**Project management system**

**Existing system studies**

Addis Ababa University is a national university located in Addis Ababa, Ethiopia. It is the oldest university in Ethiopia. The University gives educational services for regular and extension program students. The University is also a research institute for different areas of field of studies. In the University there are different management activities that are performed. And are many projects that are done by students

There are lots of projects done by AAU students but not all projects are collected and stored in an organized manner. How all of the projects are managed is not automated rather it's manual. No system enables projects to be managed easily and to be seen by other students.

**Problem of the existing system**

As mentioned above lots of projects are done Ina AAU by students but not all of the projects are collected and stored in an organized way by AAU, so it is hard to find all previous projects of AAU students. Since the projects are managed manually it is hard to find all the previous projects or we may can’t find them because they may get lost.

**Proposed system**

For the problems related to students' project management system, there must be a system to manage individual and group projects. We will create a system that organizes and stores projects that are done by students from the time at which AAU began up to now. And to add new projects which will be done in the future.

Objectives of the project

General objective

* To create a student project management system in AAU

specific objective

* To organize and store projects which were done in the past
* To add and record new projects that will be done in the future
* To create an appropriate system for the managers to manage student's projects easily.
* To keep projects appropriately
* To facilitate an opportunity for students’ teachers or other bodies, to get and see projects easily
* To enable students to do better and in a more advanced way than the previous project.

**Scope**

This study mainly focuses on how to manage projects. To do this, we have to construct a system that stores the projects that have been done before in AAU. this will protect projects from being lost without recording. Also to add if other projects will be designed in the future. So, students, teachers, or someone else could get and see it without any difficulty. And those new projects will be added by only the headmaster or a teacher or by a representative student. So, we will make the system with two choices, To add and To see. So, to add there will be a password that only a person who adds new projects knows and changes the gif He/she wants. It is out of our scope if the password will be hacked by someone.

**Methodology**

To get full information about projects we will give a questionnaire to the headmaster. After this, we will start to collect and keep all the existing projects by soft copy if they are programs done by using any programming language like Python, c#, c++, and others. Also, we'll take a photograph if they are hardware tools ().

Tools

**Significance of the project**

* It will serve as a clear and successful system to hold projects that have been done before and it can also enable the teachers or headmaster or any representative student to add new projects when they will be done in the future.
* It will enable us to get and see projects easily.
* It will protect projects from being lost
* It will provide an appropriate and useful system for AAU to manage student's project easily.

**Libraries and functions used in this project**

* fstream library: This library is used for handling file input and output operations. It includes classes like ifstream (for reading from files) and ofstream (for writing to files). The open() function is used to open files for reading or writing, and the close() function is used to close the opened file and clear the memory.
* cstdlib (C Standard General Utilities Library) : This header defines several general-purpose functions, including dynamic memory management, random number generation, communication with the environment, integer arithmetic, searching, sorting and converting
* cmath: Header <cmath> declares a set of functions to compute common mathematical operations and transformations
* The conio.h library is a non-standard header file used in **C** and **C++** programming. It contains console input-output functions that were primarily used by **MS-DOS compilers**. Although it’s not part of the standard C/C++ libraries, it served a specific purpose in the past.

A,clrscr(): This function clears the output command window. If you want to remove existing printed information from the screen during code execution, you can use clrscr()

B, getch(): Use this function to read characters from the keyboard. It also holds the output screen until the user enters any character. Without getch()

**Technologies used**

• Programming language - c++, Done by Dev C++ version 6.3

• User interface - console based

• Storage - file based storage

**Testing and Validation:**

• Test cases are created to validate the functionalities of each module

• Sample data is used to ensure the correctness and reliability of the implemented function