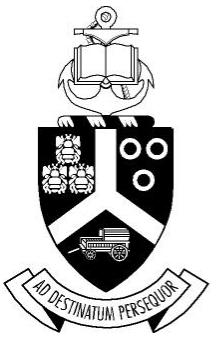

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

COS 301

Department Of Computer Science

Phase 1 Mini Project

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February 27, 2015

1 System Overview

The BuzzSystem aims to enhance the learning process by providing a platform in which Lecturers, Tutors and Students can discuss concepts covered in class in a more user friendly manner which is appealing to students; consequently this will deepen their understanding of the concepts and improve their overall performance.
This is achieved by introducing social networking elements such as tagging and gaming abilities such as earning points, because of these introductions the system will not only encourage competitiveness but also provide reporting functionalities which will indicate the performance of individual users and the system as a whole.

https://bitbucket.org/cos301group7_brequirements/phase1

2 Functional requirements and application design

2.1 Use case prioritization

Critical

- UserManagement
- Posting
- BuzzSpace

Important

- Category
- Vote
- Important

Nice to Have

- tagging
- Rewarding

2.2 Use case/Services contracts

Use Cases

Theme: Category	Functions	List Description	Pre-Condition	Post-Condition
Categories are used to group content and they are created/ accessed by users with appropriate user authorisation e.g Lecturers. It also facilitates searching.	Create a Category	Add a category to the system	The category must not be in the system	A new category is added to the system
	Deleting a Category	Locate category in the system , Remove category from the	The category must exist in the system	Category removed from the system
	Edit Categories	Access the category and make desired changes, save the	The category must exist in the system	An updated category is added to the system

Theme: User Management	Functions	List Description	Pre-Condition	Post-Condition
Manage the users of the system and keeps track of their overall participation and rates/ranks them accoording to their participation. Every user will have different cabalities depending on their level	Assign UserLevel	Get UserPoints , Check the UserLevel database in the system and assign a user to a level that corresponds to their points.	User must be logged in and exist i.e is not a guest	User is assigned to a UserLevel
	Promote User	Get UserLevel andUserPoints, If the user's points have increased,promote user to a higher level if their points correspond to that level.	User is logged and is not a guest User.	The user will be promoted to a higher level.
	Demote user	Get UserLevel andUserPoints, If the user's points have	User is logged and is not a guest User.	The user will be demoted to a lower level
	Login	Checks if user exists on the LADP database and logs the	The user has entered their credentials.	The user will be logged into the system.
	Logout	System checks if user is logged in and logs the user out of	The user must be logged in.	The user will be logged out of the system.

Theme: Threads	Functions	List Description	Pre-Condition	Post-Condition
Threads provide users with the capability of expressing their views/ suggestions regarding the concepts covered in each module and any other general topic.	Create Thread	Check if user is allowed to create a thread. Create a new thread and add it to the the system	The user must be logged in and allowed to create a thread. The thread must not exist in the system.	New thread added to the system.
	Edit Thread	Check if user is allowed to edit that thread. Get the thread from the system and make desired changes and save the updated thread.	The user must be logged in and allowed to edit a thread. The thread must exist in the system	The thread will be updated in the system
	Delete Thread	Check if user is allowed to delete that thread. Get the thread from the system if it exists remove thread from system.	The user must be logged in and allowed to delete a thread. The thread must exist in the system.	Thread will be removed from the system.
	Detect Plaigiarism	Get the current thread.	There post should exist so that it can be checked for	The system should indicate the plagiarism percentage of the

Theme: Reporting	Functions	List Description	Pre-Condition	Post-Condition
Reporting is used to determine the performance of not only the user but also each BuzzSpace and the system as a whole.	Generate report	Get the type of user	The user must be logged in and exists and is requesting a	A generated report is returned to the user.

Theme: Voting	Functions	List Description	Pre-Condition	Post-Condition
Voting is responsible for the management of assigning points to a thread and reducing points of a thread consequently it laso changes the Thread Owner's Userpoints	Upvoting	Get thread from a system Increase the thread's points or number of votes.	User must be logged in and allowed to upvote a thread. The thread must exist.	The threads number of upvotes will increase by one upvote after a user has upvoted. This information will be saved in the database and the system will keep track of the total upvotes.
	Downvoting	Get thread from a system Decrease the thread's points or number of votes.	User must be logged in and allowed to downvote a thread. The thread must exist.	after a user has upvoted. This information will be saved in the database and the system will keep track of the total downvotes.

