**Methodology**

**A. Methodology**

**Planning**

The researchers started with defining the scope of the research by defining the research problem and the questions that the research would aim to answer. The researchers then conduct an evaluation of the system that would determine if the system that is going to be created would be feasible on the constraints that are present such as the language, time, and especially the concepts that are allowed in developing the system. The researchers then divided the task through assigning the tasks and position to the members of the research.

**Analysis**

On the development of the prototype of the project, the researchers encountered some functionalities that are not efficient to implement due to the constraints of the research. Features such as storing of the record, queuing and CRUD functionalities of the program are needed to be analyzed and devise of new ways to attain which the researchers completed using a lightweight SQL database called SQLITE3. The researchers then analyzed the 4-point Likert’s Scale Survey that yields the preference and the data that the users wanted to store in the system. The researchers then conducted a roundtable meeting that discusses the features to be added and removed from the prototype version of the project.

**Design**

With the analyzed data collected from the survey and the prototype system developed, the researchers proceed with the design of the final system that would encompass the preference of the users and the core functionalities that should be present in the final application. The researchers conducted various meetings discussing on the approach of the design. Due to the constraints present in the project, the researchers have decided to make an application that would utilize the command line interface in interacting with the user and the numbered list of menus.

**Implementation**

After the planning, analysis, and designing of the system the researchers then would proceed with the implementation of the system. The researchers would offer the system to bodies such as School Registrar, Student Organization, Professors, and other entities that could utilize a Student Record Management System. The researchers would offer a free training for the interested bodies to be familiar with the system and would also make an online guide for basic troubleshooting.

**Maintenance**

After the system implementation, the researchers would open it’s contacts for at least two years for possible troubleshooting and bug fixing on the system. The researchers would also for offers to use the system and develop it to furthermore cater the needs of a specific user in exchange of a labor fee.

**B. Plan and Approach**

The researchers would develop a system based on the preferences of the users that would be gathered and analyzed using the research instrument. The users would be the one to determine what information and record should be keep and manage in the system. The researchers would also include core functionalities that is found from the related software.

After the development of the Student Record Management System, the researchers then would present it to interested parties that could use such system such as School Registrar, Student Organization, Professors, etc. The researcher would then open it’s communication lines to possible bugs and other concerns regarding the system for a year.