Team: Paul Boschert, Teresa Creech

Title: Tardis-box

Project Summary:

Tardis-box is a no-charge media distribution system. It will allow a guest to view and sort the available media and, if desired, create a member account using a valid email address. The member may delete this account, if all borrowed media has been checked in.

A member may view and sort the media with the option to check-out an item. If the requested media is unavailable, the request can be waitlisted to be checked out to the user as soon as it is available. The member may check-in media.

An administrator may view and sort the media. Only an admin can add and delete media. An administrator can delete a member account, if necessary and can handle overdue items.

Project Requirements:

Busine	Business Requirements								
ID	Requirement	Topic Area	User	Priority					
BR-01	Member usernames must be a valid e-mail address.	Accounts	Member	Medium					
BR-02	Only admin can add/delete media items.	Database	Admin	Medium					
BR-03	Guests can view available media without having to create an account or login.	Database	Guest	Critical					

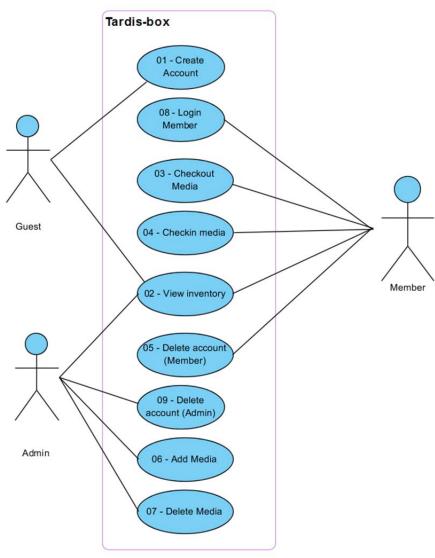
User Requirements						
ID	Requirement	Topic Area	User	Priority		
UR-01	Guest can request and create their own account	Accounts	Guest	Critical		
(Help Page)						

UR-02	Any user can view media list	Database	All	Critical
UR-03	A member can remove their account if certain conditions are met (e.g. no overdue items).	Accounts	Member	Medium
UR-04	A member can make a request to checkout media.	Database	Member	Critical
UR-05	A member can check-in media.	Database	Member	Critical
UR-06	An admin can delete an account	Accounts	Admin	Medium
UR-07	An admin can handle overdue items	Accounts	Admin	Medium

Function	Functional Requirements							
ID	Requirement	Topic Area	User	Priority				
FR-01	There must be a display of the media that shows the title and an associated picture.	Database	All	Critical				
FR-02	There must be a way to view details of a particular media item (besides just a picture and title) that shows a short description and possibly other details e.g. IMDB data).	Database	All	Medium				
FR-03	There must be a way to sort the media for display to the user.	Database	All	Medium				
FR-04	There must be a way to put media on a waitlist, if necessary.	Accounts	Admin	Medium				
FR-05	There must be a way to remove item from waitlist (and check it out to a requestor)		Admin	Medium				

Non-Functional Requirements						
ID	Requirement	Topic Area	User	Priority		
NR-01	Time to cycle from one page media titles to the next must be reasonable.	User Interface	All	Medium		
NR-02	Member credentials must be encrypted.	Accounts	Member	Low		
NR-03	Web pages need to be clearly worded and easy to navigate.	User Interface	All	Medium		

Users and Tasks:



Use Case ID:	UC-01	UC-01			
Use Case Name:	Create	Create Account			
Description:	Allow a	a guest to create a member account,	, which will allow member		
	access	to the database of items to check ou	ıt.		
Actor:	Guest				
Pre-conditions:	Membe	er database must exist			
Post-conditions:	Guest k	pecomes a Member			
Frequency of Use:	Unknov	wn, potentially 100% of guests			
Flow of Events:		Actor Action	System Response		
	1.	Guest visits homepage and clicks	Accesses the create account		
		on "create account" button	page		
	2.	Guest enters first and last names,	System verifies that the email		
		a valid email-id, enters a	is valid, creates entry in the		
		password, then presses "ok"	member database containing		
			this information. System		
			issues an "account created"		
			message		
Variations:	Guest enters an invalid email-id. System issues error message then clears				
	the create account page. Guest omits email-id and/or password – error				
	message issued screen cleared.				
Notes & Issues:					
Developer Notes:					

Use Case ID:	UC-02			
Use Case Name:	View In	ventory		
Description:		a guest or member to access the iter o scroll through and sort (by item n		
Actor:	All			
Pre-conditions:	Database exists with ability to sort and scroll, Guest/Member has accessed			
	the View Media page			
Post-conditions:	Database is scrolled and/or sorted			
Frequency of Use:	Arbitrary, depends on guest/member needs			
Flow of Events:		Actor Action	System Response	
	1.	Uses scroll bar	Moves list up or down,	
	depending on the direction			
	user is moving scroll bar			
	2.	Sort by clicking one of the column	Sorts the list using the	
		headers (once for ascending	selected column, either in	