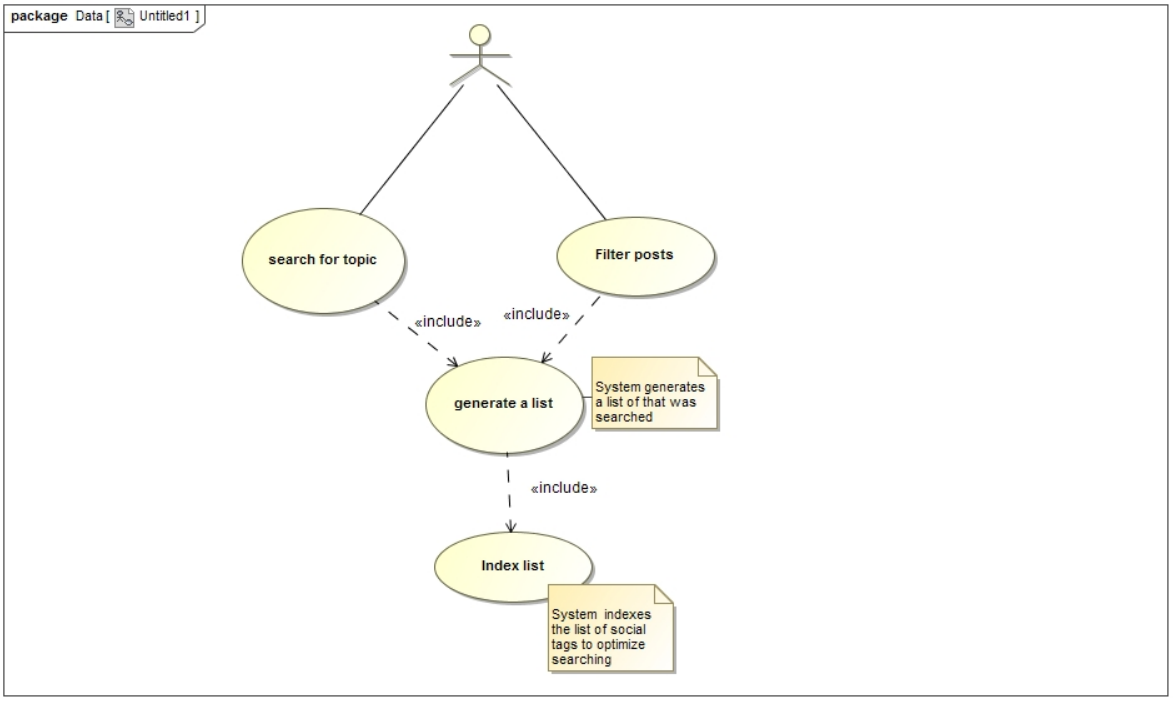
Theme: Social Tagging	Functions	List Description	Pre-Condition	Post-Condition
Tagging gives the system a social network type of feel and consequently makes the system more appealing to students and other general , public users.	Search	Searching	A user will use the # symbol in order to search for a discussion or post that is relavent to what they are lookig for.	All discussions and threads containing the searched for word will be brought from the database and placed in order from most to least upvotes.
	Filter	Filtering	There should be check boxes to indicate the attribute the	
	Index	Index for searching	System has an unindexed list of all the social tags.	System has indexed the list of social tags to optimize

Theme: Rewarding	Functions	List Description	Pre-Condition	Post-Condition
The rewarding is responsible for assigning benefits to a user based on their overall partcipation. The higher the UserPoints the more functionality benefits a user will obtain.	Assign Benefits	Get UserPointsDetermine which benefits a user should have	The user must be logged in and exists i.e is not a guest	The user has acquired benefits

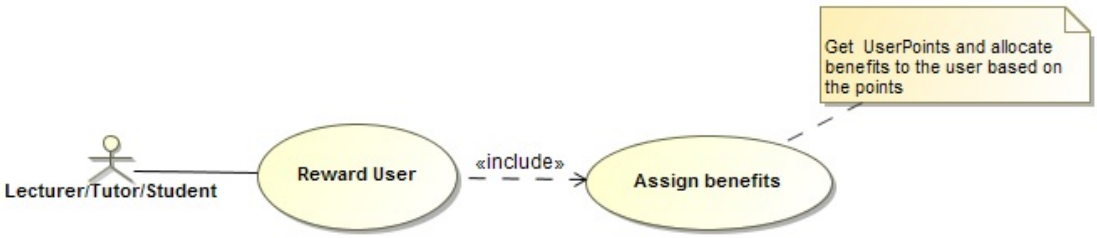
Theme: BuzzSpace	Functions	List Description	Pre-Condition	Post-Condition
BuzzSpaces are assigned to each module and module they group the content for each module.	Create BuzzSpace	Add a BuzzSpace to the system	The BuzzSpace must not be in the system	A new BuzzSpace is added to the system
	Deleting a BuzzSpace	Locate BuzzSpace in the system , Remove BuzzSpace from	The BuzzSpace must exist in the system	BuzzSpace removed from the system
	Edit BuzzSpace	Access the BuzzSpace and make desired changes, save the changes	The BuzzSpace must exist in the system	An updated BuzzSpace is added to the system

