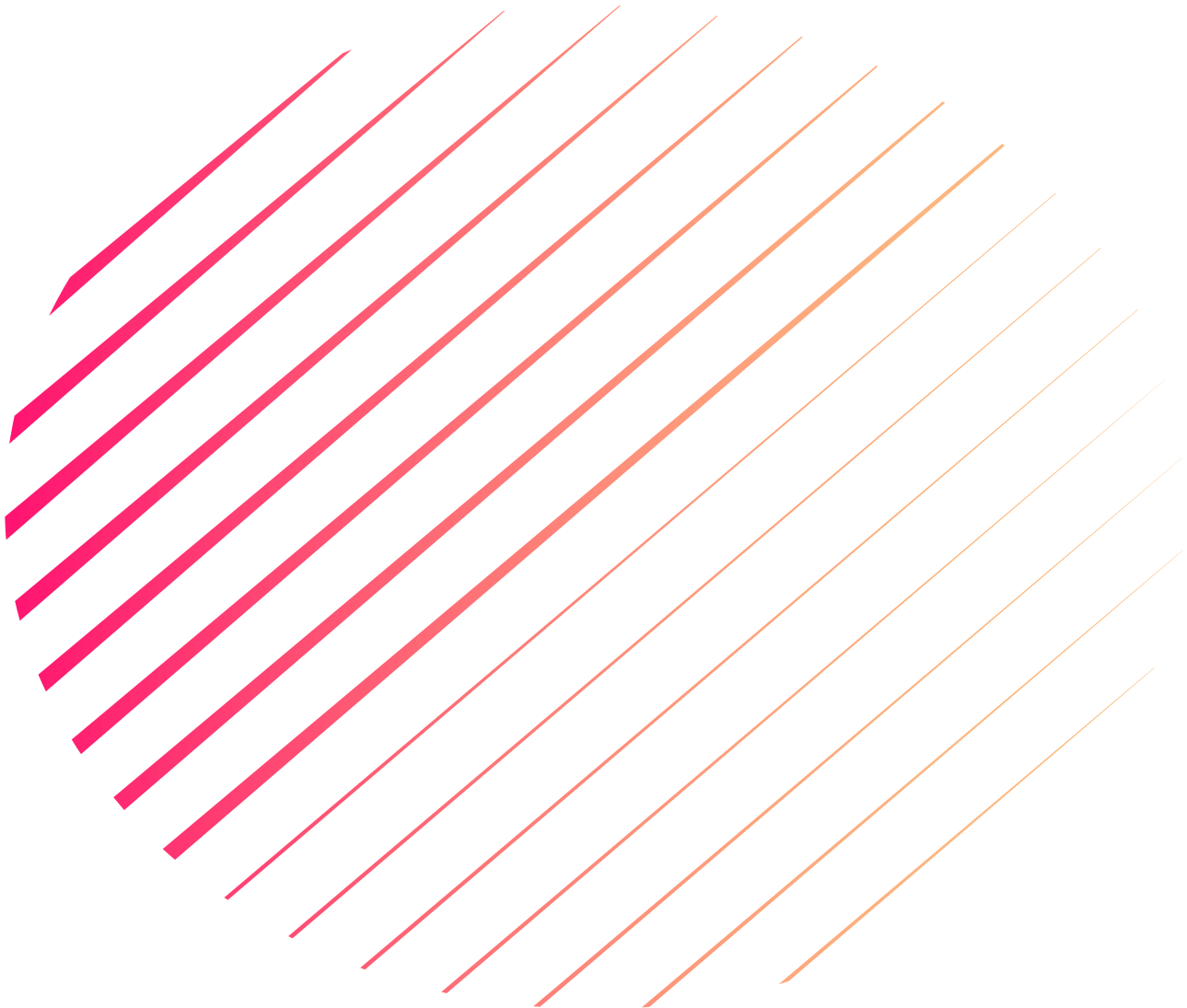


PROJECT WRITE-UP

SCHOOL IDENTITY CARD VERIFICATION SYSTEM



DATE: 20TH APRIL 2023
EEE B2 GROUP III

LECTURER: MR BETT
PROJECT WRITE-UP

INTRODUCTORY STATEMENT

With an ever-increasing population in the country, individual recognition has been critical and has been used by having the details of every individual. This kind of recognition has been critical in government institutions to offer services in various sectors such as health care and education. Governing bodies have used this kind of recognition to offer and manage their governing strategies.

