# System Modules

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

The system consists of following **modules: (1)** Storage, **(2)** Data Processing, **(3)** Student Area, **(4)** Employee Area, **(5)** System Administration Area, **(6)** Supervisors Area, **(7)** Security.
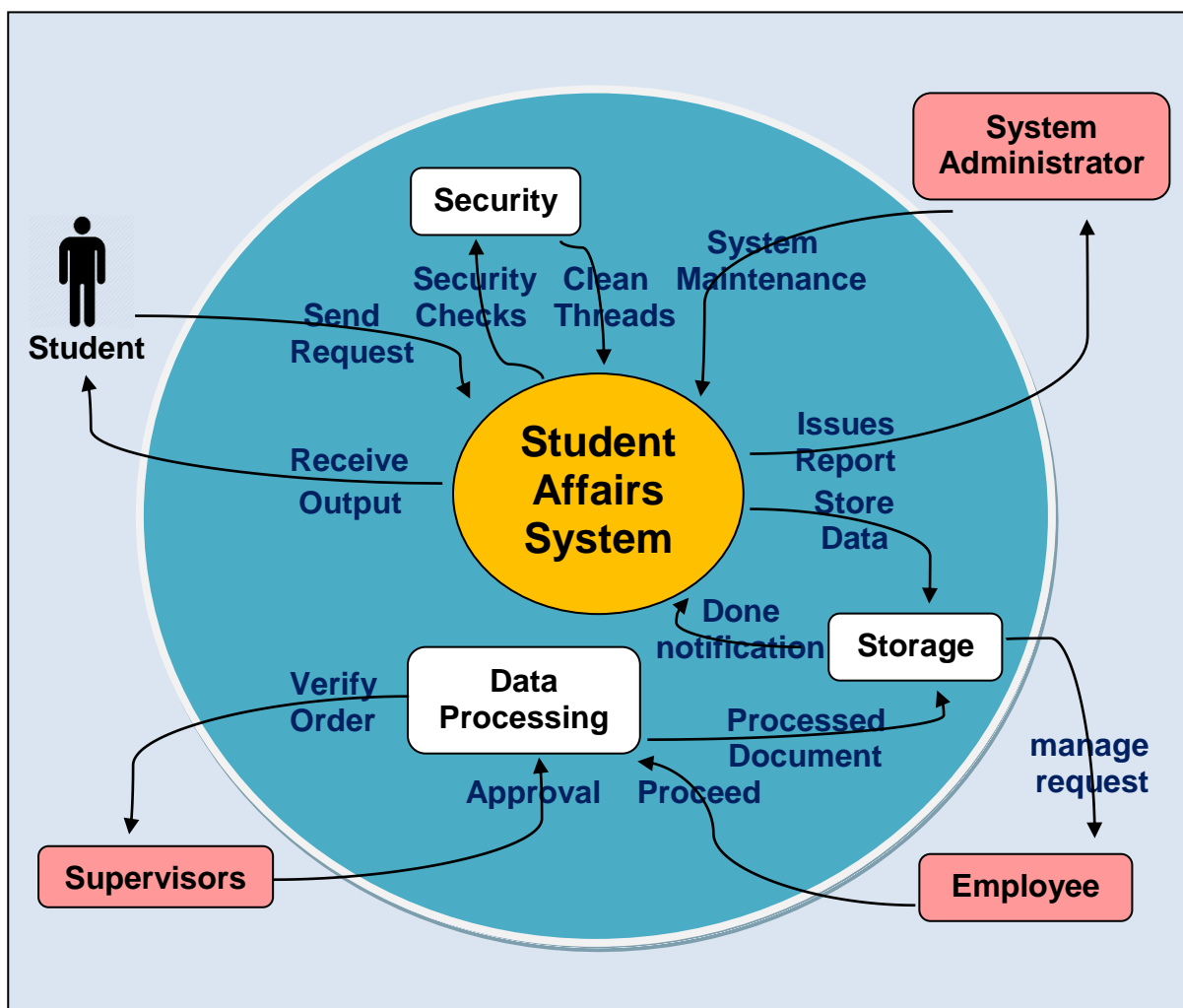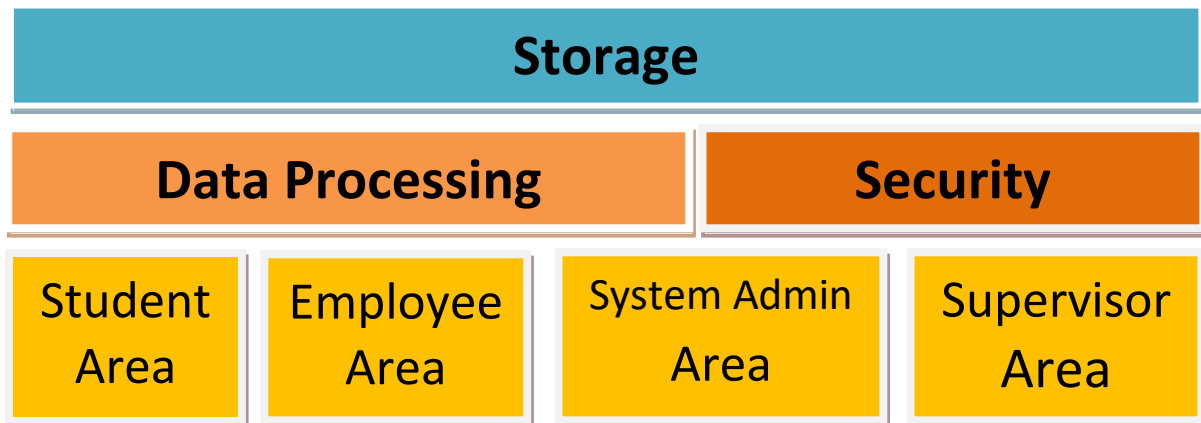
Storage