	3.	order, twice for descending order) Double click item	ascending or descending order as indicated by the number of clicks. Displays additional
			information
Variations:			
Notes & Issues:	The check-in/out buttons will be grayed out when page is accessed from home page instead of the sign in page.		
Developer Notes:			

Use Case ID:	UC-03				
Use Case Name:	Check-	Check-out Media			
Description:	Membe	er may borrow an item if it is available	e (not already checked-out).		
Actor:	Membe	er			
Pre-conditions:	Membe	er is signed in and has accessed the V	iew Media page		
Post-conditions:	Item is	either checked-out to the member o	r has been placed on a waitlist		
	for the	member.			
Frequency of Use:	Arbitra	ry, estimated at least once per memb	per login.		
Flow of Events:		Actor Action	System Response		
	1.	Enters an item number into the check-out field, Clicks OK button	Checks to see if the item is available. If it is, the item is checked-out to the member. If not available, system issues message asking member if he wishes to add the item to the waitlist.		
	2.	Selects yes	Item is added to waitlist and system issues confirmation message.		
	3.	Selects no	System removes message		
Variations:	Issue error message if the item number is invalid.				
Notes & Issues:					
Developer Notes:					

Use Case ID:	UC-04		
Use Case Name:	Checkin Media		
Description:	Member returns an item which had been borrowed		

Actor:	Membe	er		
Pre-conditions:	The ite	m must already be checked-out, men	nber is logged in and has	
	accesse	ed the view items page		
Post-conditions:	The ite	m is available for check-out		
Frequency of Use:	Done fo	or up to 100% of items borrowed, est	imate many times daily	
Flow of Events:		Actor Action	System Response	
	 2. 3. 	Enters item number in the check- in field, presses OK	System makes item available for check-out, updates item list, and removes it from the member's account. Issues a "check-in successful" message. If item is on waitlist, system checks it out to the next user who requested the item. If item is not on waitlist, system makes item available for general checkout	
Variations:				
	displayed for each error and the check-in field is cleared.			
Notes & Issues:				
Developer Notes:				

Use Case ID:	UC-05			
Use Case Name:	Delete	Account (Member)		
Description:	Membe	er may delete account as long as all it	ems have been checked-in	
Actor:	Membe	er		
Pre-conditions:	Must be on login page			
Post-conditions:	Account no longer exists			
Frequency of Use:				
Flow of Events:		Actor Action	System Response	
	1.	Enters email-id and password	Verifies information	
	2.	Clicks on Delete button	Verifies that no items are	
	checked-out, removes account			
	and issues confirmation email			
Variations:	Email-id and/or Password invalid – system issues error message and clears			
	screen			
	Items checked out – system issues message instructing Member to return			

	items before account can be deleted		
Notes & Issues:			
Developer Notes:			

Use Case ID:	UC-06			
Use Case Name:	Add media			
Description:	A new	media item can be added to the syste	em.	
Actor:	Admin	Admin		
Pre-conditions:	The me	The media item must not already exist.		
Post-conditions:	The new media item was added and is available for checkout.			
Frequency of Use:	Arbitrary, anytime an admin needs to add media. Est: weekly			
Flow of Events:		Actor Action	System Response	
	1.	Log in to Tardis-box	User credentials are verified	
	2.	Click on administrator panel	Administrative options are	
			displayed	
	3.	Click on media sub-panel	A list of media actions is	
			displayed	
	4.	Click on add media	The media entry form is	
			displayed	
	5.	Enter media details; click submit	The new media item is added	
Variations:				
Notes & Issues:				
Developer Notes:				

Use Case ID:	UC-07		
Use Case Name:	Delete media		
Description:	A media item needs to be removed from the system.		
Actor:	Admin		
Pre-conditions:	The media item must exist.		
Post-conditions:	The media item deleted no longer exists in the system.		
Frequency of Use:	Arbitrary, anytime an admin needs to delete media. Est: weekly		
Flow of Events:		Actor Action	System Response
	1.	Log into Tardis-box	User credentials are verified
	2.	Click on administrator panel	Administrative options are

