COS301 Software requirements specification (SRS)

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Academic Platform Name: Academia101
Software used for document: MikeTex (TexWorks)
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1.INTRODUCTION

Academia101 is an acdemic media platform which serves to allow individual users/students to connect with friends/scholars from different institutions in a simple, shorthanded manner, sharing academic content, solutions to math problems and educational multimedia content. Unlike social media platform like Facebook, Academia101 will not cater for social interactions like Status Posting, use of Emojis/Emoticons, and like/dislike buttons. The goal of Academia101 is to make the world a single global village where academic resources are distributed equally, and are easily accessable, with a particular focus of
lending a helping hand to students enrolled in marginalised academic institutions.

This is a requirements elicitation document which collected requirements from User/Customers and other participating stakeholders. It will, therefore, outline the overall decription of Academia101 and the requirements that should be met.

2. OVERALL DESCRIPTION

I have included a block diagram to illustrate the overall architecture of Academia101, only showing high level components of the design and how they interact.

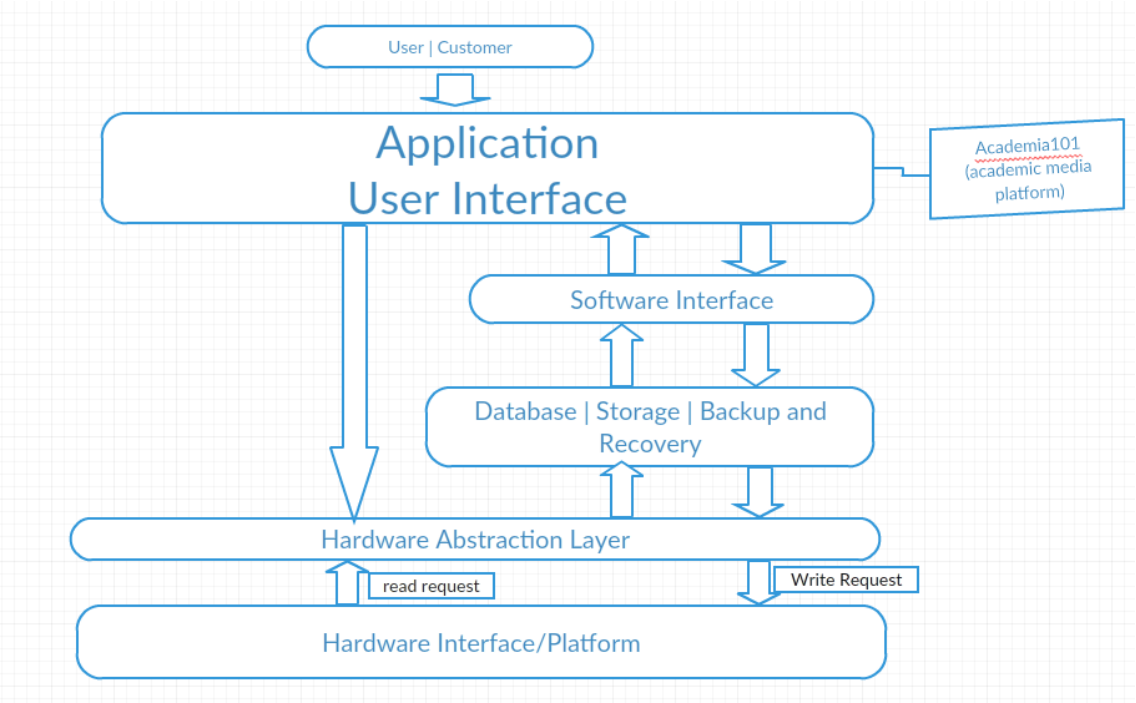


Image Description: We begin with a user interface, which is the point of interaction between our application (Academia101) and our users (students). The user interface is where data is transferred between the user and the application. The user interface will directly communicate with the software interface and the Hardware Abstraction Layer. The software interface will prohibit access to all resources in the database by default, and only allow access through well-defined entry points. The Hardware Abstraction layer acts as an abstract interface to the Hardware the application (Academia101) will run on. The application will perform Input/Output operations in order to communicate with hardware through this abstraction. Data will be stored at the memory section in a database, which the application will use for backup and recovery.

