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DEPARTMENT OF COMPUTER SCIENCE

COS 301 - SOFTWARE ENGINEERING

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## COS 301 - Mini Project

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February 27, 2015

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# SOFTWARE REQUIREMENTS SPECIFICATION AND TECHNOLOGY NEUTRAL PROCESS DESIGN

## BUZZ SPACE DISCUSSIONS/MINI PROJECT

Version: Version 0.2 Alpha For further references see [gitHub](#). February 27, 2015

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For further references see [gitHub](https://github.com/DieBaber/COS301-GROUP6-A.git) or got to the link <https://github.com/DieBaber/COS301-GROUP6-A.git>

# 1 Functional requirements



## 1.1 Introduction

We use this document to give a high level overview of the buzz discussion board. We have identified the various components of our system. The purpose of this document is to create a dynamic and scalable solution. We also want to include an achievement system that rewards users for using the discussion board. This document will inform you on how we will achieve a system that is both scalable and pluggable. We have identified the use cases of the various components of the discussion board and helped expand on them.

## 1.2 Use case prioritiation

### Critical

- BuzzSpace
- CRUD posts(Creating,Reading; Updating; Deleting).
- System Access
- Information Management

### Important

- User Management
- Communication(Notifications)
- Reporting

### Nice-To-Have

- Achievement/Rewards System
- Reporting
- Summaries



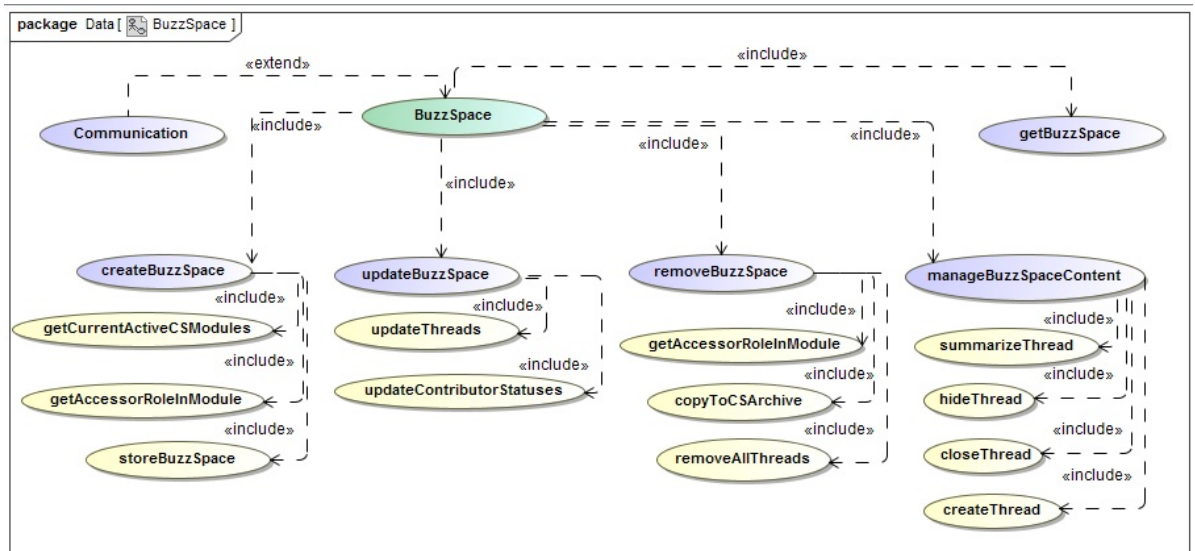
### 1.3 Use case/Service contracts

Use Case	Pre Condition	Post Condition	Description
BuzzSpace	There must be a valid user	User must still exist	This use case provides an interface that facilitates management of threads
Information Management			
Communication	A user needs to be registered in order to have notifications sent to his profile inside the application. For e-mails to be sent, a valid and up-to-date e-mail address is needed on the user database.	A notification should visibally be highlighted in the application with appropriate messages. In some cases, an email is sent out from the system.	This use case specifies all the functions that the Buzz system needs to have in order to communicate important information with the user.
Summaries			
Achievement Rewards System	A user's level requires Achievements to be allocated and/or rewards to be awarded	Achievements are allocated and/or rewards are awarded	This use case provides a system that allocates achievements to users based on their levels and the votes they aquired. it also provides a system that awards rewards to users based on their achievements.
Access	The user will need a browser to view the website.	Threads and posts are displayed in descending order by date.	Details how an end-user will be able to access the Buzz system.
Validation	Post is palgiarised and/or does not follow netiquette	Post is valid against rules	This module will be the interface that other modules use in order to validate any post and help generate certaaain reports.
User Management	If the User is not involved in the course (not a registered student/ tutor/ teaching assistant).	The User is still involved in the course	This is a basic system which manages the User's Login and logout.
Reporting	Data must be available to report on.	Data must not be corrupt.	This use case generate report for all actors

