

# NotePost Notice Tracking System, Requirements Specification

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## **Abstract**

This document outlines the requirements of the NotePost system for Procedural Programming (PPR) term project. It captures the system and user requirements. This is *version 1.0* of the system.

## Revision History

Date	Description	Author	Comments
18 April 2014	version 1	Melkisedek Hamakali	First revision

## Document Approval

Signature	Printed Name	Title	Date
	Melkisedek Hamakali	Lead Software Developer	

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## 1 Introduction

This document will provide details and explain the purpose of the system. This includes what it can do, it's constraints and how it came about. This document is meant to be usable by end-users(stake holders) and developers.

### 1.1 Project Background

The Polytechnic of Namibia uses notice boards for informing students of events happening in the institution. These are a good traditional way of giving information to students. However at times it can be inadequate. The system proposed will computerize some of the functions of notice posting.

### 1.2 Purpose

The purpose of the system is to centralize note posting and to make it easier by:

- Requiring logged access to the system so that not anyone posts what ever they want.
- Providing information about the users and what they posted or removed.
- Restricting certain functions to those that are not registered.

## 2 Scope

The project will cover the following functions:

1. log-in a registered user
2. register new user
3. viewing notes
4. finding a specific note
5. create a notice
6. delete a notice

The project includes the installation of the system on the client's machines.

## 3 User Competencies & Target environment

The user is expected to know how to read English and use a computer keyboard. The user should also know how to use command-line programs on \*nix<sup>1</sup> operating systems.

The system will work on all operating systems that support the POSIX<sup>2</sup> standard. The current version of the system runs locally, it is expected to use TCP/IP protocol in future versions.

## 4 Build environment

This program is developed using:

- git version 1.9.3 for source control
- GNU Make 4.0 compiling
- gcc 4.9.0 as the compiler
- Linux kernel 3.14.4-1-ARCH x86\_64 GNU/Linux as the platform
- sublime-text 2 and vim for text editing
- zsh as the terminal shell
- Intel(R) Core(TM) i3 CPU M 380 processor with 4gb ram

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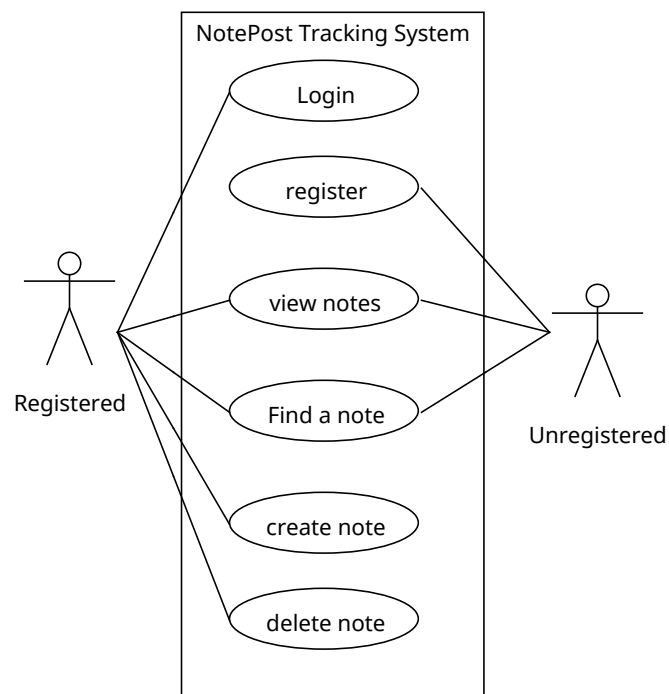
<sup>1</sup>Unix, Linux, OS X and similar

<sup>2</sup>Portable Operating System Interface

## 5 Security

- Unique log-in/password to authorized officers.
- Passwords will be SHA-512 encrypted
- User Access to the specific functions will be limited accordingly to unregistered users.

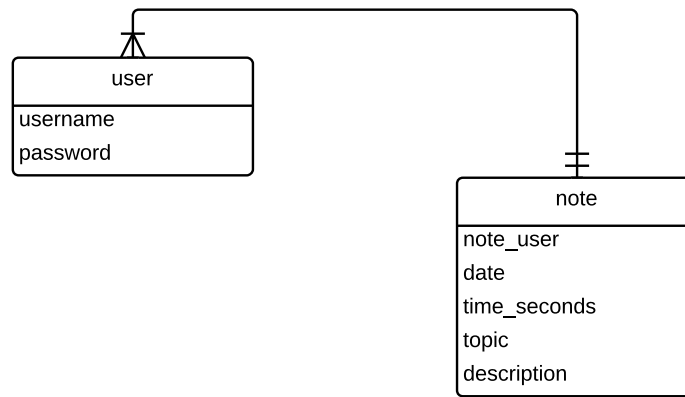
## 6 Overall use case



Entity Relationship Diagram

# NotePost

## Entity Relationship Diagram



## 7 Constraints

The system has the following constraints:

- The end user must be familiar with the command-line of \*nix<sup>3</sup> systems
- This program will not run on windows at this point
- It relies on functionality provided by POSIX and Linux interfaces which may not be supported by some OS<sup>4</sup> vendors.
- It is not provided as an executable binary to avoid compatibility issues.

## 8 Input

All user input will be received via keyboard on PC. The system will store username as plain text in a user-data file but the password will be hashed by sha512 algorithm before storage.

## 9 Output

The system shall give output on screen in case of errors or misuse of program. The processes data of the system such as the notes and user-data shall be store to disk.

## 10 Restrictions

All unregistered users will not be able to log in and will also not be able to delete or create notices. Unregistered members will have access to viewing and searching of specific notes.

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<sup>3</sup>Unix, Linux, OS X and similar

<sup>4</sup>operating system