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# **Software Requirements Specification**

**for**

## **Students Courses Prediction System**

**Version 1.0 approved**

**Prepared by Group 12**

**Software Engineering Assignment**

**March 30, 2021**

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# 1. Introduction

## 1.1 Purpose

The purpose of this document is to present a detailed description of the Students Courses Prediction System. It will explain the purpose and features of the software, the interfaces of the software, what the software will do and the constraints under which it must operate. This document is intended for users of the software and also potential developers.

## 1.2 Document Conventions

*This Document was created based on the IEEE template for System Requirement Specification Documents.*

## 1.3 Intended Audience and Reading Suggestions

The requirement document is expected to be read by the following audience:

- Developers: will read this document in order to refer before developing the system
- Users: will check whether all they need inside the system is identified in this document
- System Analysts: to analyze the requirement for the development

## 1.4 Product Scope

The scopes of this system are as follows:

- This system allows students to: -
  - Register into the system.
  - Predict Courses
  - Add Feedback
- This system also allows admin part to: -
  - Add Courses.
  - View Courses.
  - Add / Edit O-level Subjects.
  - View Feedback

## 1.5 References

For more info, contact the following numbers for details:

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## **2. Overall Description**

### **2.1 Product Perspective**

*This project is designed to help science students to have idea or check all possible and available courses that map their combination from Jamb and the cut-off marks that certify the requirement allotted to the various courses, this is in order to clarify the issues of having misinterpretation of subject's combination and the constraint of cut-off marks.*

### **2.2 Product Functions**

- *Admin: Log into the system*
- *Admin: Add O-level Subjects*
- *Admin: Add Courses*
- *Admin: View / Edit Courses*
- *Admin: View Registered student*
- *Admin: View Feedback*
- *Student: Student register*
- *Student: Log into the System*
- *Student: Add his or her subject's combination from jamb and cut-off to predicts.*
- *Students: Add Feedback*

### **2.3 User Classes and Characteristics**

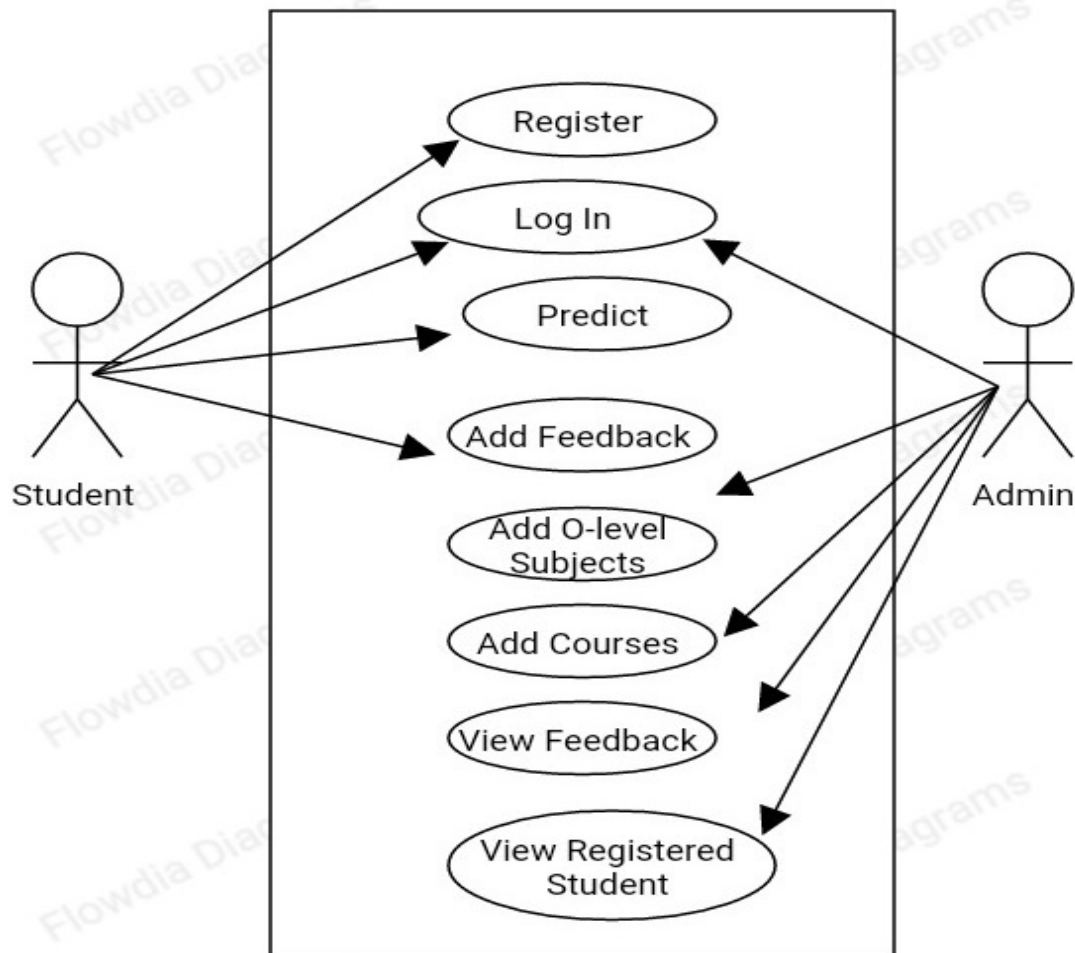
- Typical Users, such as students who wants to have an idea about the courses that they can be able to apply for during their admission process.