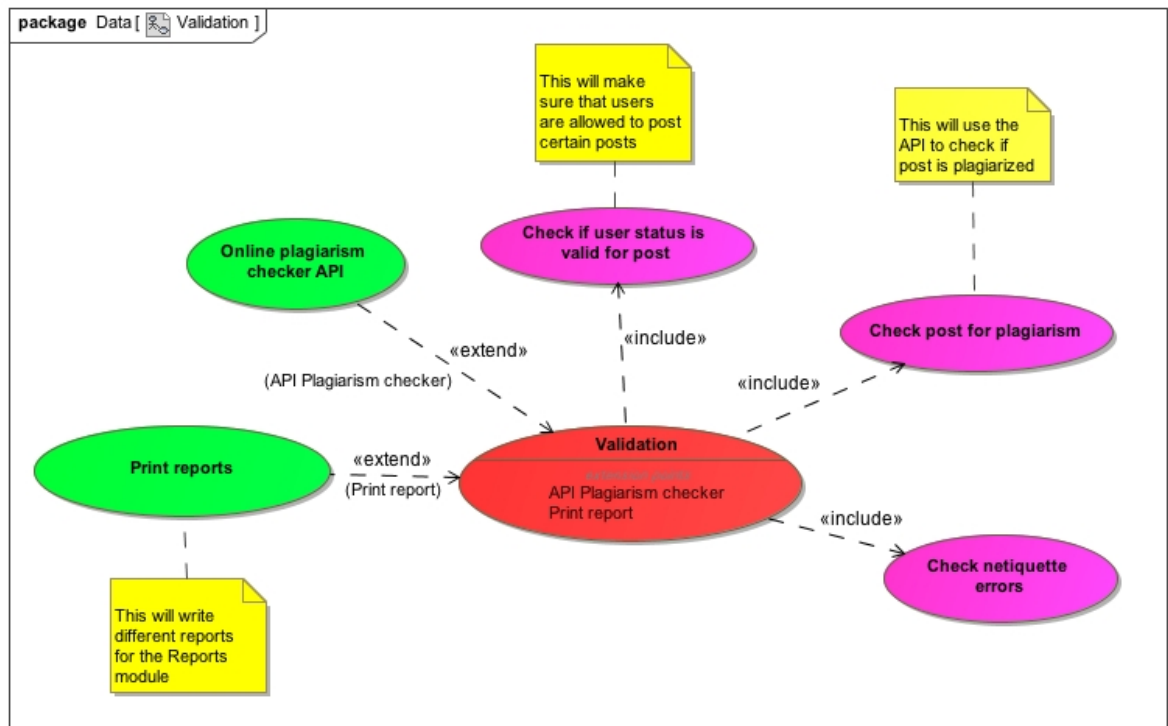


## 1.4 Required functionality

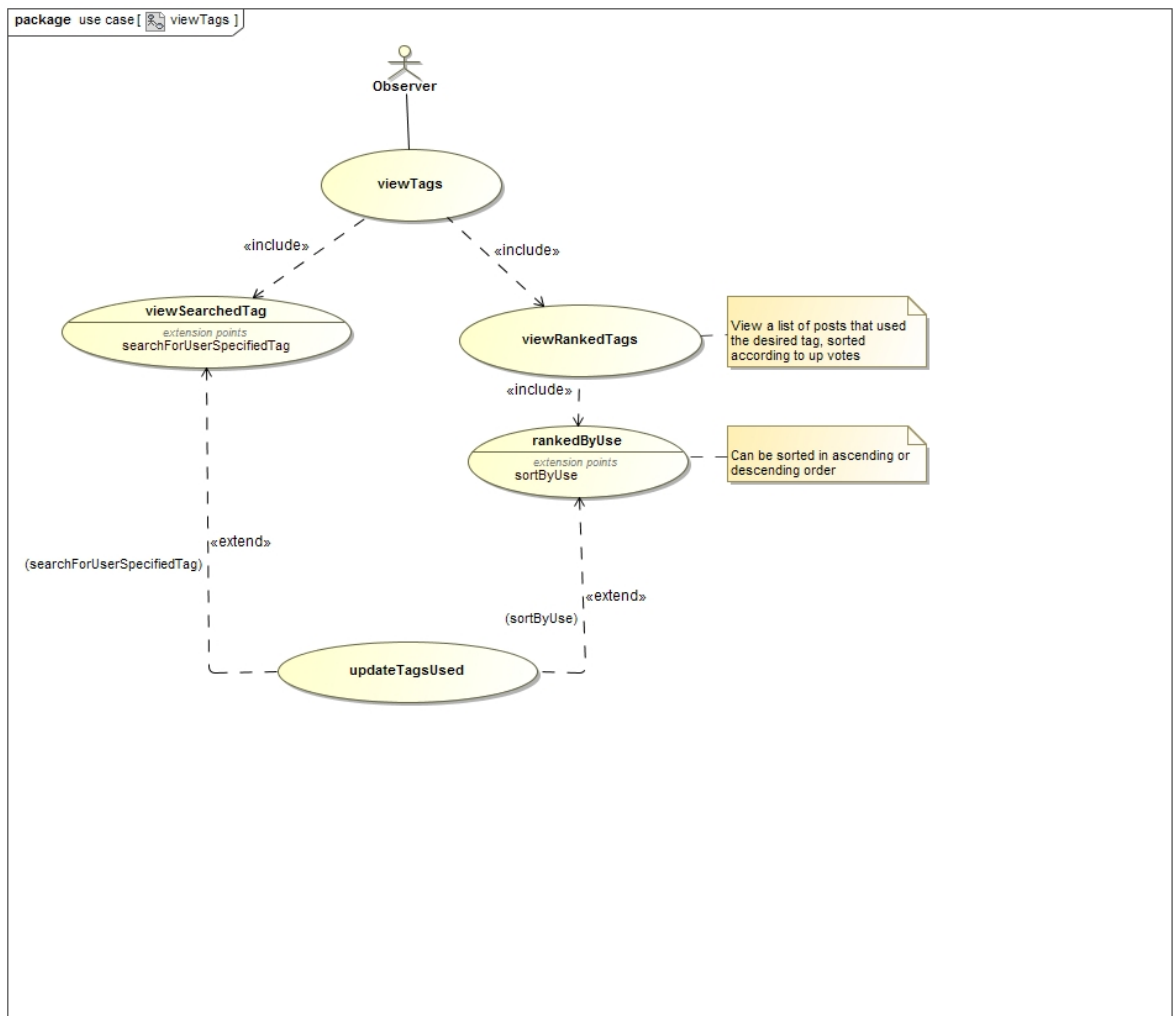
- **BuzzSpace.** A Buzz Space is a integral component of the Buzz System which facilitates the management of threads added by its users. Buzz Spaces may be created for each active module in the Computer Science Department in order to promote intuitive communication between the Computer Science staff and its students.



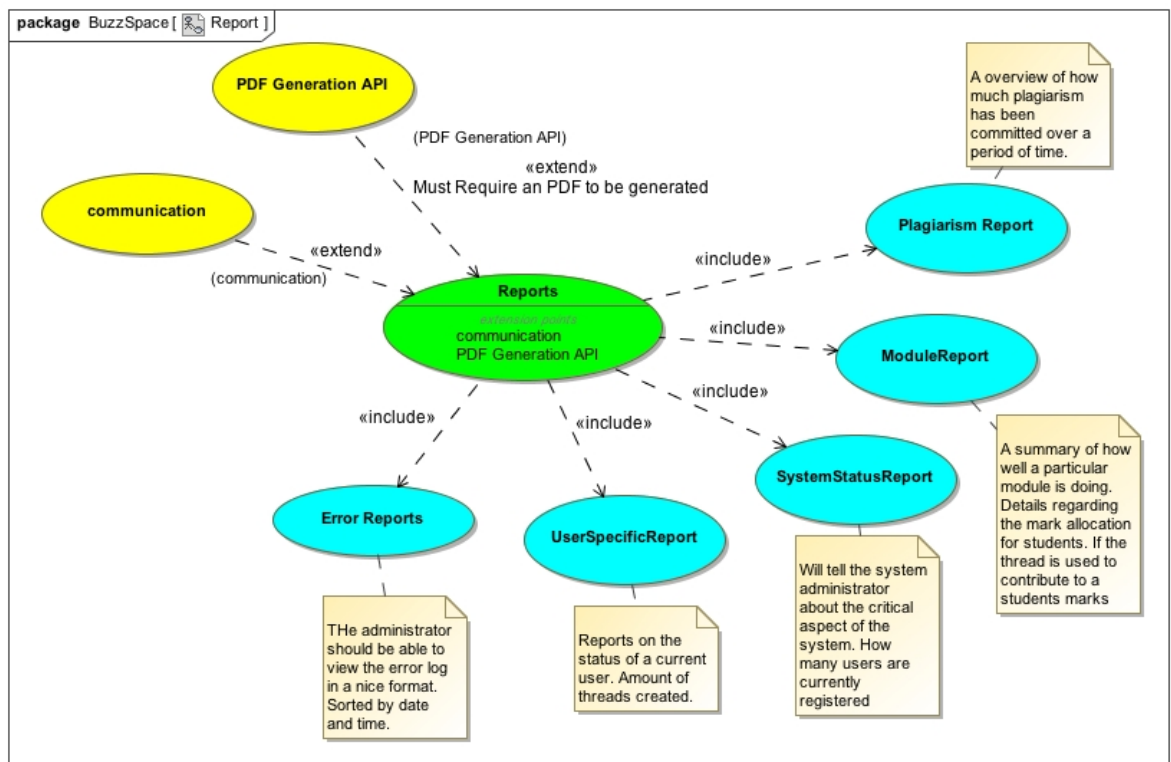
- **Validation.** This module will validate the any post send to it in terms of plagiarism check and also to check to see if the post follows certain netiquette rules. The post will also make sure of valid user acces by using the Usermanagement system. This system will also help the Report system to generate certain reports regarding the above validation. This module will only ever be used by other modules and not directly by the user. It will simply just make sure that all the rules that must be followed for a post to be sufficient for the Buzz space threads.



