

Exam System

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1. Table of Contents

1. Introduction

- 1.1 Purpose
- 1.2 Scope
- 1.3 Definition
- 1.4 Reference
- 1.5 Overview

2. Overall Description

- 2.1 Product perspective
- 2.2 System Interface
- 2.3 User interface
- 2.4 Hardware Requirements
- 2.5 Software Requirements

3. Product functions

- 3.1 Context diagram
- 3.2 Use case diagrams
 - 3.2.1 User login
 - 3.2.2 Menu selection
 - 3.2.3 Start test

4. Use case description

- 4.1 User login
- 4.2 Menu selection
- 4.3 Start quiz

5. Constraint

- 5.1 User interface constraint
- 5.2 Software constraint
- 5.3 Hardware constraint
- 5.4 Design standard compliance

6. Specific requirement

- 6.1 Functional requirement
 - a. Use case scenario-user login
 - b. Use case scenario-user test
- 6.2 Performance requirement
- 6.3 Design constraint
- 6.4 Software system attributes
- 6.5 Reliability
- 6.6 Availability
- 6.7 Portability

1. Introduction

1.1 Purpose

The purpose of this document is to conduct the online exam to check the student progress, the description and requirements of an exam system.

1.2 Scope

This console-based exam system will be an online examination portal for any school/college wishing to manage their academic examination online.

1.3 Definitions

Exam management system is console-based application to help facilitate online exam.

1.3.1 Login

Login is the first feature of the exam system where user can give the user name and password which is provided by the school/college.

1.3.2 Create account

Create account is the second feature of the exam system where user can provide the user first name, last name and email to create the.

1.3.3 Quiz

After the successfully login and provide the student details the main quiz will be start. Which contain display question, correct answer, total marks, result and exit.

1.4 Reference

Probuz trainer Mr. Roshan Kumar.

1.5 Overview

This is a working console application and, as such, is subject to change. Requirements may be modified, and additional requirements may be added as development progresses and the system description becomes more refined. This information will serve as a working structure for the current definition and future evolution of the exam system.

2. Overall Description

2.1 Product perspective

Exam system is meant to serve as a common platform where management of quiz can be carried out conveniently. My goal is to develop the Exam system used by students it is more users friendly and to promote online academic examination among the users.

2.2 System Interface

The console application will be used for exam system. The user inputs data via keyboard. The actual program that will perform the operations is written in C++.

2.3 User interface

The new system will provide a very simple and user-friendly interface to the user so that the user can easily navigate through the option which contain Login, create account, display question, correct answer, total marks, result and exit. If user cannot access the other option without giving the test.

2.4 Hardware Requirements

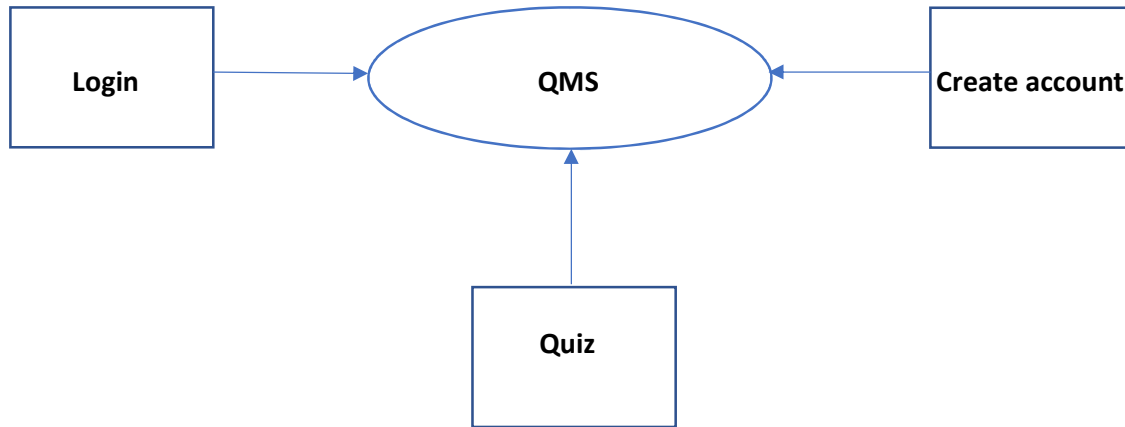
1. Monitor screen – the software will display information to the user via the monitor screen
2. Mouse – the software will change font size with the combination of (ctrl + mouse wheel).
3. Keyboard – user easily interact with the software with the keystrokes of the keyboard.

2.5 Software Requirements

1. Dev-Cpp 5.11 TDM-GCC 4.9.2 where code create in C++ programming language.
2. An OS which is supports modern programming language.