### **2.4 Operating Environment**

- *All measure browsers. Such as Google Chrome, Mozilla Firefox, Opera, etc.*

## 2.5 Design and Implementation Constraints

Use case diagram



The constraints in design and implementation phase can be instead as follows:

- Language requirement
  - This system is only in English
- Browser support limitations
  - This system is a web based application.
  - Support all measure browsers google chrome
- Security consideration
  - Each of the Student and System Administrator of Courses Prediction system will have their own username and password.
  - This is to ensure the secure auditing process

## 2.6 User Documentation

Since this system is easy to use and the process is simple, the user will be equipped with the simple user manual. The characteristic of user manual are as follows:

- This user manual will be available in home page.
- This user manual will consist of step by step approach to use system.

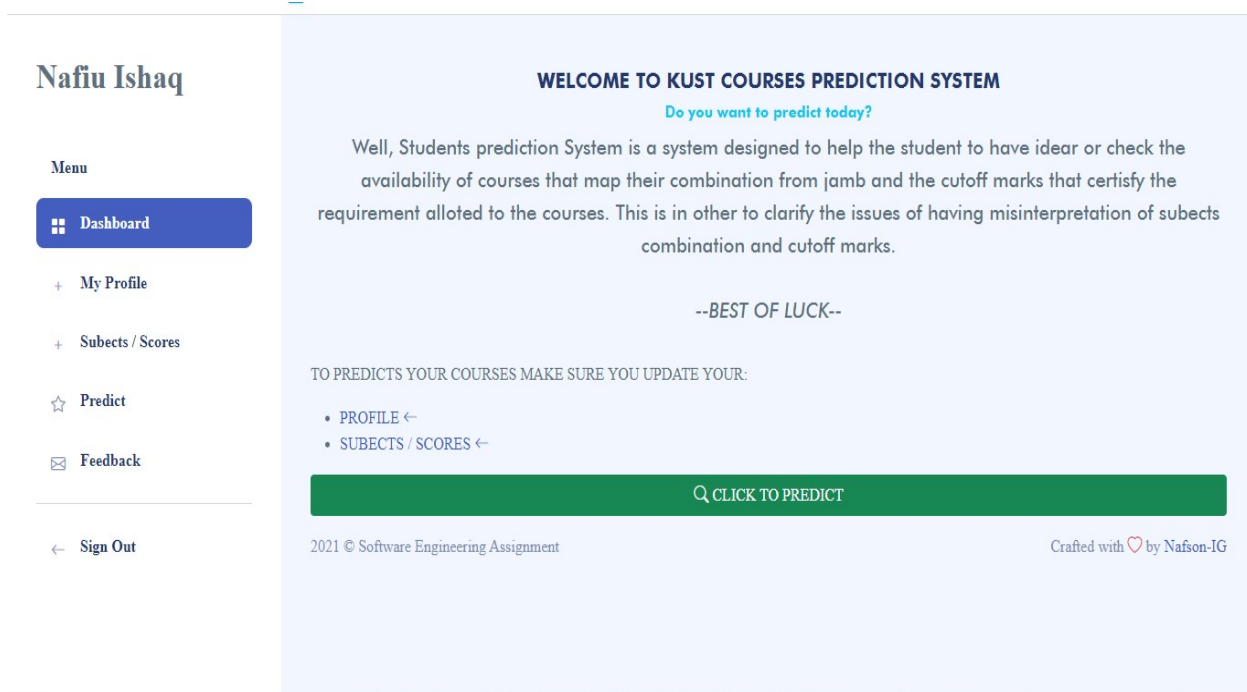
## 2.7 Assumptions and Dependencies

*Student Courses Prediction System is developed in PHP and MYSQL therefore requires to be hosted online. The required software in order to use this system are: Google Chrome, Internet Explorer, Opera etc.*

