Functional requirements

Student affairs system introduces huge amount of student information and many student services (profiles, data, requests, documents). student affairs will be developed using open source tools, languages and servers so structured database **MySQL** is used as it provides better queries and data processing over structured contents. With its proven performance. Setting this database using PHP programming language.

Pages designing and user interfacing using HTML, JavaScript, bootstrap.

Input: user enters his information (Email, password, ID), then logging in his profile where he can choose the wanted service (official document, requests, enquiries).

Output: mail notification indicating that the request is finished or to receive the requested documents or the enquiry has been answered.

Non-Functional Requirements

Performance

Student affairs system introduces huge amount of student information and many student services. The system offers the contents and service to both mobile and desktop users via web based.

## Storage

Student affairs uses traditional structured database which provide better queries and data processing over structured contents. MySQL is the world’s most popular open source database. With its proven performance, reliability, and ease-of-use, MySQL [1] has become the leading database choice for web-based applications, used by high profile web properties including Facebook, Twitter, YouTube, and all five of the top five websites. Additionally, it is an extremely popular choice as embedded database, distributed by thousands of ISVs and OEMs.

**Data Processing**

Data processing module is responsible on providing all data related services like data modelling and correction, data transformation, data classifier and multimedia processing.

Data modelling and correction is required to understand the textual material based on the related language model. Data transformation is required to allow import and export of different data format. The system supports common data formats supported by common data processors applications. Multimedia processing is required to enhance the quality of multimedia contents like images. It converts multimedia contents to unified format

Security

Maximum need to user’s authentication and communications security. User can register/login using internal accounts. The portal access must be made using https protocol in order to secure the communication. Security module also, responsible on managing the permissions and roles. Users are either students or employees. Security module also, responsible on detecting the threats and preventing data theft. The system is tested against common attacks using known penetration testing tools.

Usability

**Students Affairs** Website is a tool that will accelerate the workflow of SA department and offer great deal of comfort for both applicants and employees. Online student affairs offer answers for all student’s enquiries and FAQs, easy & quick access to any document procedures, student can manage all his\her requests supported with online payment as well as mail notifications.

* Offers easy and effective online student affairs service.
* Offers recorded answers for frequently asked questions and inquiries about any document procedures.
* Offers effective way of students/affairs office interaction, document follow up and final reception.
* Offers organized and secure way of certification and official documentation with online fees payment.
* Offers free and self-growing service to everyone

Development

The system development is performed using Agile methodology. Initial R&D activity should be applied to experiments tools and techniques. Later continuous R&D activity will run beside the system development activities. Student affairs will be developed using open source tools, languages and servers. This will decrease the cost especially for long term operation. While development only online tools will be used for management, tracking, testing and source control. This will increase the collaboration between team members even they are not located at the same place. Also, this will allow external teams and members to participate.

Technology

user can request forms and pay the required fees online through “Fawry” by generating code to pay with it also user get notifications when his/her request is done.

Operation:

user can easily track and follow the request step by step through all the procedures to get frequent feedback and updated time

The system consists of following modules: (1) Student Area, (2) Employee Area, (3) System Administration Area, (4) supervisors Area.

## Student Area

This module provides all student needs in a very comfortable environment. The student can request the document he wants and fill all the required information and pay online for the documents that require some fees. The student will be notified when his document is finished. The student can send his enquiries to student affairs department and get notification when they answer it.

## Employee Area

This module provides employee all the tools required to manage student affairs department. The employee will receive the student’s request with student information. The employee can notify the student when his is paper is finished. The employee can answer students’ questions online.

## System Administration Area

This module is dedicated for system administrators. System administrators responsible on system management, configuration, backup and solving technical issues. System administrator can view system status, data status, online sessions, logs and other system status and measures.

## Supervisors Area

This module is dedicated for system operators. System operators are responsible on managing the system operation and contents. System operator can access all system contents, view statistical reports and provide direct support to users.