In school, for example, the administration offers school IDs to recognize their students. With a case study of our institution, Jomo Kenyatta University of Agriculture and Technology, students have their IDs that are used to access services ranging from sitting for their exams to accessing health care services at the hospital. Their entry into the institution is done through showing their student ID to verify their identity as JKUAT students.

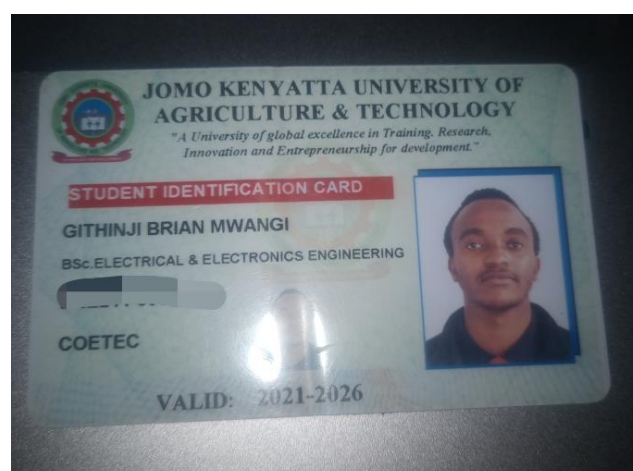
CHALLENGE FACED

Students have faced the problem of losing their identity cards and risk losing access to services offered at JKUAT. They even risk losing access to the institution. This leads to a challenge in their education since without their identity cards, the institution recognizes them as non-students.

Losing their IDs is a challenge that is commonly heard of since it is part and parcel of human error. It could be lost or misplaced or stolen hence the challenge cannot be blamed on the students.

A lot of cases have been presented to the departmental offices regarding lost IDs.

As a group, we decided to investigate the way we could solve this issue and create a better educational environment for our fellow students.



A sample of a JKUAT student ID

SOLUTION FOUND

We decided to create a system that could enable students to find their IDs. The system has a database with the details of all students in the school. This can be done by filling in their details during their first year reporting day.

When a student loses his or her ID, the student who has found it can access the system and enter the school ID number written on that ID, and by accessing the database, the details of the students can be displayed by the system.

Specific details of the students that would be displayed include the name, department of study, and ID number.

We were able to compile a written source code in C language that would create this system.

System in place is a mobile or web application.

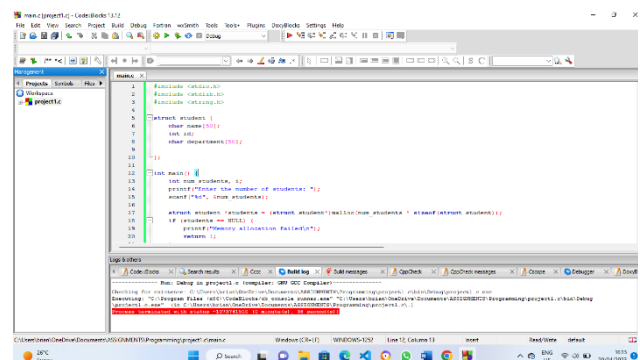
SOURCE CODE

We wrote our code in C programming language and used the Codeblocks IDE.

The code can be found using the link:
<https://github.com/BrianGithinji/EEE-B2-2.2-GROUP-3/blob/master/Final%20Project%20code>