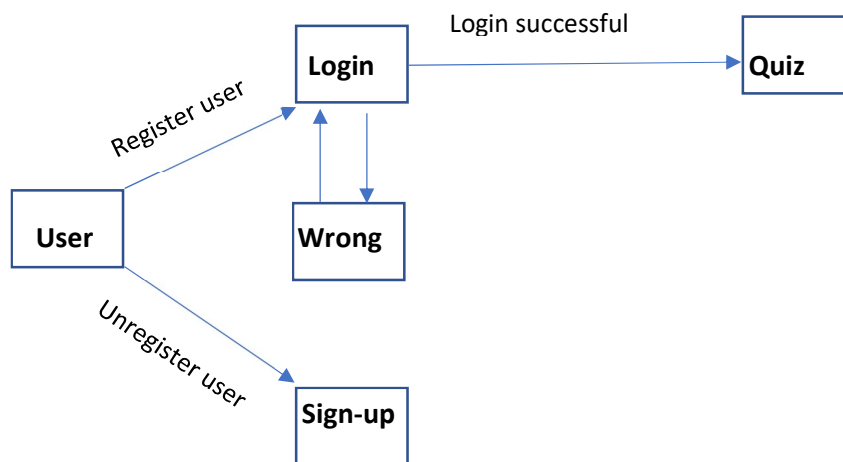
3. Product functions

3.1 Context Diagram

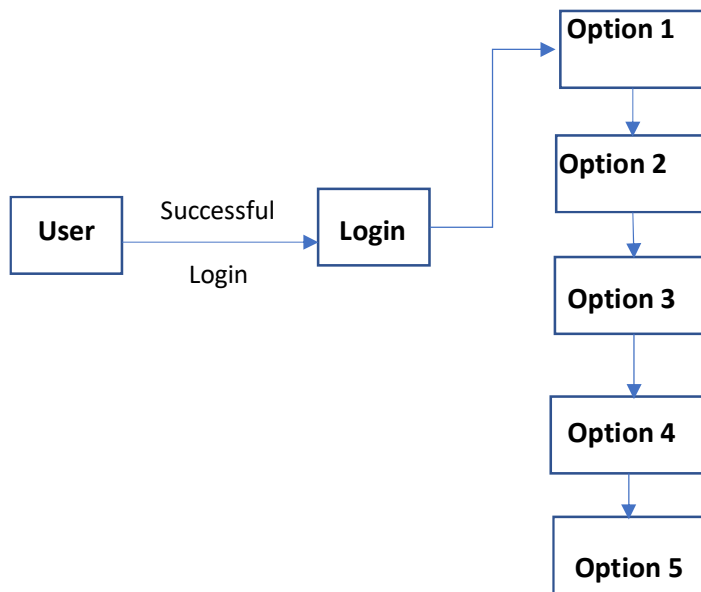


3.2 Use Case Diagrams

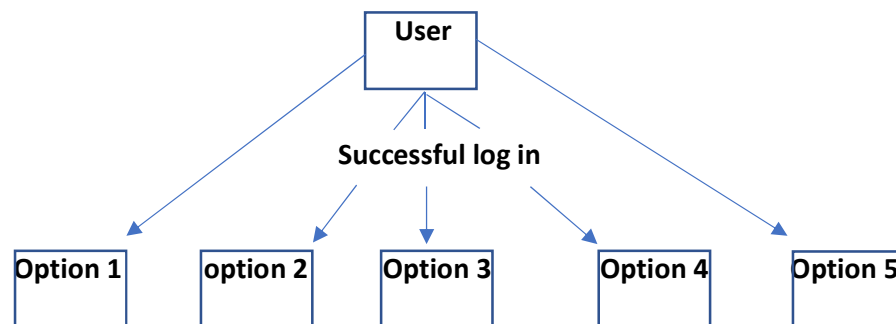
3.2.1 User Login



3.2.2 Menu selection



3.2.3 Start Test



4. Use case description

4.1 User login

Register user who know the login credentials if credentials are match the it shows otherwise it show the credentials is wrong and it exit from the program.

4.2 Menu selection

After entering credentials user successful login, it shows the multiple option where user must select any option if user want to give test then user will select Display question if user wants to show the correct answer then user will select Display correct answer. If user don't want to give the test the user has exit option. For terminate the test.

4.3 Start quiz

If user successfully login then select display question to start quiz and it will display question one by one and user must select right option.

If option is right, then it will count/add 3 marks for each question if answer is wrong it will deduct 1 mark for the total. after the test user know the result whether the user pass or fail.

5. Constraint

5.1 User interface constraint

This software is console-based software and it is very simple, and user can familiar with this software very easily and quickly.

5.2 Software constraint

The software will be run on any IDE like Dev C++, visual studio code etc. or command prompt.

5.3 Hardware constraint

The application should work on desktop and laptop.

5.4 Design standard compliance

This software shall be run on console app in c++ programming language.

6. Specific requirement

6.1 Functional requirement

- a. Use case scenario-user login

Purpose	User login in into software using credentials which is provided by admin.
User	A user with an existing profile.
Input data	Profile username and password.
Output data	Corresponding data.
Pre-condition	User is not logged into a profile input profile matches with existing data.
Post-condition	Matched with existing data login successful.
Basic flow	Matched data with existing data it matches shows logging successful Otherwise shows wrong password.

b. Use case scenario-user test

Purpose	A user wants to start quiz.
User	An existing user logged into the software
Input data	Start quiz.
Output data	Shows total marks.
Pre-condition	User is logged for test shows menu on screen to select menu.
Basic flow	The user select menu and start test after complete test on screen directly shows score.

6.2 Performance requirement

The system support one user at time who already registered with user details.

6.3 Design constraint

The software is written in C++ Programming language output must compatible with console app.

6.4 Software system attributes

1. Dev-Cpp 5.11 TDM-GCC 4.9.2
2. RAM

6.5 Reliability

The reliability of the overall program depends on the separate components.

6.6 Availability

The system code should available in laptop or computers for perform or run code.

6.7 Portability

This software run on another IDE also.