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COS301 MINI PROJECT FUNCTIONAL REQUIREMENTS SPECIFICATION

Group 2a

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1 History

Date	Version	Description
17-02-2015	Version 0.1	Document Template Created
17-02-2015	Version 0.2	UP Logo Added
18-02-2015	Version 0.2.1	Intro, Purpose, Conventions and Description Added
19-02-2015	Version 0.2.2	Added Skeleton for Required functionality

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2 Introduction

The Computer Science Education Didactic and Application Research (CSEDAR) from the university of Pretoria. Have approached us in building a software platform to create a collaborative community by means of an online discussion. To aid students to excel in problem solving as group. Such a tool already exists for students to use however this tool lacks certain functionality, Lecturer - Student interaction, often students are unaware of who is higher ranked in terms of the course (Teaching Assistant, Tutor, Lecturer & student).

2.1 Purpose

This document serves to present the clients requirements on a functional level by use of use-case diagrams, Domain models, pre- & post conditions as well as possible input-output pairs.

2.2 Document Conventions

A ranking system of importance is used for the functional requirements based on a 'star' system with

- **** - Critical
- *** - Important
- ** - Somewhat important
- * - Nice to have
- Not considered

2.3 Project Scope

Short overview with limitations and restrictions of the project.

2.4 References

Tutorial on Use case diagrams - http://www.tutorialspoint.com/uml/uml_use_case_diagram.htm

3 System Description

Buzz will be a complete software unit which is to be integrated seamlessly with existing web servers to be used by courses to encourage the use of online discussion. Users will be able to climb ranks up the online discussion forum and achieve more functionality as they progress. The system will also have certain functionality incorporated into awarding users marks if required so by the teaching staff. Teaching staff will also be able to archive and summarise threads. Users will also only be able to post in threads which pertain to them at that specific time, thus having a thread become 'Ancient' and hence archived no new information may be added to said thread.

4 Functional Requirements

4.1 Use Cases

We can Add all the details from MagicDraw here

4.2 Required Functionality

The Following system processes detail the functional requirements of the individual points.

1. Users must create, Update and delete posts.
 - (a) Elaboration -
 - (b) Importance - *****
 - (c) Dependency level -
 - (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
 - (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
 - (f) Requester

2.
 - (a) Elaboration -
 - (b) Importance -
 - (c) Dependency level -
 - (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
 - (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
 - (f) Requester

3. Restrict the length of messages and the type of content allowed in messages based on the level where it is posted as well as on the status of the user posting the message.
 - (a) Elaboration -
 - (b) Importance -
 - (c) Dependency level -
 - (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
 - (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
 - (f) Requester

- 4. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 5. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 6. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 7. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

8. Automatically change the status of a user based on the users participation
 - (a) Elaboration - The System should be configured in such a way that when a user participates often the user will progress through the levels of the system, Specific number of points required per level.
 - (b) Importance - ****
 - (c) Dependency level - Requires the users level to be implemented before a user can participate and increase in level, Users should be able to post on Buzz
 - (d) Pre-conditions
 - i. User is in level x
 - ii. User only needs y amount of points to progress
 - (e) Post-conditions
 - i. User achieved y amount of point
 - ii. User is now in level x+1
 - (f) Requester - System (Automatically checks each time a user posts)

- 9. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 10. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

11. Provide functionality to evaluate posts and vote for posts.

- (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 12. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 13. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 14. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

- 15. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester

16. Detect if a post is plagiarised

- (a) Elaboration - The entire post will be checked to see if it has been copied directly from another source, a full post quote will be open searched in a search engine, if any hits are found the post will be marked as possibly plagiarised and send to administrator
- (b) Importance - **
- (c) Dependency level - User must be able to post to Buzz
- (d) Pre-conditions
 - i. User posts a post
- (e) Post-conditions
 - i. Post is marked as Plagiarised - Added to Buzz(Invisible, Message sent to user and Administrator
 - ii. Post is marked as not Plagiarised - Posted to Buzz
- (f) Requester

- 17. (a) Elaboration -
- (b) Importance -
- (c) Dependency level -
- (d) Pre-conditions
 - i. Condition 1
 - ii. Condition 2
- (e) Post-conditions
 - i. Condition 1
 - ii. Condition 2
- (f) Requester
- ...

4.3 Entity Relationship Diagrams

4.4 Data Dictionary

Description of entities.

5 External Interface Requirements

Requirements for user interfaces.

6 Technical Requirements

List of non-functional requirements.

7 Requirement Matrices

8 Open Issues

9 Glossary