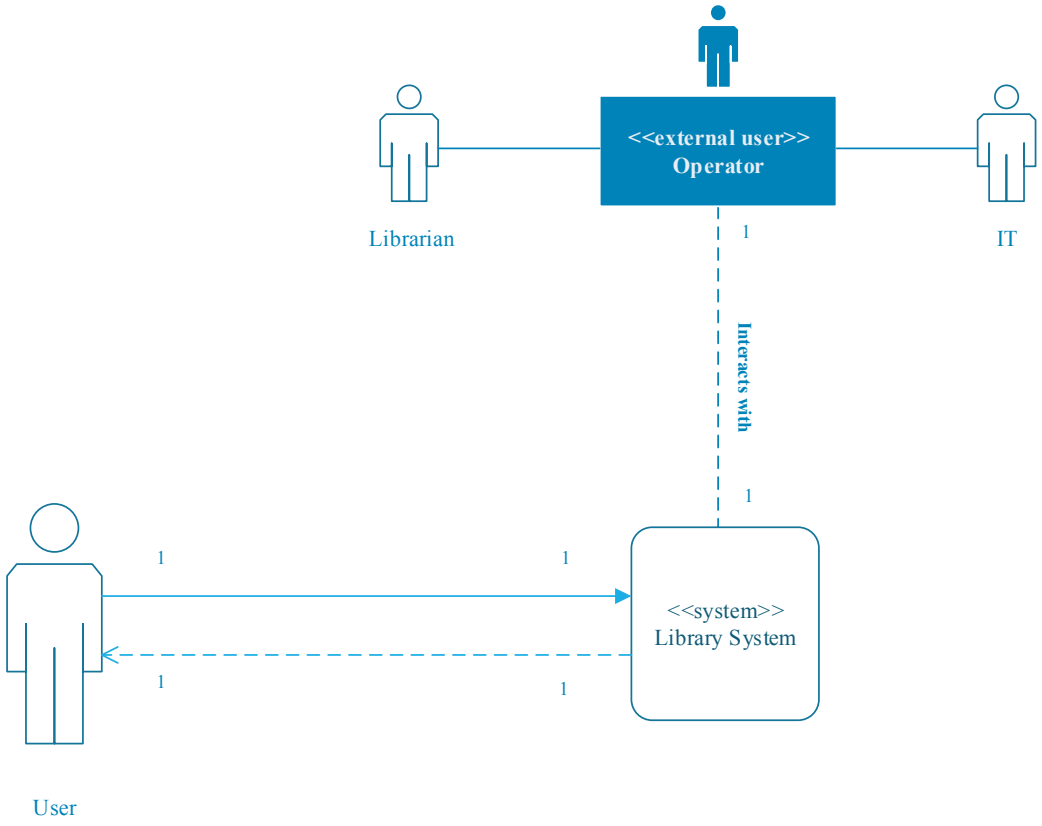
5.6.5 When all branch locations hyperlink clicked, then system provides map of all locations