2.3 Required functionality

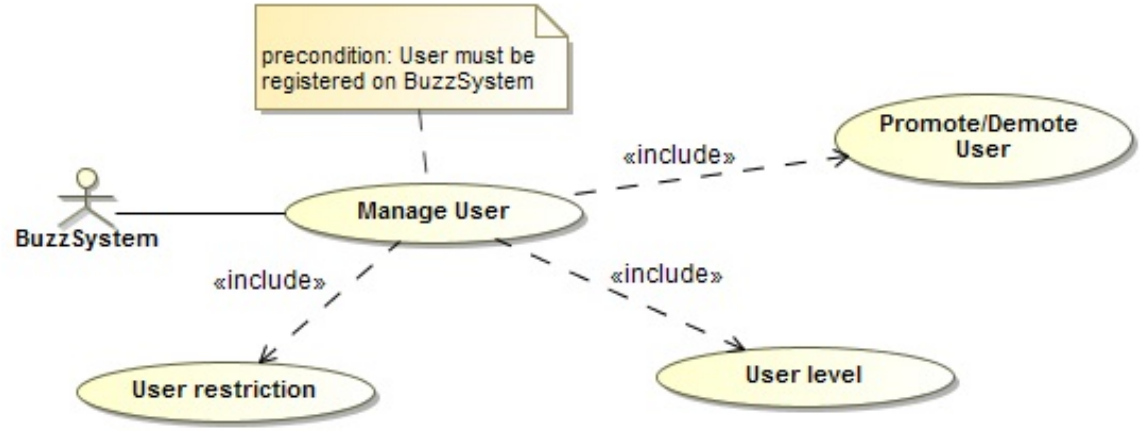
Social Tag



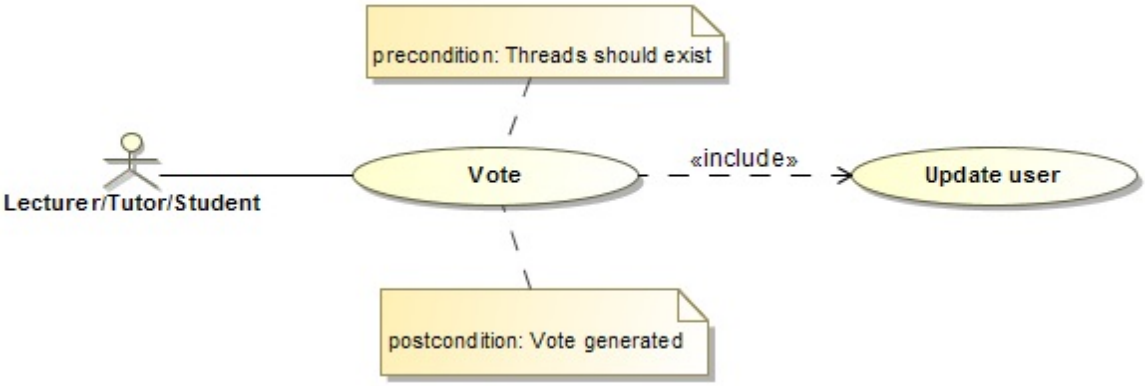
Rewarding



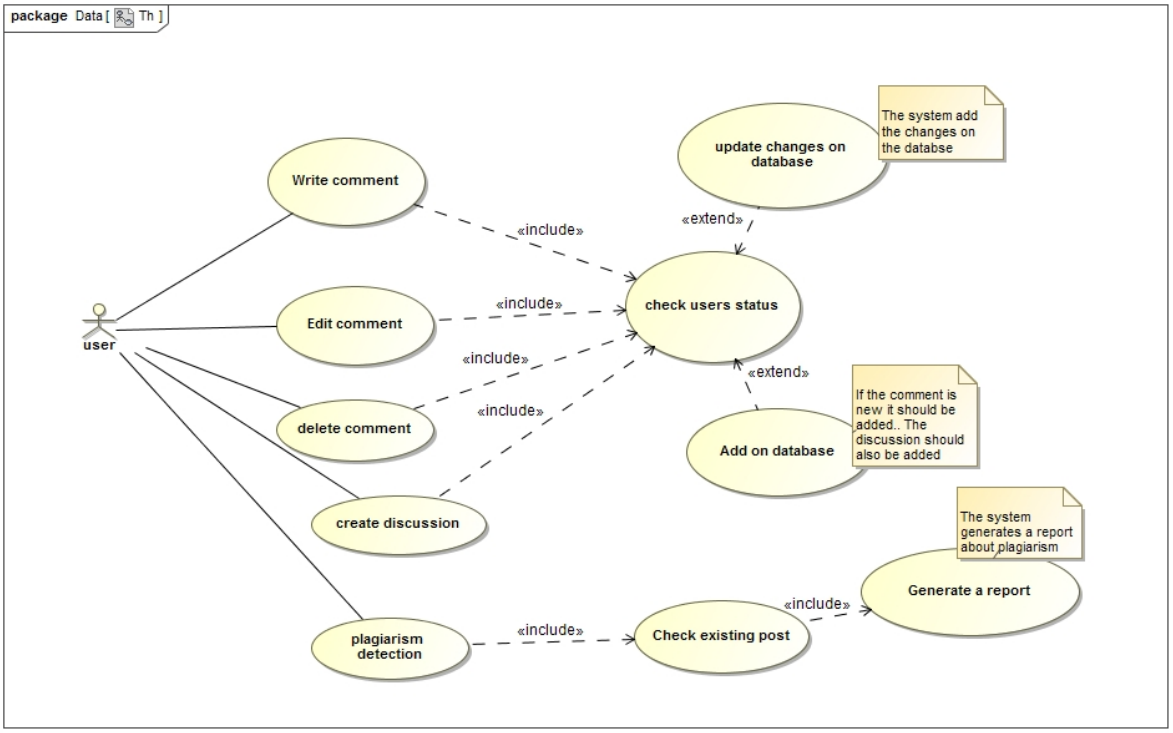