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.
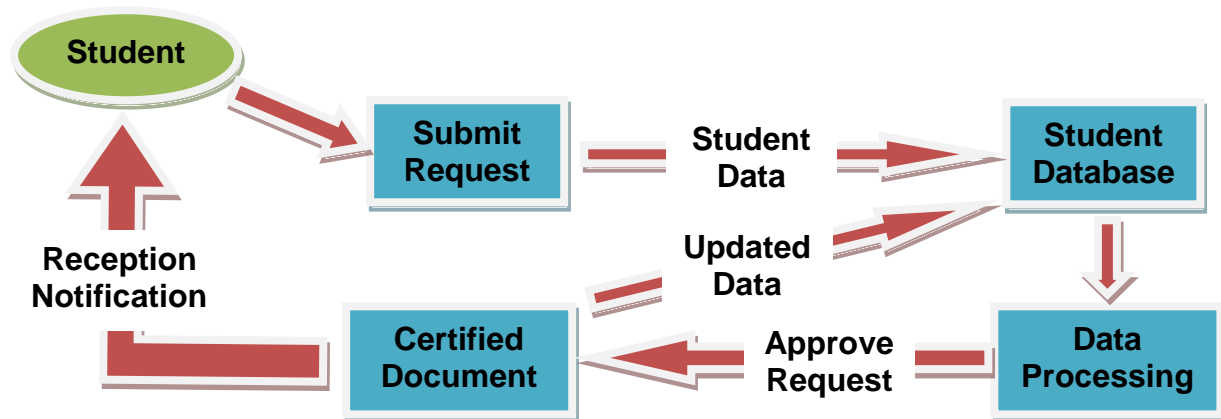
Data Processing

Data processing module is responsible on providing all data related services like data modeling and correction, data **transformation**, data **classifier** and **multimedia** processing. Data modeling 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.
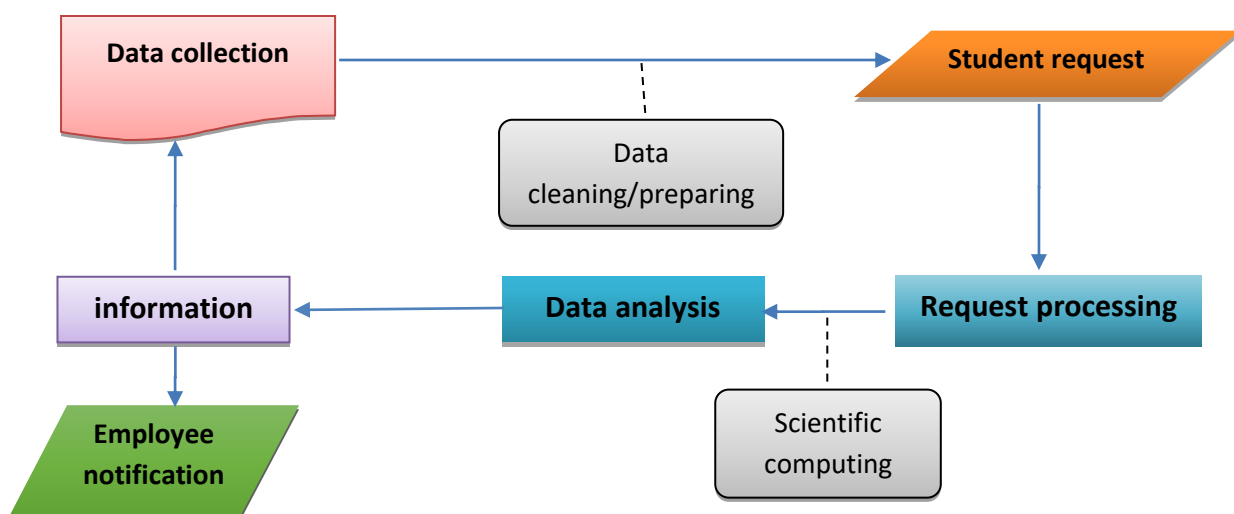
Student Area

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.