6. Constraints

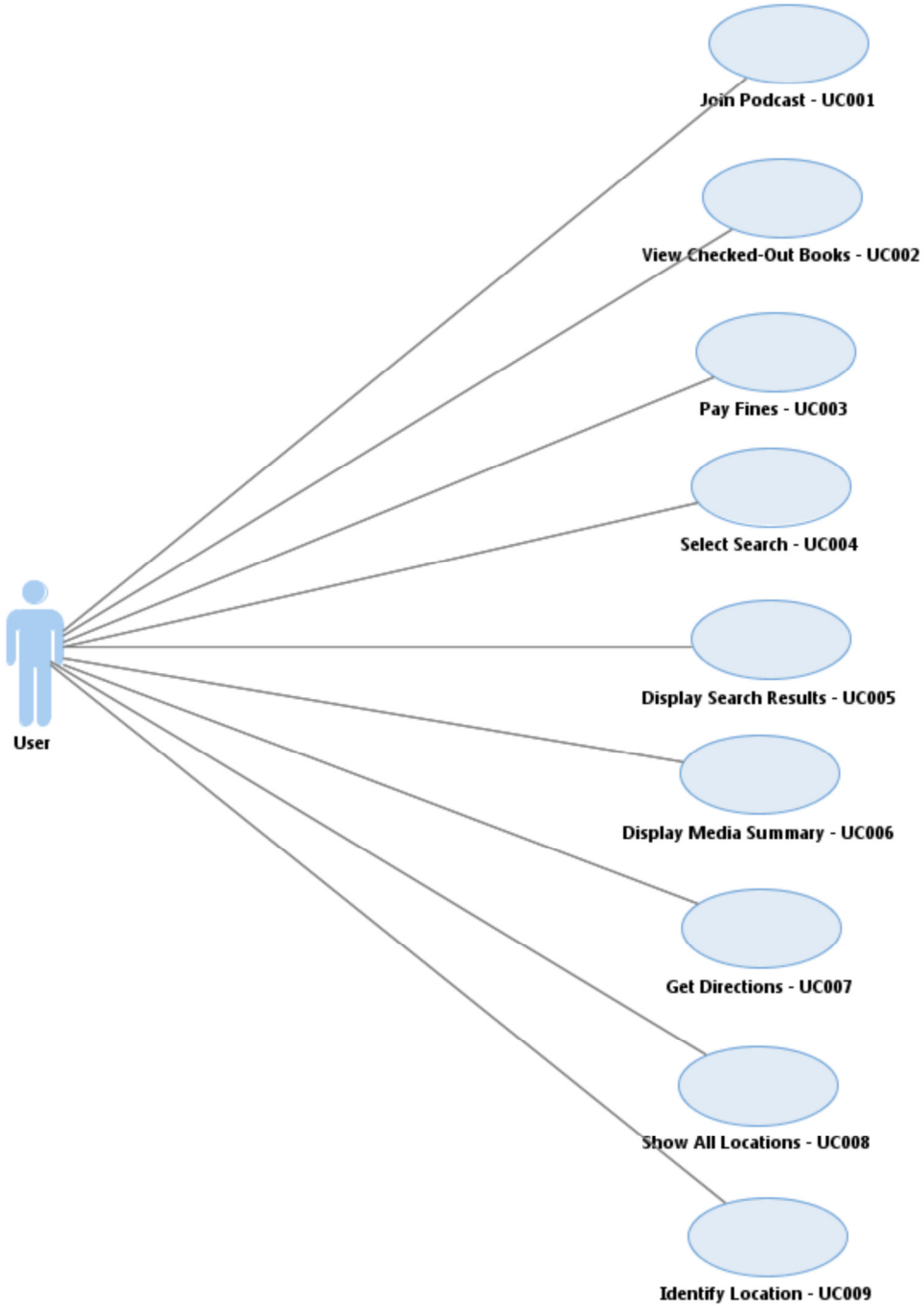
7. Precedence and Priority

8. Use-Case Model

8.1 System Context Diagram



8.2 Use Case Diagram

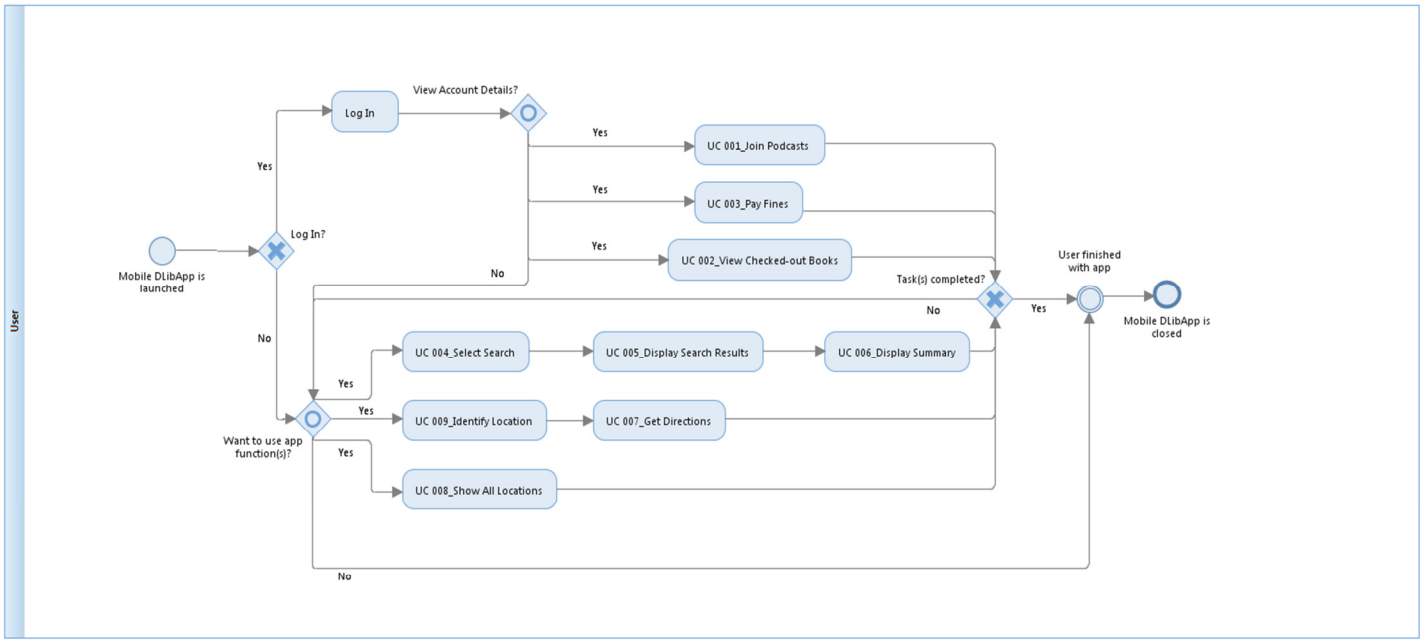


8.3 Goal Use-Case Traceability

	Goal 5.4.4	Goal 5.4.5	Goal 5.4.6	Goal 5.5.1	Goal 5.5.4	Goal 5.5.5	Goal 5.6.1	Goal 5.6.2	Goal 5.6.3	Goal 5.6.4	Goal 5.6.5
UC 001	X										
UC		X									

002											
UC 003			X								
UC 004				X							
UC 005					X						
UC 006						X					
UC 007										X	
UC 008											X
UC 009							X	X	X		

8.4 Business Process Model Diagram



8.5 Use-Case 001_Join Podcasts

Actor(s): User
Goal: 5.4.4 When user is logged in, then allow user to subscribe to podcasts
Brief Description: User finds a podcast and subscribes
Pre-condition: User is logged in
Post-condition: User subscribed to podcast.

Actor	System
1. User clicks on podcasts hyperlink	2. System processes request and displays podcasts

	list
3. User selects desired podcast	4. System opens podcast 5. System displays subscribe hyperlink beneath podcast
6. User clicks subscribe hyperlink	7. System displays “Subscribe to podcast?” message
8. User clicks OK	9. System adds user to subscription list and displays confirmation
Alternative	
A. 8. User clicks Cancel	9. System displays “Subscribe to another podcast?” message
10. User clicks No	11. System returns to podcast list
B. 10. User clicks Yes	12. System returns to podcast list
13. User selects desired podcast	14. Return to step 4. in main flow

8.6 Use-Case 002_View Checked-Out Books

Actor(s): User
Goal: 5.4.6 When user is logged in, then allow user to view currently checked-out books and their corresponding due dates
Brief Description: User views account details including currently checked-out books
Pre-condition: User has successfully logged in
Post-condition: User is able to view books they checked out.

Actor	System
1. User clicks on My Account hyperlink	2. System accesses account information 3. System displays account details
4. Actor clicks on checked-out books	5. System accesses Actor's checked-out book list and due dates 6. System displays Actor's checked-out book list and due dates
Alternative	
4. User clicks home hyperlink or phone’s built-in back button	5. System displays homepage