- **Information Management**

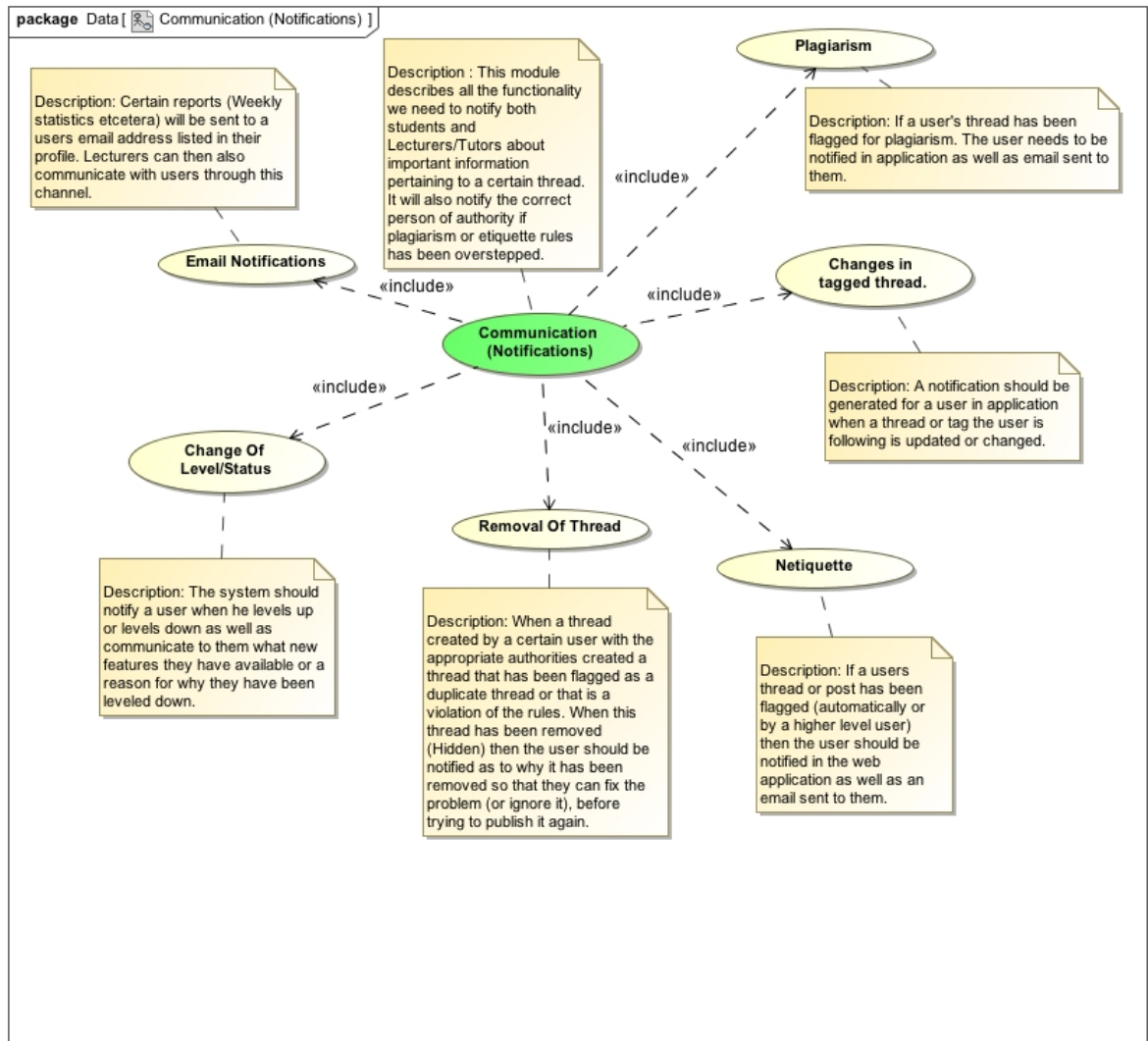


- Reporting.** We will use the reporting module to generate quite a few reports regarding the Buzz Space system. It will be a key player in adding value to lecturers and students. Each student can easily general a report regarding their own contributions towards a Buzz Space. Lecturers will be able to grade student performance and see how much plagiarism has occurred. The system administrators will be able to check for system bugs and see error logs.



