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DEPARTMENT OF INFORMATION TECHNOLOGY

COS 301 - SOFTWARE ENGINEERING

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## COS 301 - Mini Project

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# SOFTWARE REQUIREMENTS SPECIFICATION AND TECHNOLOGY NEUTRAL PROCESS DESIGN

## BUZZ SPACE DISCUSSIONS/MINI PROJECT

Version: Version 0.1 Alpha

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## 1 Introduction

This document specifies an discussion board which aims to add education befenits to the users. This is an attempt to redesign the idea of an discussion board. We aim to keep it as simple as possiable. Also adding functionality that will make if enjoyable to use. It must captivate the user attention and keep them involved in the discussions.

## 2 Vision

To provide a new perspective on discussion boards and how they can be used to benefit individuals. it must be educational and benefit the students. As most students using the discussion board we will attempt to recognize code and display it accordingly.

## 3 Background

The project was introduced to us by the Univeristy of Pretoria. Vreda Pieterse a lecturer at the University has been trying to find a way to get students more involved. Currently the discussion boards are under utilized. They are also looking for a modular system that can be integrated into their current website. This will be a educational benefit to the students.

## 4 Arcitecture requirements

The program will be accessed throught the web. We will follow a responsive design approach. This will make our web application available on both Desktop and mobile devices of various screen sizes. It will also be necessary to be modular. So that the application can integrate into the a existing echo system.

### 4.1 Access channel requirements

Mobile Devices	Students are using devices frequently.
Desktop Computers	This will be our main focus
Restful webservice clients	...

### 4.2 Quality requirements

### 4.3 Integration requirements

### 4.4 Architecture constraints

JavaEE, JPA and JPQL, JSF, HTML, AJAX.

## 5 Functional requirements

### 5.1 Use case prioritiation

#### Critical

- Login System.
- Creation of a Buzz thread.
- Edit options on threads (Reading; Updating; Deleting).

#### Important

- Content Management (By higher level users and Administrators).
- User Restriction based on level.
- Automatic update of user status.
- Semi-Automatic evaluation of posts.
- Gathering and analization of statistical information.
- Socail tagging system on threads (and posts).
- Searching and filtering of threads.
- Format code in an easy to view/edit layout.

### **Nice-To-Have**

- Keeping track of who read what (ie. Message Highlighting).
- Semi-Automatic functionality for generating thread summaries.
- Text formatting functionality based on user level.
- Self organization functionality.
- Automatic plagiarism checking system.
- Semi-Automatic detection of netiquette rule violations.
- Have functionality to vote for and evaluate posts.

## **5.2 Use case/Service contracts**

Pre-Conditions Post-Conditions Request and Results Data Structures

## **5.3 Required functionality**

## **5.4 Process specification**

## **5.5 Domain Model**