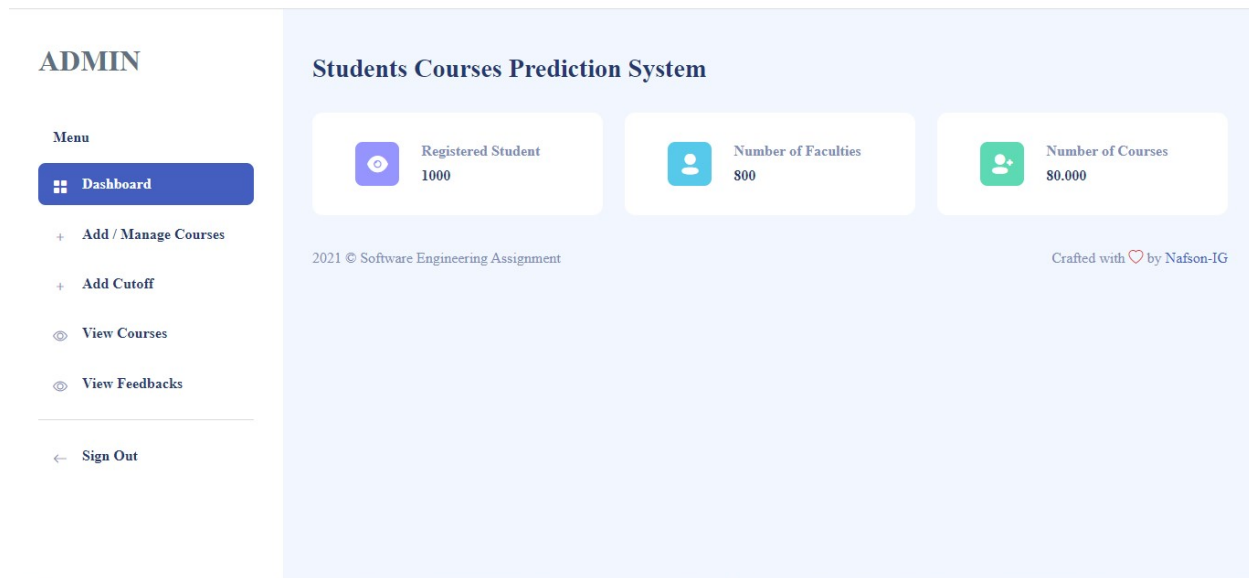
# 3. External Interface Requirements

## 3.1 User Interfaces

User Home page



## Admin Home Page



## 3.2 Hardware Interfaces

*The hardware to be used ranges from Desktop, Laptop, Tablet and mobile Devices*

## 3.3 Software Interfaces

*Since the software is web-based system the software interface is based on the device used to browse the system.*

## 3.4 Communications Interfaces

*Students Prediction System requires an internet connection be used.*

# 4. System Features

*This section demonstrates Students Prediction System most prominent features and explains how they can be used and the results they will give back to the user.*

## 4.1 Add O-level Subjects.

*4.1.1: The Admin will log into the system to:*

**Add O-level** subjects that is going to be used by the student at their end to be able to check the available and or possible courses that they can apply for in the university.

**Add Courses** along with the constraint for the student to see while prediction matches the courses constraint.

REQ-1 Add O-level:

REQ-2 Add Courses:

## 4.2 Add O-level Subjects.

4.2.1: The Student will register and log into the system to:

**Add subject from jamb combination** for the system to check the availability of matching the courses that are allowed by his or her combination.

**Prediction** Once the user (Student) provide the details and click the predicts button the system automatically select all the courses that the user can apply for in the university.

REQ-1 Add subject from jamb:

REQ-2 Prediction:

## 5. Other Nonfunctional Requirements

### 5.1 Performance Requirements

All devices with internet Access and a minimum of 258mb storage can access the system online.

### 5.2 Safety Requirements

No safety requirement yet. Please use the system at your own risk.

### 5.3 Security Requirements

Student Courses Prediction System does not have any security requirements and thus any type of user can use it without any additional privileges except for the admin which only the administrator have access to the login details.

### 5.4 Software Quality Attributes

Student Prediction System provides the users with simple features. Due to its well designed and easy to use interface it can be used by both experts and typical users.

### 5.5 Business Rules

No business rules yet.



## 6. Other Requirements

*No other requirement*

## Appendix A: Glossary

*No of meetings 5*

*Attendance*

<i>Name</i>	<i>No of Attendance</i>	<i>Reg No</i>
Bello Sani Muhammad	5/5	UG16/COMS/1197
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