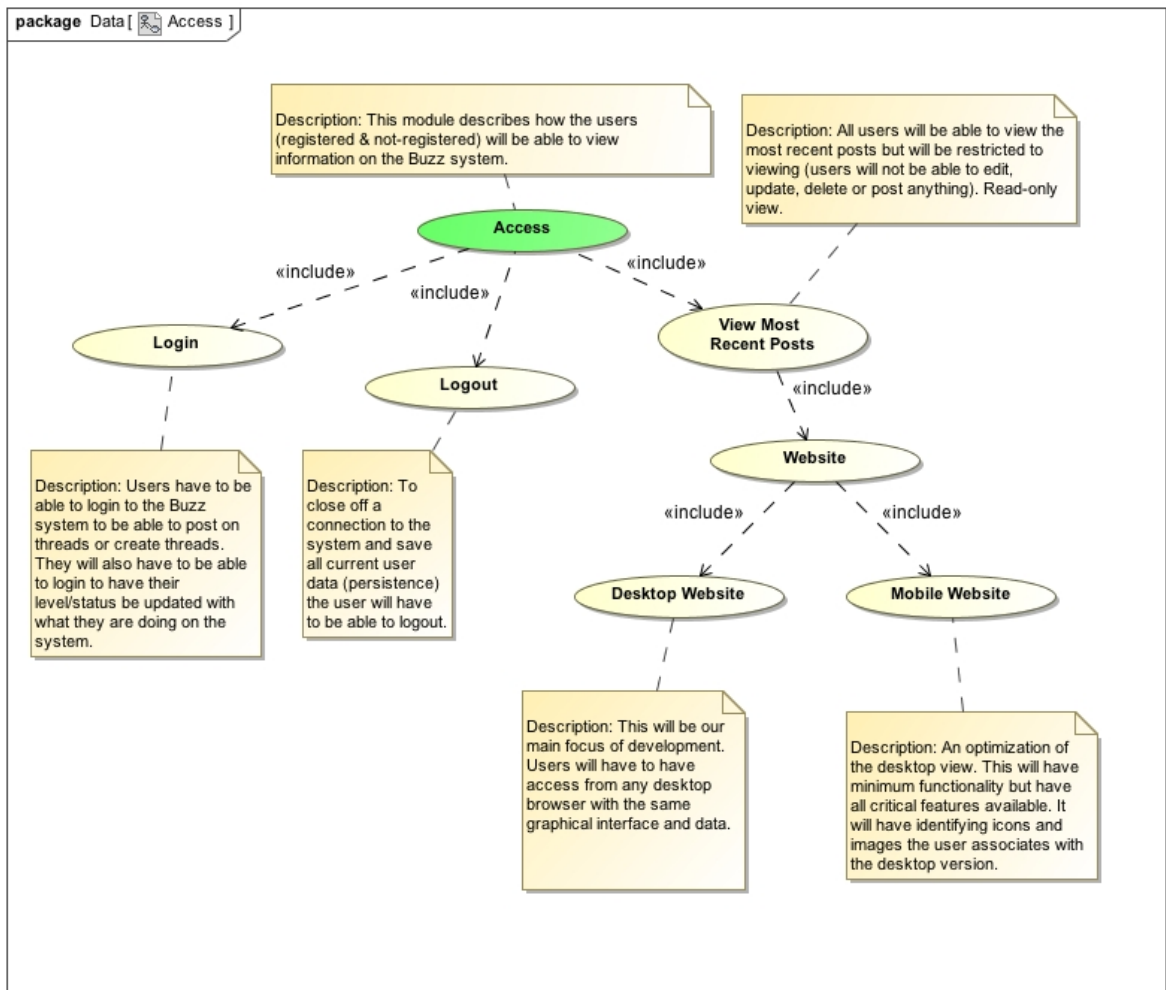
- **Communication (Notifications)**

This module describes the way the Buzz System will communicate with its users inside of the application as well as sending information and/or reports from the Buzz system to an external system such as email notifications.