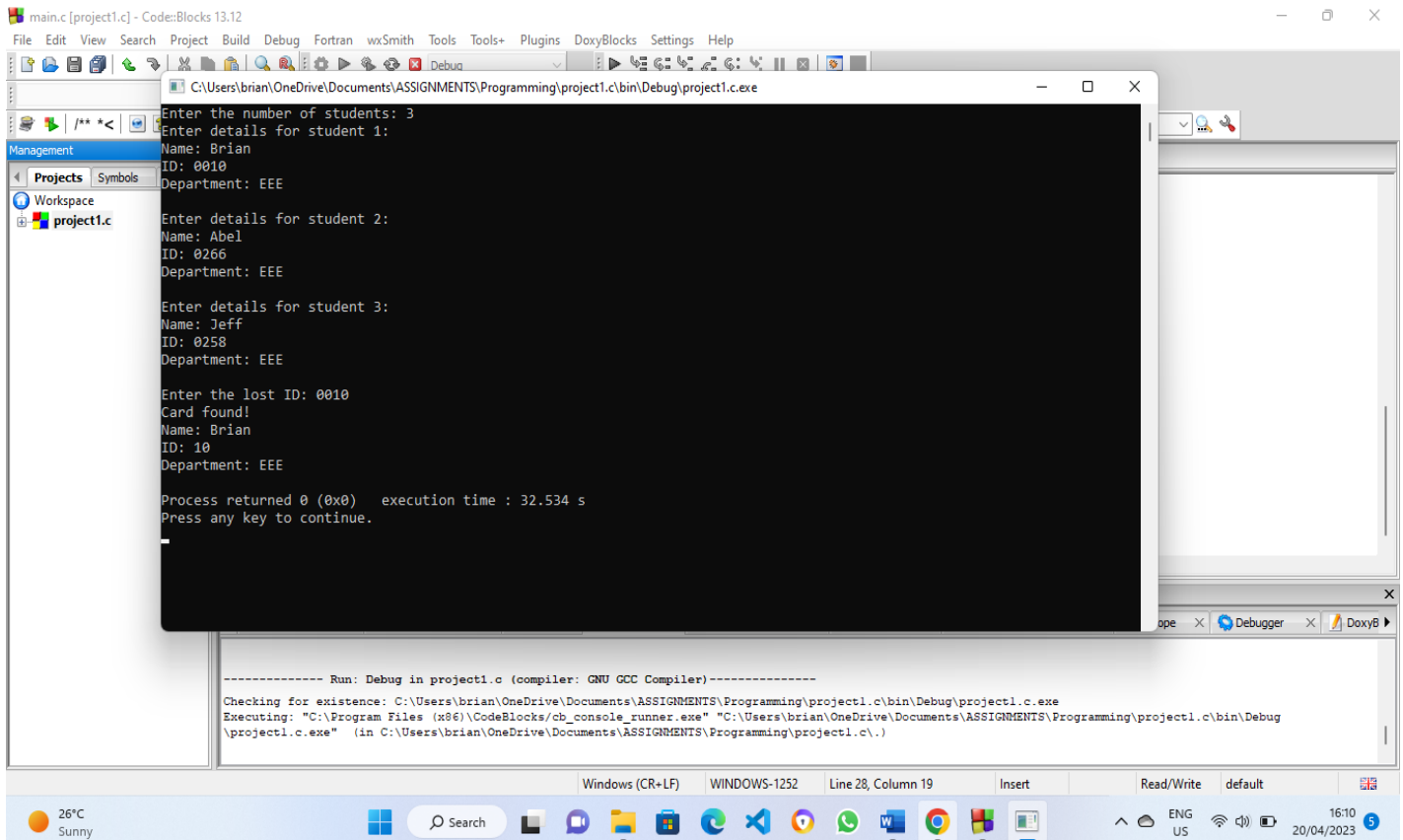


JKUAT students at the gate



BUILDING AND RUNNING THE CODE

The display of the code was as shown:



```
main.c [project1.c] - Code::Blocks 13.12
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBlocks Settings Help
C:\Users\brian\OneDrive\Documents\ASSIGNMENTS\Programming\project1.c\bin\Debug\project1.c.exe
Enter the number of students: 3
Enter details for student 1:
Name: Brian
ID: 0010
Department: EEE
Enter details for student 2:
Name: Abel
ID: 0266
Department: EEE
Enter details for student 3:
Name: Jeff
ID: 0258
Department: EEE
Enter the lost ID: 0010
Card found!
Name: Brian
ID: 10
Department: EEE
Process returned 0 (0x0)   execution time : 32.534 s
Press any key to continue.

----- Run: Debug in project1.c (compiler: GNU GCC Compiler)-----
Checking for existence: C:\Users\brian\OneDrive\Documents\ASSIGNMENTS\Programming\project1.c\bin\Debug\project1.c.exe
Executing: "C:\Program Files (x86)\CodeBlocks\cb_console_runner.exe" "C:\Users\brian\OneDrive\Documents\ASSIGNMENTS\Programming\project1.c\bin\Debug\project1.c.exe" (in C:\Users\brian\OneDrive\Documents\ASSIGNMENTS\Programming\project1.c\..)
```

PROBLEM ENCOUNTERED

1. The code could not run with more than two names enlisted for one student.
2. A database has to be created to run for the system to work.

FUTURE DEVELOPMENTS

1. More student data could be entered for accuracy.
2. A database can be created that is separate to the source code with a documentational database such as MongoDB.



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