UserManagement



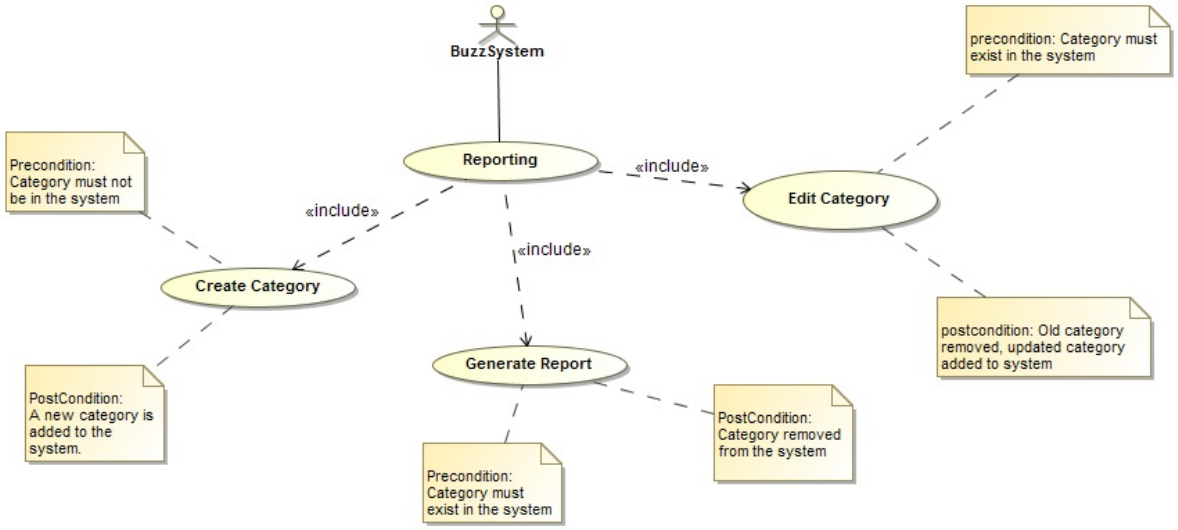
Vote



THREADS

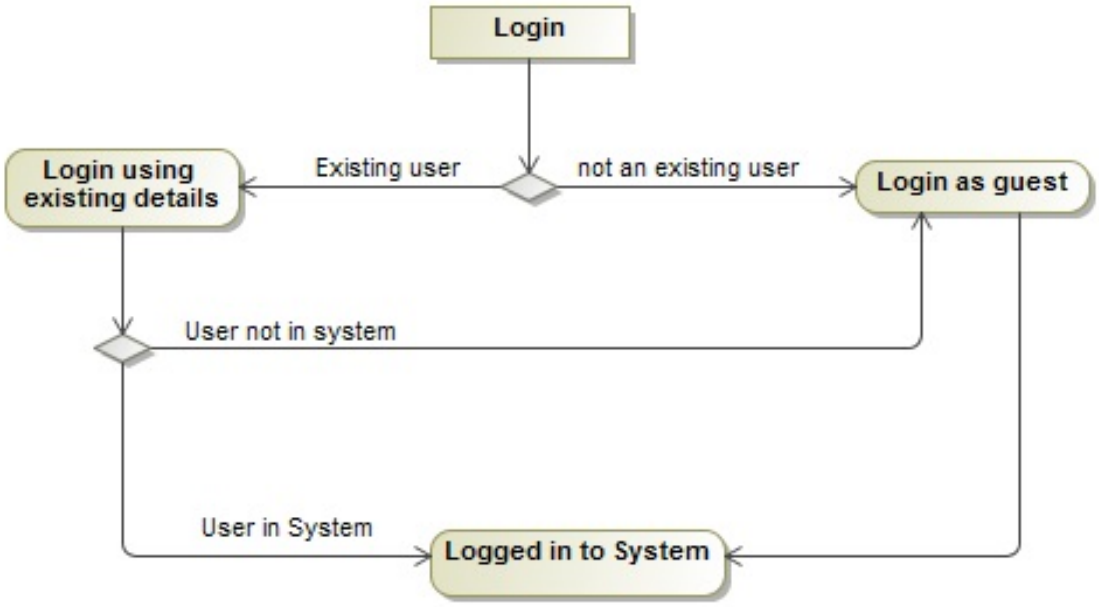


REPORING

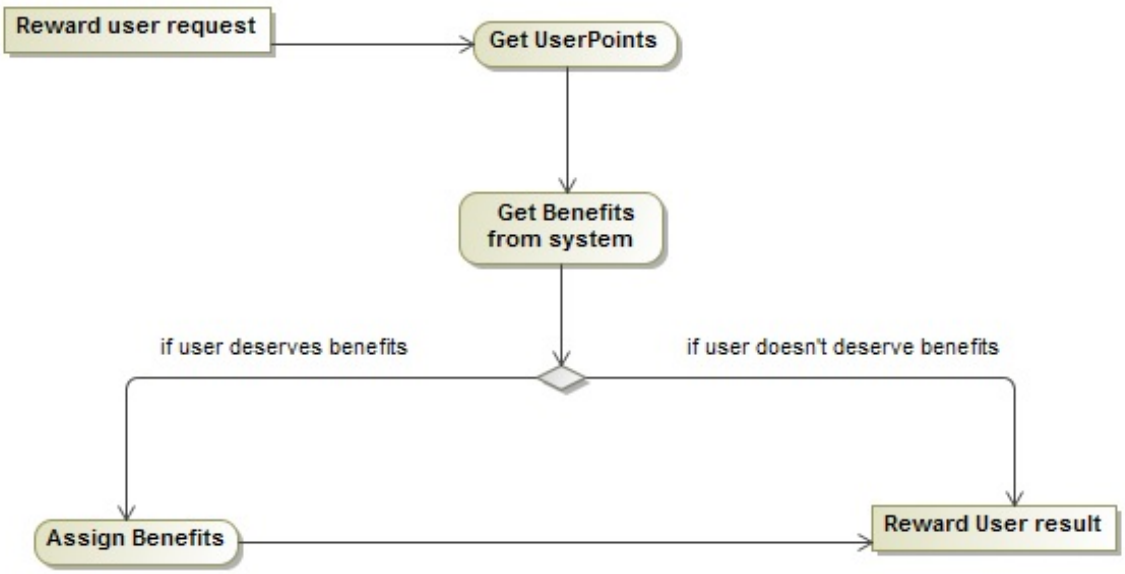