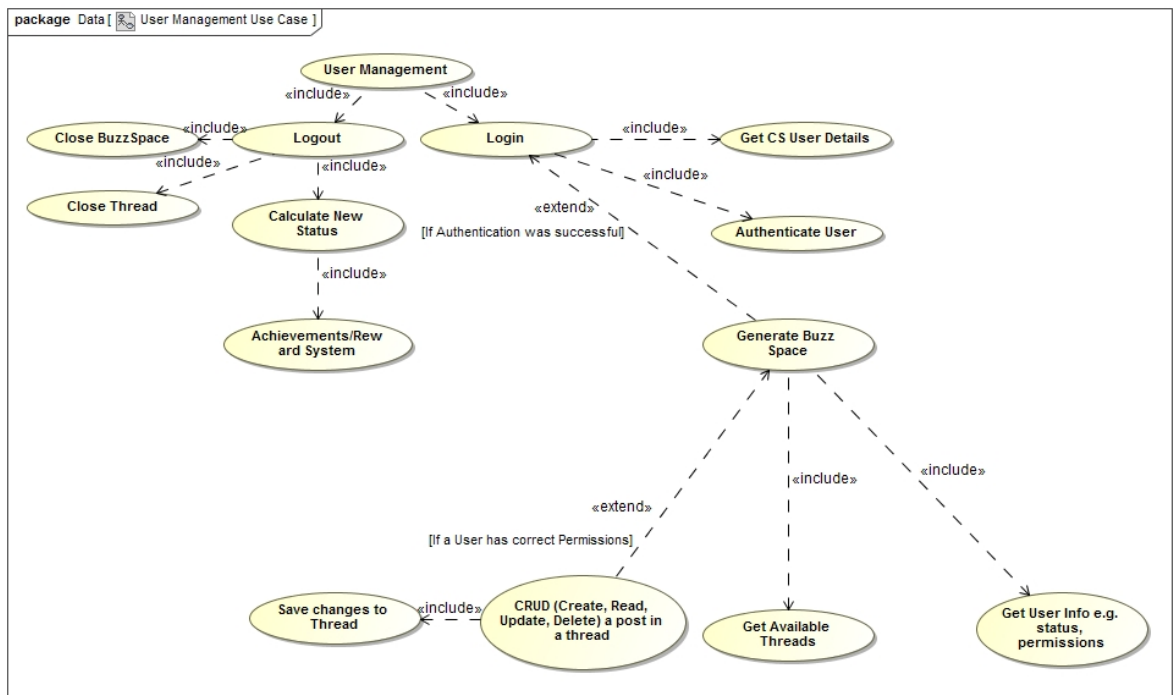
- **Access**

The use case below shows how a end-user will be able to access the Buzz system. Although a user may not be registered, they should still be able to view and read threads and posts.



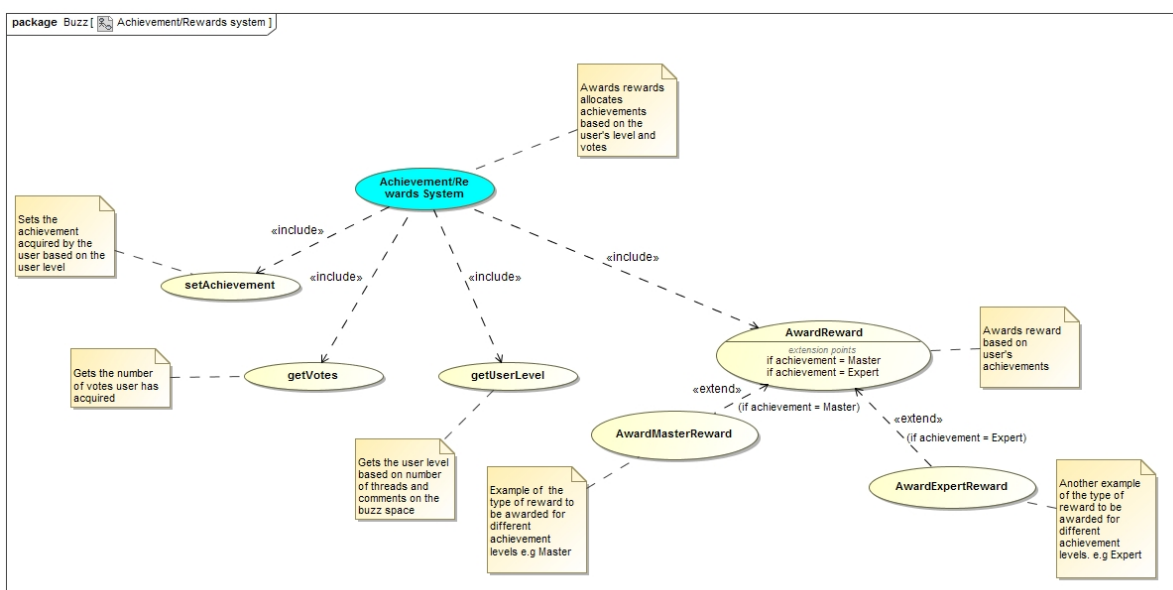
## • User Management

This use case specifies how the user's themselves will be managed (not their data). This refers to who will be allowed to firstly login, access a buzzspace and then a specific thread and eventually logout. This displays what services help achieve User Management and also which services are subsets of other services.