Application Users:

- This application will be used by high school students from Grade(s) 8 - 12 for sharing of helpful academic content.
- This application will be used by Parents to help their children in Grade(s) 1-7
- This application will be used by
  Instructors to find helpful material to properly educate students in Grade(s) 1 - 12

Application Constraints:

- Promulgation (Accessibility) of the Platform, especially to poor, marginalised communities without a proper ICT infrastructure.
- Usability of the Platform. The platform/application recognises English as the lingua franca, therefore, potentially marginalises an English illeterate demographic
- Validility of content shared, heavily relies on the discretion of the end user.

Pressumption and Dependencies:

- It is assumed that almost all students/parents/instructors will have access to a smart phone/computer
- It is assumed that almost all students/parents/instructors will have internet access
- It is assumed that all students/parents/instructors will be able to discern valid material from invalid material.
-]It is assumed that all students/parents/instructors understand basic English - enough to navigate Application/platform

3. SPECIFIC REQUIREMENTS

Functional Requirements:

- The application must check whether the user is a students/parents/instructors of a government accredited institution
- The application must create an online profile of the user
- The application must allow instructors/students to publicly or privately share content
- The application must provide interactive quizes/mock tests for different modules/subjects at different grade levels.
- The application must allow students from grade(s) 8 - 12 to upload helpful academic content, subject to the approval of the instructor of that particular module/subject.
- The application must be accessible from a smartphone/tablet/desktop computer at any given location in the country.
- The application must allow students to create a downloadable personal timetable for on school and off-school use

Performance Requirements:

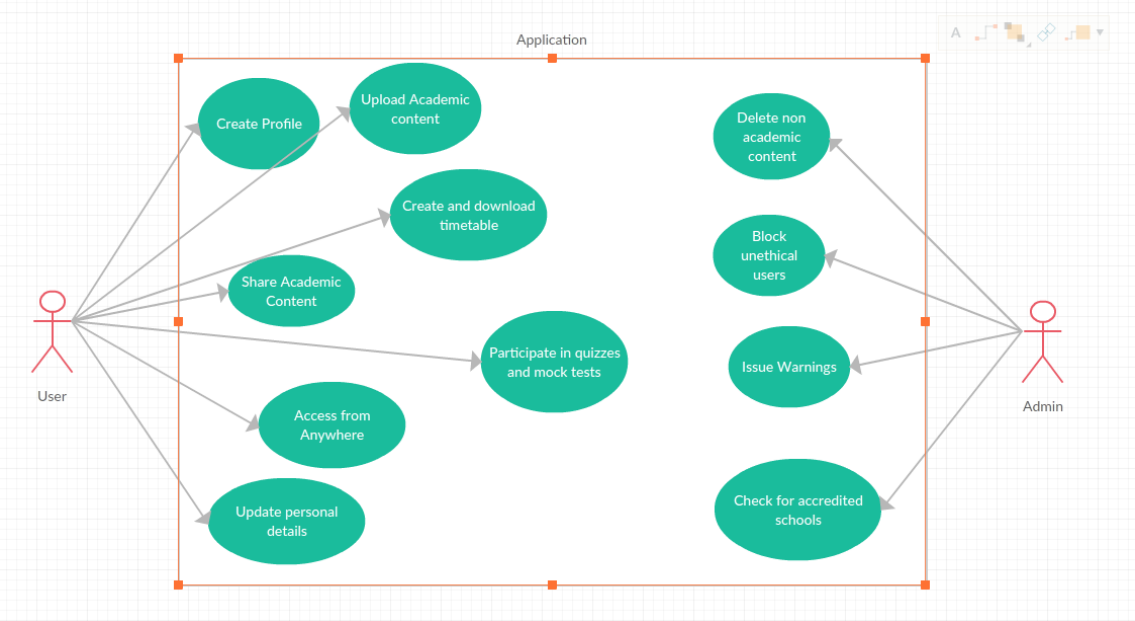
- The application should use the most efficient searching algorithms, and the best record/file storing techniques - which will
allow for faster data retreival, faster data recovery, and faster data dissemination.

Software/Application attributes:

- The application should be safe for student, parents and instructors to use. Users will not be subjected to 3rd party advertisements.
- The application should be reliable for students to use for learning, for instructors to use for teaching, for parents to use in helping their children learn

Supporting readability and maintainability

We have included a UML use case diagram to show how the users and admin interact with the platform and showed what is expected (function reequirements) from the system once it is fully functional



Please note that that the detailed functional requirements are outlined above.