Ukab remarking database essay sample

A. Introduction

The UKAB (United Kingdom Awarding Body) is a script remarking company. They aim to return examination scripts to candidates within three weeks of them receiving the request.

The company produces a daily list of re-marks that have not been completed in the three-week period and a daily list of re-marks completed where the candidate's grade has changed.

The UKAB require the Centre And Candidate's information to be able to produce a letter and/or a report on the candidate's new or unchanged grade. The centre will then receive this report through the post and the candidate will collect it from the centre.

It is important that we make sure that the Centre and Candidate number are correct as if they are wrong the remark will be awarded to another candidate and may change their final outcome.

B. Objectives of the new system

The objectives for this system can be expressed in both quantative and qualitative terms

1. It should take very little time to find a record, which is already on file.

2. Data Entry should be as fast and efficient as possible to save time.

3. There should be allowances for Candidates requesting remarks of more than one paper.

4. The system is required to show all the following information;

1. A list of at least 15 candidates from four centres.

2. The subjects should cover situations when the remark has increased and decreased.

5. It should be possible to preview and print a report of overdue remarks.

6. It should be possible to see and print a list of all remarks from the system.

7. The main menu should open and fully load when the database is opened, the whole system should use menus for navigation.

C. Data flows

A Data Flow Diagram for the proposed system/database is shown below;

D. Constraints and limitations

System Boundaries

The system that needs to be developed is going to be a database for the employee's use, and is going to enhance the capability of the old filing system. If this system were implemented, it would have to be updated every day. However in the future it may be deemed necessary to update this system every hour or half-hour. This would be a problem because the system would then take up a lot of memory on the network and hence slow down other applications.

Software

I will be completing this project with two versions of Microsoft access. The 1997 version and the 2000 version as these are the two versions available to me. The final system however will be in the 2000 version as it is then easier to access from newer computers. Access will be the program I use to design my system as I can use visual basic with it for applications inside the system. Access also uses relational databases to work and this will be particularly useful as it means I can relate the Script, Centre and Candidate tables together.

Hardware

To be able to run access 2000 a windows based PC with Windows 2000 or higher with a minimum of 8Mb (Preferably 16Mb plus room for the database to be run at the same time). A fast processor such as P120 will be needed to speed up the movement between the different menus of the system.

E. Consideration of possible solutions

A database system would be ideal for tackling the UKAB problem, and Access 2000 should ideally be used because it is probably the most widely used version of access. It is possible to create parts of the system using visual basic or a similar programming language, but this is not really needed, as it would involve creating a higher cost for the UKAB because they would need to buy new software to run the system.

I have access 2000 at home and access 1997 at school so I already have a little experience with the program.

Using access I should be able to:

* Set up Tables and Relationships that are needed for the system.

* Produce unique adding and editing forms for records.

* Create queries to enable fast searches of the database for specific information.

* Design reports and individual information slips as needed.

* Create and use a unique menu system to navigate the system.

Part 2: DESIGN.

A. Overall System Design:

INPUT

PROCESSES

Candidate details:

* Candidate ID

* Centre ID

* Subject ID*

* Candidate Forename

* Candidate Surname

* Original Mark

* New Mark

* Script Return Needed

* Date of Request

* Date Remark Due At Centre

* Actual Date of Remark's Arrival

* Three Week Target Achieved

Centre details:

* Centre ID

* Centre Name

* Centre Address

* Town

* Centre Contact Number

Subject details:

* Subject ID

* A Grade Boundary

* B Grade Boundary

* C Grade Boundary

* D Grade Boundary

* E Grade Boundary

* U Grade Below

Add, Edit, Delete Subject Details

Add, Edit, Delete Candidate Details

Add, Edit, Delete Centre Details

Print out reports:

* Candidate Details with Remark Details

* Overdue Remarks

TABLES

OUTPUT

TblSubject

TblCandidate

TblCentre

Display:

* Candidate/Script Details

* Centre Details

Reports:

* Candidate Details with Remark Details

* Overdue Remarks

B. Database Design:

The system will contain three entities, Candidiate, Subject, Centre. These are related as shown below:

I will create tables for each of these entities.

C. Definition of Data Requirements:

Attribute Name

Comments

Data type and Length

Validation

Candidate ID

Automatically Inserted

Text (4)

Unique Primary Key When Joined with Centre ID

Candidate Forename

Text (25)

Candidate Surname

Text (10)

Original Mark

Text (1)

New Mark

Text (1)

Script Return Needed

Yes/No (Boolean)

Date of Request

Default – Current Date

Date/Time

Date Remark Due At Centre

Default – Current Date Add Three Weeks

Date/Time

Actual Date of Remark's Arrival

Date/Time

Three Week Target Achieved

Yes/No (Boolean)

Centre ID

Text (5)

Must Be Between 10000 and 80000 Unique Primary Key When Joined With Candidate ID

Centre Name

Text (25)

Centre Address

Text (25)

Town

Text (10)

Centre Contact Number

Text (12)

Subject ID

Text (5)

Unique Primary Key

A Grade Boundary

Expressed as percentage

Number (%)

B Grade Boundary

Expressed as percentage

Number (%)

C Grade Boundary

Expressed as percentage

Number (%)

D Grade Boundary

Expressed as percentage

Number (%)

E Grade Boundary

Expressed as percentage

Number (%)

U Grade Below

Expressed as percentage

Number (%)

D. Design of input forms.

Three data entry forms are needed for this system to work:

1. frmAddEditCC

This form will be used to add and edit Candidate remark details. It needs facilities to be able to:

* Add new Candidates to the database.

* Edit old Candidates already on the database.

* Navigate back to the previous menu.

* Print records.

* Delete records.

2. frmCntrAddEdit

This form will be used to add and edit Centre details, therefore it needs to be able to:

* Add new Centres to the database.

* Edit old Centre details.

* Navigate back to the previous menu.

* Print records.

* Delete records.

3. frmSbjctAddEdit

This form will be needed to input and change old details in the database.

Therefore it needs to be able to do the following:

* Add new Subjects to the database.

* Edit old Subject details.

* Navigate back to the previous menu.

* Print records.

* Delete Records

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