- Achievement/Rewards system

The Achievement/Rewards system use case component shows how the Buzz System generates and awards rewards to users, based on their different achievements. The achievement is derived from each user's level of participation on the Buzz Space as well as the number of votes they acquire. The Achievement/Reward system incorporates the gamification functionality of the Buzz System. Therefore, forcing the users of the system to participate more often as there will be rewards for this.

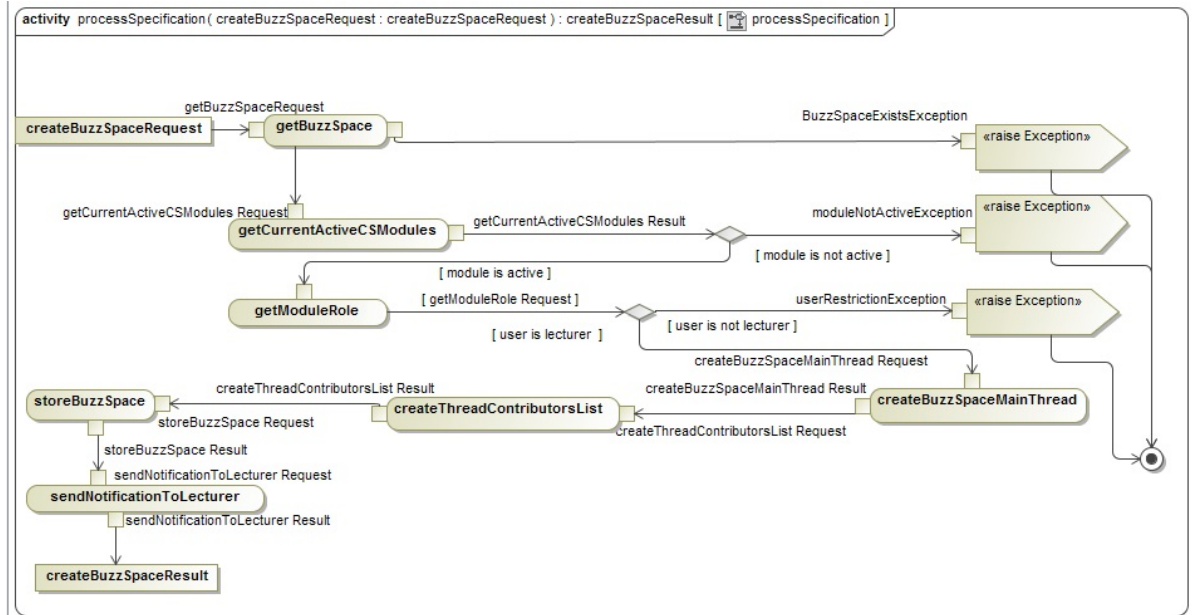




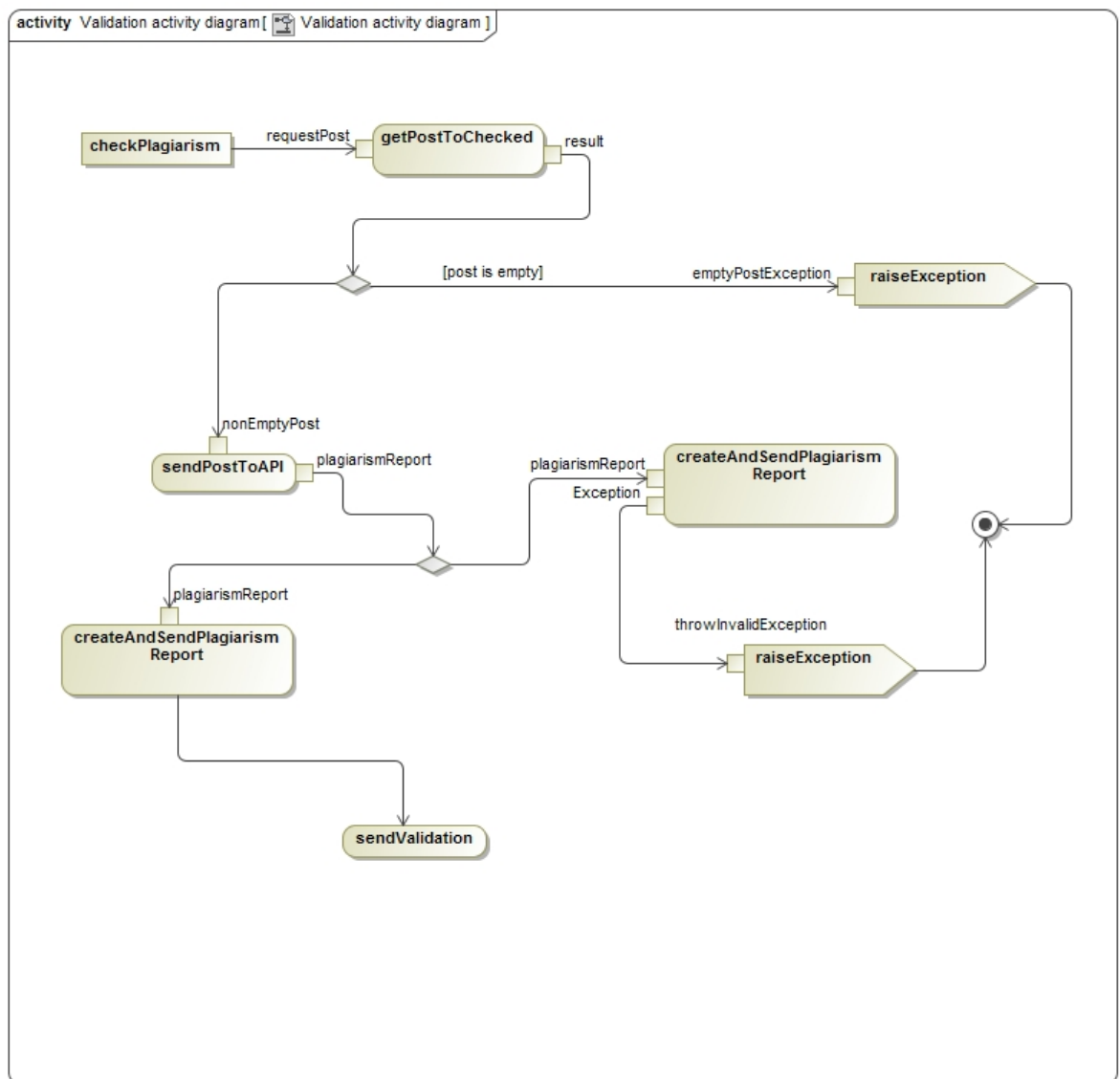
## 1.5 Process specification

We want to show various important process specification of our recommendation.

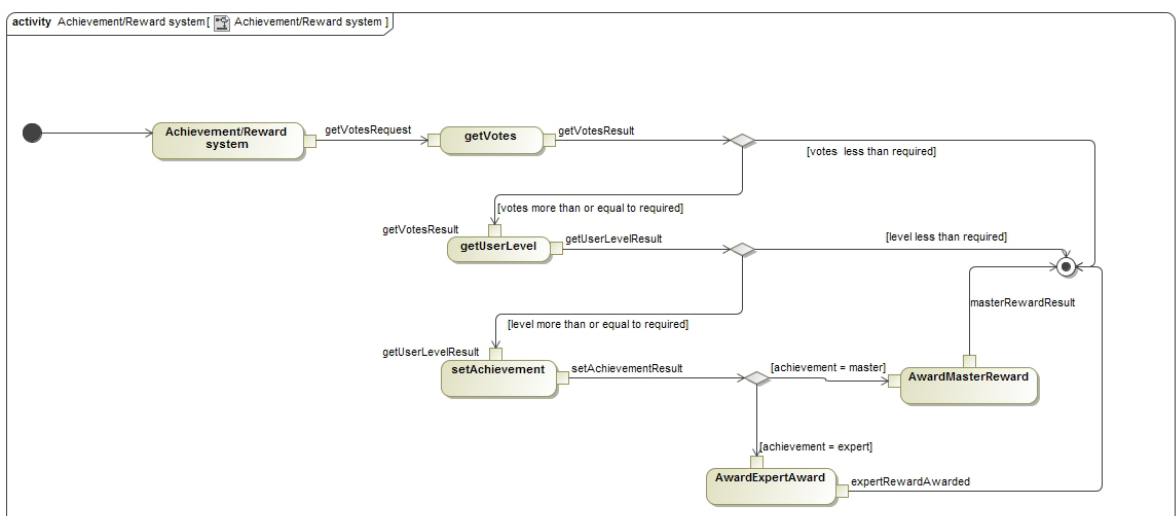
- CreateBuzzSpace



- Validation



- Achievement/Rewards system



## 1.6 Domain Model

