# Specify the other systems this system needs to integrate with, and requirements around these integration channels.

# OVERVIEW OF TO-BE-IMPLEMENTED

In this section you need to specify the different system which your system must integrate with and the integration channels and protocols which need to be used. You should also specify the different access channels through which the system functionality should be made available to humans and/or other systems.

Specify integration channels btw architectural components

# Different system which your system must integrate with

There are numerous systems which are imperative to take into account in order to ensure successful integration of the Buzz System.

* The first of these is LDAP:
  + Each user will need to have an LDAP account (i.e. username and password) which they will use to log into the buzz system.
  + University of Pretoria Computer Science students automatically have these accounts as they’re registered on the CS web.
  + However, this is a requirement if other Universities want to integrate the buzz system into their systems.
* The second of these is the CS Web:
  + The buzz system will be integrated into the CS Web (<http://www.cs.up.ac.za/>) in order to allow users to access the functionality.
  + Most likely, the buzz system will replace the current CS web’s forum system, which will allow modules to link their personal buzz space from the module site.
  + Thus, it is necessary for the CS web to have access to the buzz system.
* The third of these is the WWW (World Wide Web)
  + The buzz system will need to be hosted to a server and needs to have access to that server’s individual functionality services (i.e. Apache, PHP, etc.).
  + It is necessary to integrate the buzz system with the WWW in order to allow people to actually access it (i.e. via a URL).
* The fourth of these is the DBMS (Database Management System)
  + The buzz system will need to connect to some database which will store all user information such as profiles, passwords, usernames, etc. This storing of information will be done via some DBMS (Such as MySQL).

# The integration channels and protocols which need to be used

The integration channels are the channels through which the buzz system will be made available to users.

* The first integration channel is the GUI (Graphical User Interface).
  + This will allow users to actually interact with the Buzz System so that they can post, comment, etc.
  + Examples of protocols which will be used here are:
    - HTTP
    - As well as various necessary programming languages/markup languages for the web such as
      * HTML 5,
      * JavaScript,
      * CSS3 and PHP.
* The second integration channel is the actual server which the buzz system is hosted on.
  + The server will provide a lot of the functionality needed for the buzz system to actually be able to handle and respond to requests.
    - It will also provide the core access channel for users.
  + Various protocols need to be used here, such as:
    - HTTP
      * For processing and handling GET/POST requests from users (i.e. conformity to the RFC (Request for Comments standard).
    - SOAP (Simple Object Access Protocol).
      * This is a messaging protocol that allows programs which run on disparate operating systems to communicate using HTTP and its XML.
      * This is necessary to ensure that users between different operating systems can communicate using a standard interface, so that there are no technological gaps which will hamper communication among different users.