8.7 Use-Case 003_Pay Fines

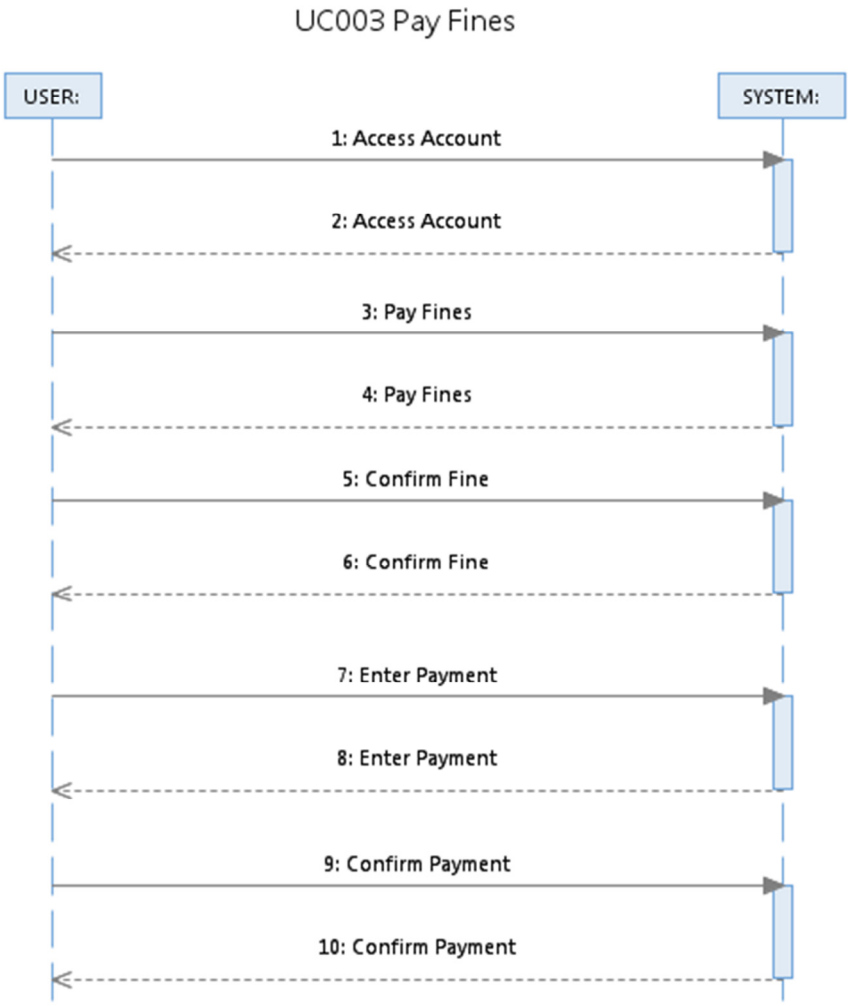
Actor(s): User
Goal: 5.4.5 When user is logged in, then allow user to pay fines
Brief Description: User pays fines

Pre-condition: User has successfully logged in
Post-condition: System confirms fines payed

Actor	System
1. User clicks on My Account hyperlink	2. System accesses account information and displays account information
3. User selects Pay Fines	4. System accesses user's account information and displays fines 5. System displays “Pay Fines Now?” message
6. User clicks OK	7. System displays “Enter Payment Information” message and fields
8. User enters payment information	9. System confirms payment details 10. System updates account information 11. System displays payment confirmation and current fine balance
Alternative	
A.	9. System displays “Error with payment method. Try again?” message
10. User clicks Yes and re-enters payment information	11. Return to step 9. in main flow
B. 10. User clicks No	11. System cancels payment transaction 12. System returns to My Account page and displays account details

8.7.1 Sequence Diagram

Use-Case 003_Pay Fines



8.8 Use-Case 004_Select Search

Actor(s): User
Goal: 5.5.1 When user selects search link, then open search field and allow user to select search criteria
Brief Description: User selects search criteria to refine search
Pre-condition: DlibApp is launched
Post-condition: Search field is displayed

Actor	System
1. User clicks on search hyperlink	2. System processes request and displays available search criteria
3. User selects search category from displayed list	4. System processes selection and displays search field
Alternative	
3. User clicks back hyperlink or taps phone's built-	4. System stops search request and displays

in back button	homepage

8.9 Use-Case 005_Display Search Results

Actor(s): User
Goal: 5.5.4 When displaying search results, always display book or media title, author, and copyright date
Brief Description: User runs search and sees results
Pre-condition: User has selected search category and typed information into the search field
Post-condition: System displays search results

Actor	System
1. User clicks search button	2. System processes search
	3. System displays matches' title, author, and copyright date
Alternative	
	3. System displays “No results found” message
4. User clicks “OK”	5. System displays search dialog

8.10 Use-Case 006_Display Media Summary

Actor(s): User
Goal: 5.5.5 When user selects a search result, then display a summary of the book or media item and a list of locations where the item is available for check-out
Brief Description: User requests more information on items in search results
Pre-condition: Search results are displayed
Post-condition: System displays summary and location details

Actor	System
1. User selects a search result	2. System displays a plot summary or item description
	3. System displays list of locations where item is available for check-out
Alternative	
A.	3. System displays “Not available for check-out” message
4. User clicks back button or “OK”	5. System displays search results
B.	3. System displays “Not available for check-out” message
4. User selects “Expand location search”	5. System displays locations farther away that have the item available for check-out