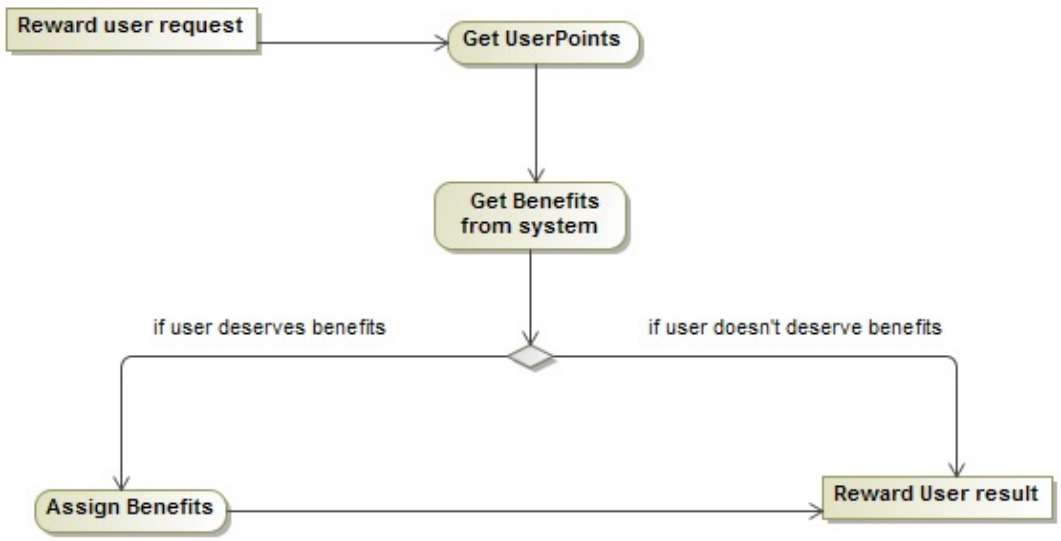
2.4 Process specifications

Login

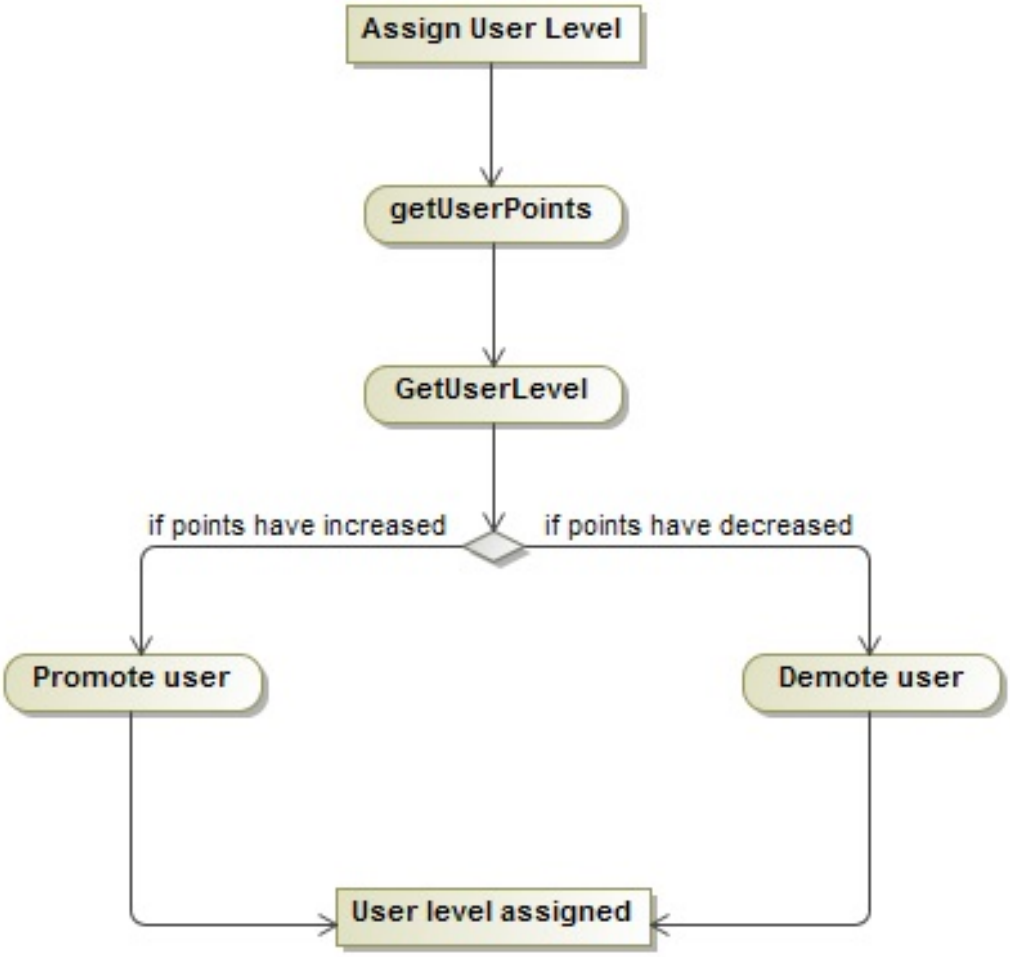


Rewarding

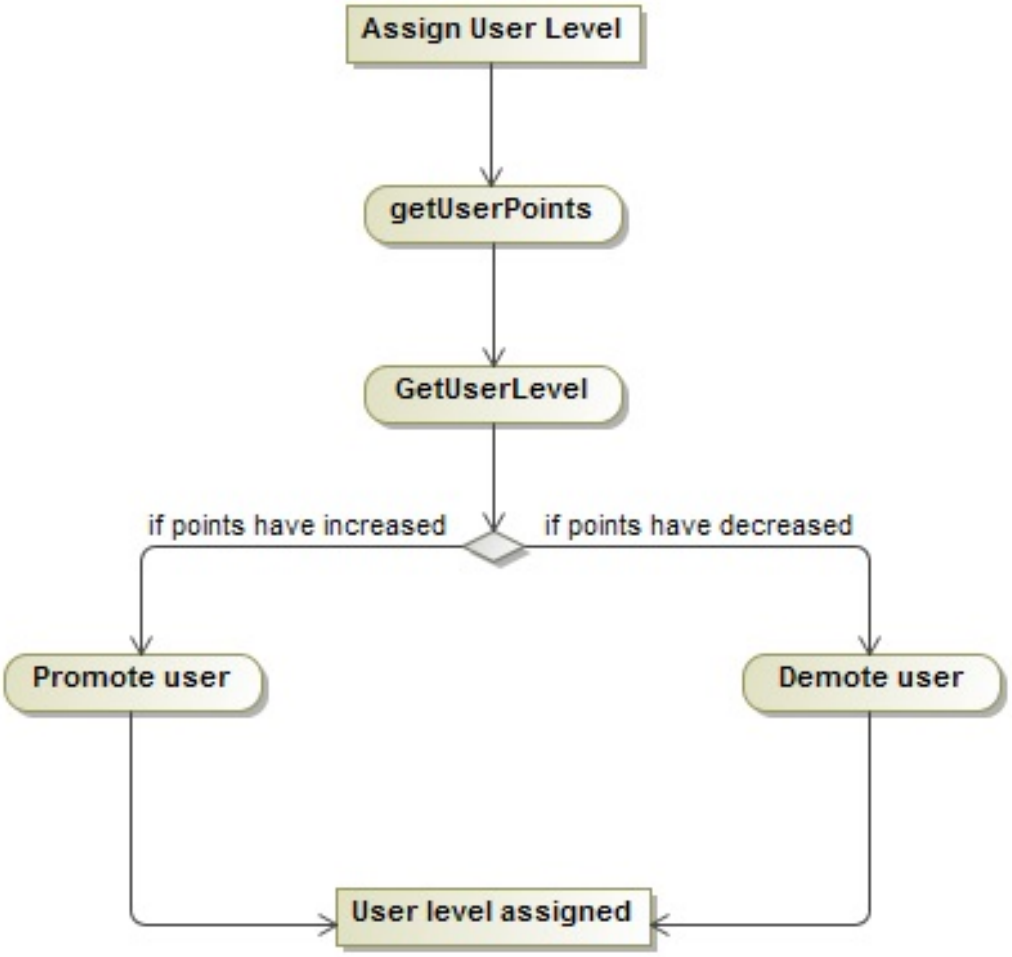



Reward user request
Get UserPoints
Get Benefits from system
if user deserves benefits
if user doesn't deserve benefits
Assign Benefits
Reward User result

