



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

DEPARTMENT OF COMPUTER SCIENCE

COS 301 - MINI PROJECT

Assignment 1

Requirements and Application Design

Author:

Daniel King

Azhar Mohungoo

Andreas du Preez

Banele Nxumalo

Frederic Ehlers

Diana Obo

Bilal Muhammad

Student number:

u13307607

u12239799

u12207871

u12201911

u11061112

u13134885

u13080335

February 18, 2016

REQUIREMENTS SPECIFICATION

BRAVO GITHUB REPOSITORY LINK

For further references see [gitHub](#). February 18, 2016

1 Introduction

This document aims to specify the functional and non-functional requirements of a document archiving system, as specified by Ms Vreda Pieterse of the Computer Science Department.

It will serve as a means of communication between the client and developers as well as providing an elaboration and a clear discription of it's implementation specifications.

2 Vision

We intend to create a system that will allow authors and their co-authors to work on their research papers in an environment that reassures collaborative work, which in turn diminishes the time spent on papers with multiple authors. The following are what we plan to achieve:

- Keep track of research papers.
- View meta data of research papers.
- Allow multiple authors to collaborate on the same research paper.
- Different levels of authority, i.e. Admin, Author, User.
- View and edit the details of a text based profile of differents researchers.
- Implemented as a Website and Android application.

3 Background

We live in a world where time is valuable. We would like to do as much as we possibly can in the shortest amount of time. And if that's not possible, we work in teams to ensure that we achieve that goal.

Reseacher papers tend to be fairly lengthy, and if completed by only one author, it could be quite a tedious process. Hence we propose a system which would make the storage and collaboration of research articles and papers effortless by producing an archive system.

4 Architecture Requirements

4.1 Access channel requirements

4.2 Quality requirements

4.3 Integration requirements

4.4 Architecture constraints

- The platform must exist in 2 mediums, namely web and android application.
- It is an internal network to be used by the Computer Science department, so it need not to source any information from the web.
- Any form of database can be used, but the team has decided that MySQL would be the best option from the current skillset.
- PHP and JavaScript will be used for the web and Android Studio for the android application.
- The system should cater for and including 100 users as a maximum.
- There should be a log that records all activity on the system

5 Functional requirements and application design

5.1 Use case prioritization

5.2 Use case/Services contracts

5.3 Required functionality

5.4 Process specifications

5.5 Domain Model

6 Open Issues

7 References

PIETERSE, V. 2016. COS301: Mini project. In: Lecture notes issued online. University of Pretoria. Pretoria, South Africa