8.11 Use-Case 007_Get Directions

Actor(s): User
Goal: 5.6.4 When location icon clicked, then system provides directions to selected location from current location
Brief Description: User requests directions to nearest location
Pre-condition: DlibApp is launched
Post-condition: Directions provided to user selected location

Actor	System
1. User clicks location icon	2. System responds with “From current location?” dialog box
3. User clicks “OK”	4. System responds with highlighted map and directions
Alternative	
3. User clicks “Don’t Allow”	4. System removes dialog box and current location 5. System displays map of nearest locations

8.12 Use-Case 008_Show All Locations

Actor(s): User
Goal: 5.6.5 When all branch locations hyperlink clicked, then system provides map of all locations
Brief Description: User initiates show all locations
Pre-condition: DlibApp is launched
Post-condition: All locations displayed

Actor	System
1. User clicks 'Show all locations' hyperlink	2. System responds with map of all location icons
Alternative	
	2. System times out
3. User clicks 'Cancel'	4. System returns to and displays homepage

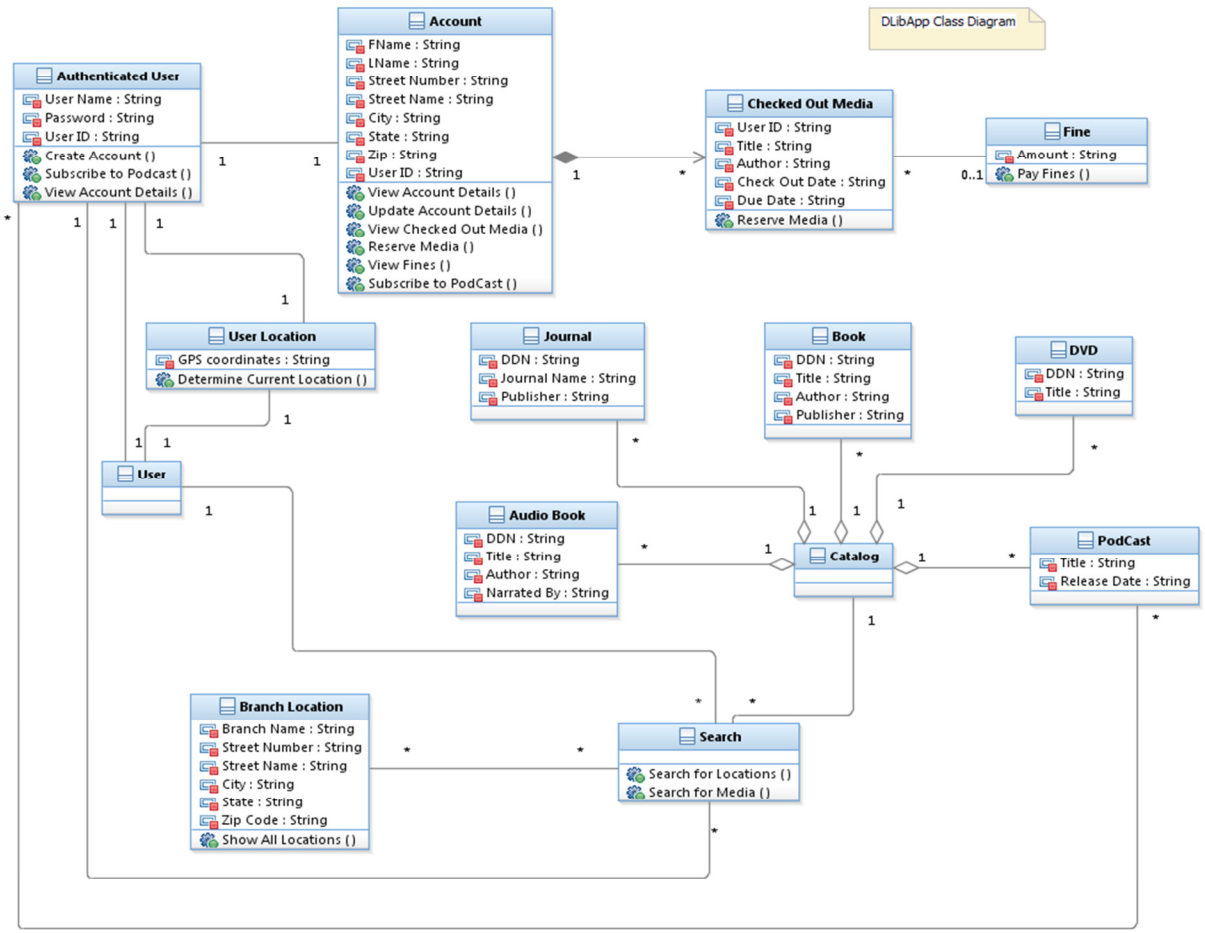