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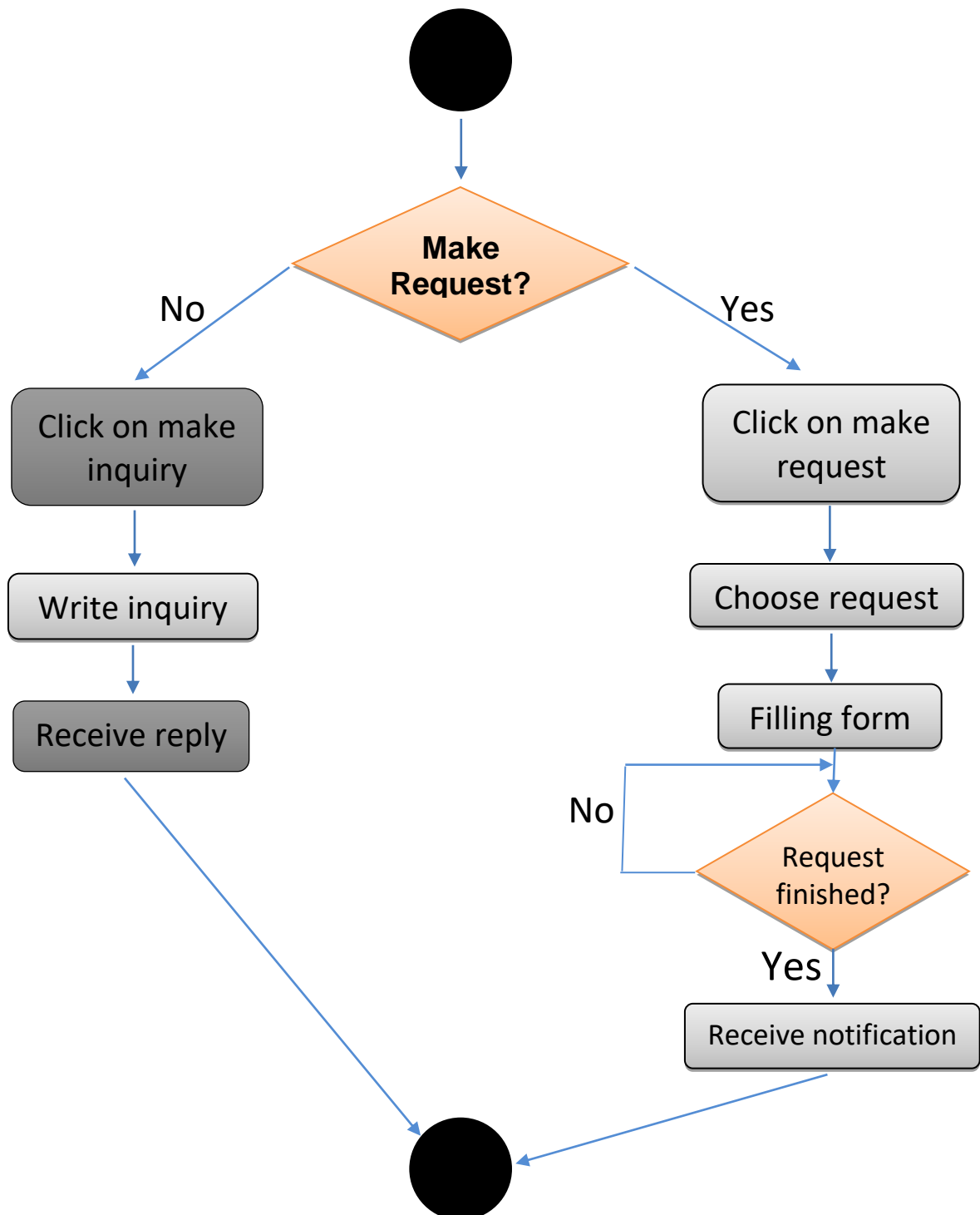
Employee Area

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.

Student 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.

Security

Security module is responsible on user authentication and communications security. User can register/login using internal accounts. The portal access is 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. Data theft is prevented using various data protection techniques.