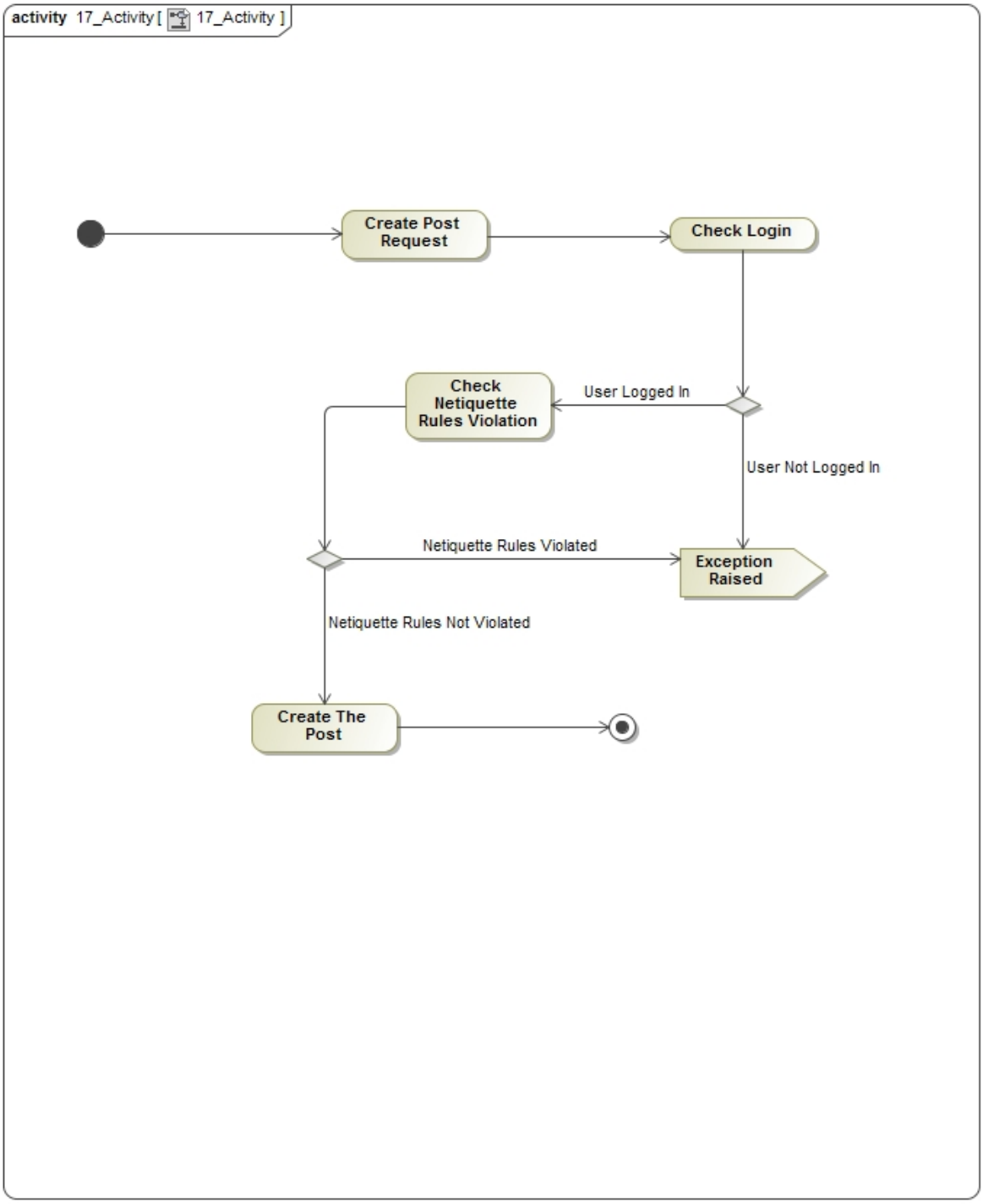
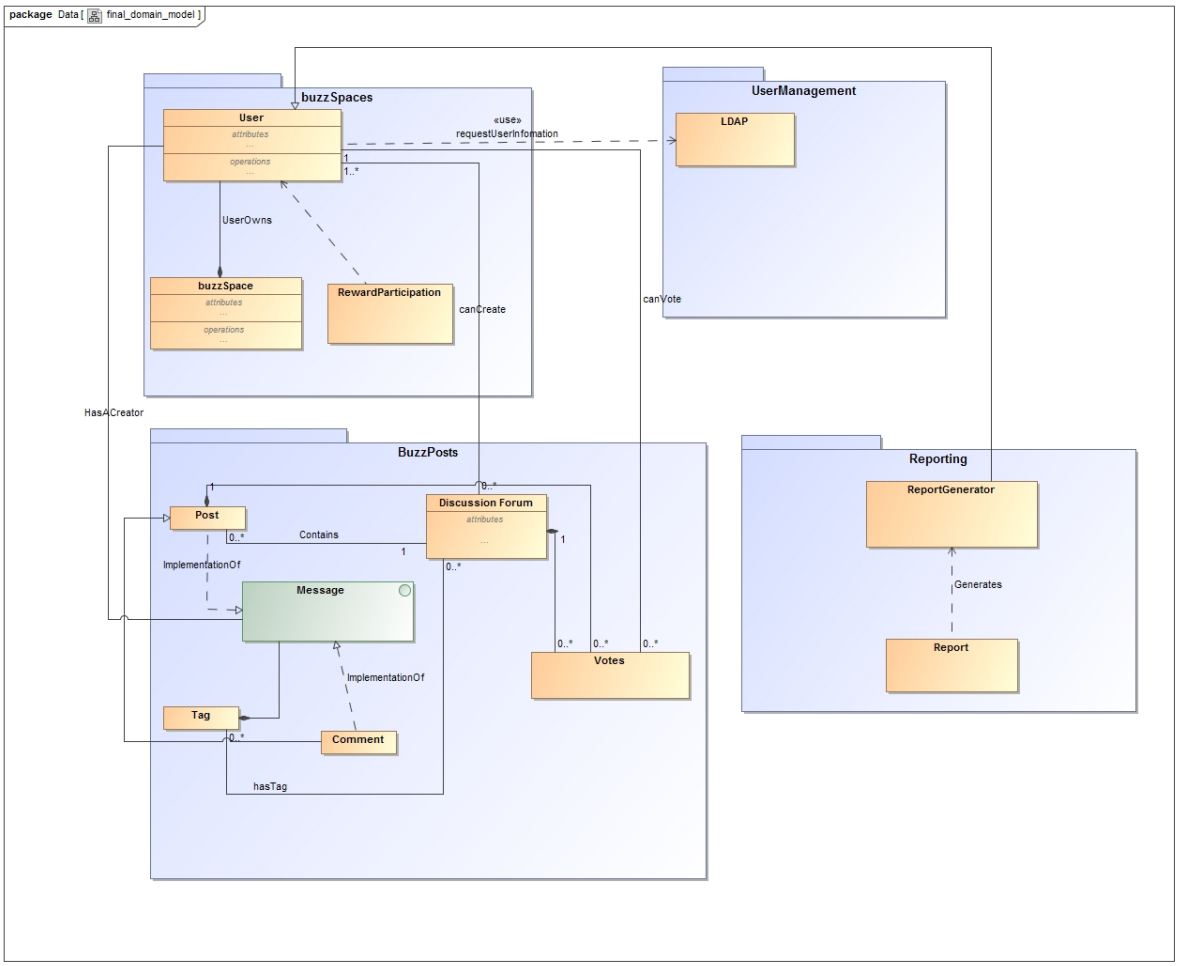
UserManagement



UserLevel


Assign User Level
getUserPoints
GetUserLevel
if points have increased
if points have decreased
Promote user
Demote user
User level assigned

Netiquette


activity 17_Activity [17_Activity]
Create Post Request
Check Login
Check Netiquette Rules Violation
User Logged In
User Not Logged In
Netiquette Rules Violated
Exception Raised
Netiquette Rules Not Violated
Create The Post

2.5 Domain Model