8.13 Use-Case 009_Identify Location

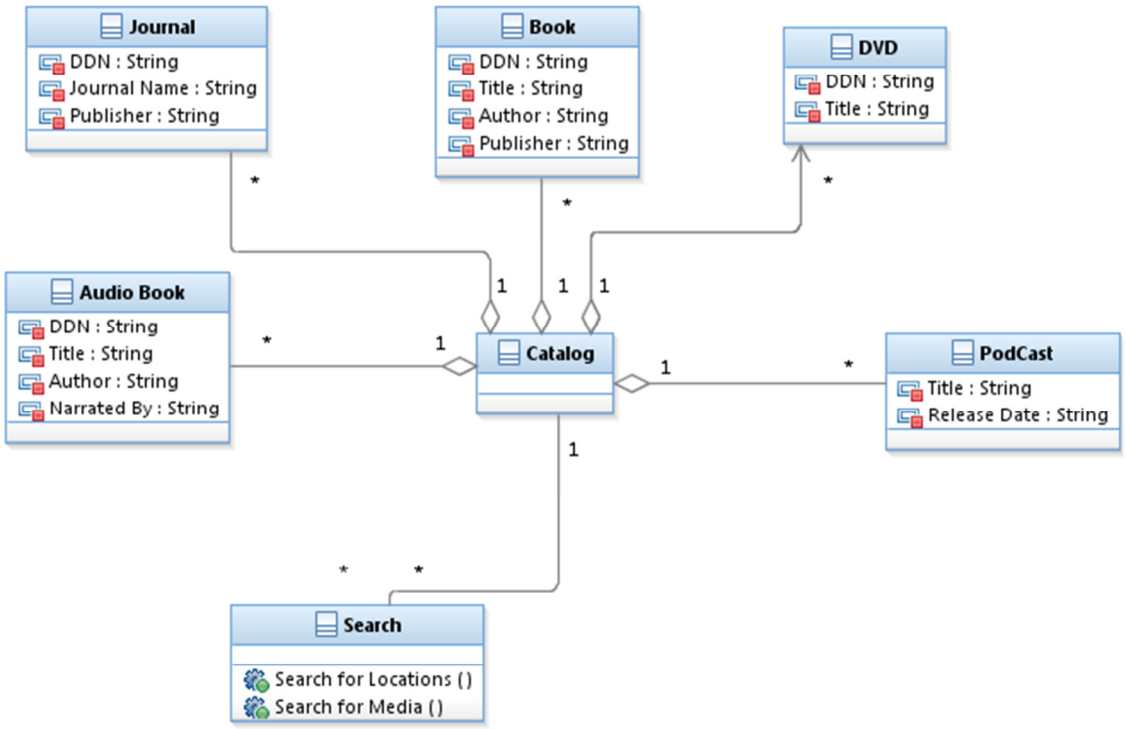
Actor(s): User
Goals: 5.6.1 When branch locator hyperlink clicked, then system identifies user location
5.6.2 If system cannot identify location, then system requests user location
5.6.3 When location identified, then system provides map of closest locations
Brief Description: User initiates location search and sees map of nearest locations
Pre-condition: User has launched DlipApp
Post-condition: User location identified

Actor	System
1. User clicks location hyperlink	2. System accesses GPS and/or cell signal triangulation to identify location
	3. System displays map with current user's location and nearest branch locations
Alternative	
1. User clicks location hyperlink	2. System responds with “Location unavailable” and requests user input of current location
3. User inputs necessary information such as street name, city, and/or zip code	4. System responds with display of map with user's location and nearest branch locations

8.14 Object Model

8.14.1 Class Diagram





8.14.2 State Diagrams [GSU.CIS:Optional]

9. Design Model [GSU.CIS:Only for design course]

10. Stakeholder Requests