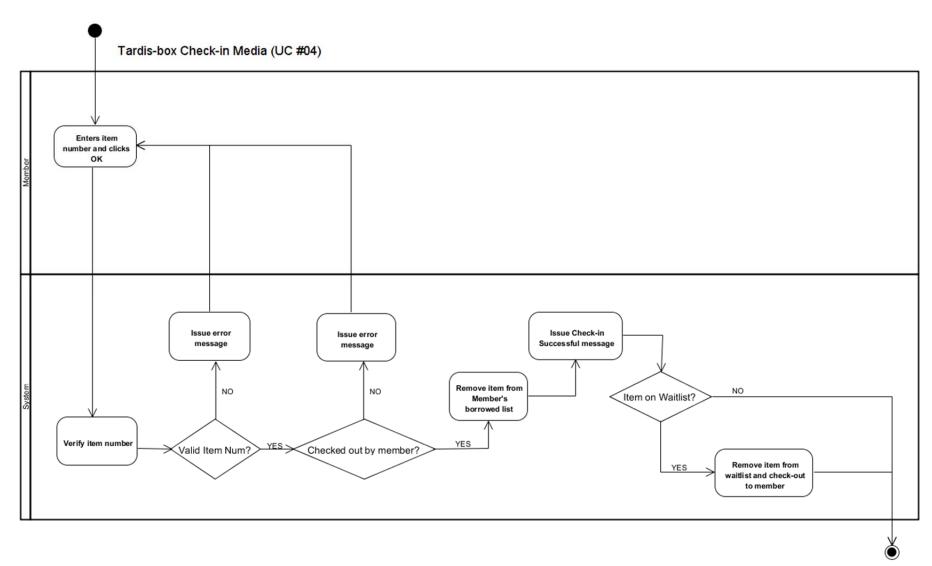
			displayed
	3.	Click on media sub-panel	A list of media actions is
			displayed
	4.	Click on delete media	A list of available media items
			is displayed
	5.	Select the media item; click delete	The media item is deleted
Variations:			
Notes & Issues:			
Developer Notes:			

Use Case ID:	UC-08			
Use Case Name:	Login Member			
Description:	A member may login to account			
Actor:		Member		
Pre-conditions:	Member is on login page			
Post-conditions:	Memb	Member is logged in		
Frequency of Use:				
Flow of Events:		Actor Action	System Response	
	2.	Enter email-id and password, clicks on Login button	Verifies information, if account is an admin account, the system will go to the admin page. Members are logged in and sent to view items page If waitlisted item is now	
			available, system displays message indicating that the item is available for check-out and will be deleted from the waitlist (checkout is in different UC table)	
Variations:	Email-id and/or Password invalid – system issues error message and clears screen			
Notes & Issues:				
Developer Notes:				

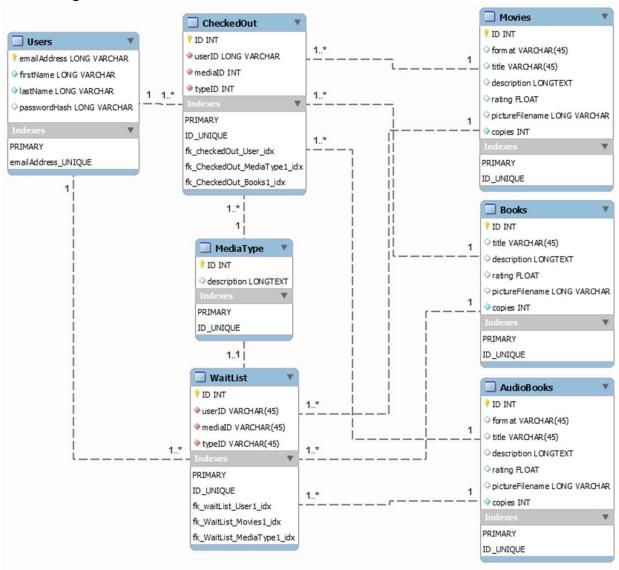
Use Case ID:	UC-09
Use Case Name:	Delete account (Admin)

Description:	Administrators can remove user accounts			
Actor:	Admin			
Pre-conditions:	The use	The user that needs to be deleted exists.		
Post-conditions:	The deleted user no longer exists.			
Frequency of Use:	Arbitrary, anytime a user needs to be removed by an administrator. Est:			
	monthly.			
Flow of Events:		Actor Action	System Response	
	1.	Log in to Tardis-box	User credentials are verified	
	2.	Click on administrator panel	Administrative options are	
			displayed	
	3.	Click on user sub-panel	A list of users is displayed	
	4.	Select a user	The user is highlighted	
	5.	Click the remove icon	The user is removed	
Variations:				
Notes & Issues:				
Developer Notes:				

Activity Diagram:



Data Storage:



UI Mockups:

<u>In separate document, will be merged later</u>

User Interactions:

TODO

Class Diagram:

TODO