

**CORSAT QUIZ FACILITY**

BY  
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JANUARY 2006

## CORSAT QUIZ FACILITY (CQF)

Internet Blocks, specialized in developing Web based applications for the Training and Education industry, has developed a ready made facility for online testing called Corsat Quiz Facility (CQF). Both IBM and OTS have used CQF successfully during the Egypt Graduates Project previous phases many times testing more than 1700 candidates on the same time and in the scope of other projects as well. CQF is designed to test any kind of multiple-choice exam on any subject and with single or multiple right answer. The following is a description of the modules of CQF and required operation conditions.

### 1- Exams Preparation

The exam preparation section of CQF is used for setting up new exams in order to be used in the future. The following is a description of the main functions of the exam preparation module

#### a. Maintain exams

Create new exams and update their basic data such as subject, version, date of creation, etc. An exam is a group of related questions designed to measure the level of a candidate in a special subject. Exam definition also involves whether the questions of the exam should appear to the examinee in one single page or to be displayed question by question. These are two different formats that CQF provides for testing.

#### b. Maintain exam sections

Every exam can be divided into different sections. A section is a group of related questions designed around a part of the exam. The integration of sections forms a complete exam. The system allows for adding new sections for any exam.

#### c. Maintain question levels

In order to improve the testing process, questions of the same section can be divided into different difficulty levels. The system allows for adding difficulty levels to any exam section.

#### d. Maintain questions

Questions are the main component of the system. Each question is added to a difficulty level of an exam section. For each question, CQF allows the addition of a set of maximum 7 answers. Moreover, the correct answer or answers are marked. CQF allows those types of questions and answers:

- i. Questions with a single correct answer
- ii. Questions with multiple correct answers

On the other hand, the following CQF allows the following formats to be used in questions and answers:

- i. Text format
- ii. Image format

#### e. Maintain exam generation rules

Exam rules are a set of data items that have to be defined for each exam to help generating the exam versions. Those data items include:

- i. Total number of questions per exam version
- ii. Number of questions to be generated from each difficulty level of an exam section
- iii. Duration of the exam

## 2- Candidates Registration

CQF allows for candidates registration for exams. The following is needed for registering a candidate for an exam:

- a. Register Candidates  
Registering of Candidates' basic data such as ID, name, birth date etc...
- b. Register exam date and time  
Define the exam date and time for the candidate.

## 3- Integration with CASS for candidates registration

A module is developed to allow for migration of Candidates data from CASS directly to CQF instead of dual data entry.

## 4- Exam Generation

Depending on the fed-in data, CQF generates a number of versions equal to a preset figure or to the number of candidates preset to sit for the exam.

Generation depends on the exam generation rules that are defined with the exam. CQF is loaded with a randomization engine that randomizes the selection of questions from each difficulty level, randomizes the organization of questions within the section and randomizes the organization of answers of each question.

## 5- Assign exams to candidates

Depending on the exam rules set before, each candidate is assigned an exam based on one of the following options:

- c. Every candidate has his own exam version
- d. Every candidate is assigned a preset version

## 6- Take exam

Taking the exam is the only interface of CQF that exam-candidates use. It composes of the following sub-modules:

- a. Security and login  
Candidates are only allowed to sit for exam during a preset period. If a candidate tries to log to the exam in any other period, the system rejects. Candidates log to the system using a combination of their IDs and Birth dates.

## IBM/MCIT Egypt Graduates Project

### Qualification Exam

#### Exam Instructions

- 1- The exam includes 80 questions divided among six sections.
- 2- You are required to solve all 80 questions in only 80 minutes.
- 3- You are not allowed to take any paper with you out of the exam.
- 4- We shall distribute some documentation on you after the exam. Do not go without them. They are mandatory for the interview.
- 5- Results and interview schedule will be announced on [www.corsat.com/IBM-EGP](http://www.corsat.com/IBM-EGP) on Monday October 28th after 5:00 PM.

Please fill all the following fields to start your exam

Application Number:  \*

First Name:  \* Middle Name(s):  \* Last Name:  \*

Date Of Birth:  Day  Month  Year  \*

Select Your Exam Number:  select Exam

Do not click on this button until you are allowed

Take Exam

#### b. Mark specific questions

During the exam, while answering questions, if a candidate needs to mark a question for future revision, the system allows for marking any number of questions.

User Name: Alaa Abdallah Emam  
Date of Birth: 21/11/1981  
Start time: 16:42

mark

#### question (2 of 100)

Your network has a permanent connection to the Internet. Your local network includes multiple services. You are concerned about hackers gaining access from the Internet. You decide to set up filtering on ports 100 through 200. Which service might this affect?

- (A)  FTP
- (B)  NTP
- (C)  HTTP
- (D)  SMTP

Previous

Final Report

Next

#### c. List marked questions

CQF has a feature to list marked questions and redisplay them one by one for candidate to review.

d. List unanswered questions

CQF also has a feature to list unanswered questions and redisplay them one by one in order for candidates not to forget answering them.

User Name: Alaa Abdallah Emam  
 Date of Birth: 21/11/1981  
 Start time: 16:42

\* Checked = For Review  
 \* Yellow = Not Answered

<input type="checkbox"/> Q (1)	<input type="checkbox"/> Q (11)	<input type="checkbox"/> Q (21)	<input type="checkbox"/> Q (31)	<input type="checkbox"/> Q (41)	<input type="checkbox"/> Q (51)	<input type="checkbox"/> Q (61)	<input type="checkbox"/> Q (71)	<input type="checkbox"/> Q (81)	<input type="checkbox"/> Q (91)
<input type="checkbox"/> Q (2)	<input type="checkbox"/> Q (12)	<input type="checkbox"/> Q (22)	<input type="checkbox"/> Q (32)	<input type="checkbox"/> Q (42)	<input type="checkbox"/> Q (52)	<input type="checkbox"/> Q (62)	<input type="checkbox"/> Q (72)	<input type="checkbox"/> Q (82)	<input type="checkbox"/> Q (92)
<input type="checkbox"/> Q (3)	<input type="checkbox"/> Q (13)	<input type="checkbox"/> Q (23)	<input type="checkbox"/> Q (33)	<input type="checkbox"/> Q (43)	<input type="checkbox"/> Q (53)	<input type="checkbox"/> Q (63)	<input type="checkbox"/> Q (73)	<input type="checkbox"/> Q (83)	<input type="checkbox"/> Q (93)
<input type="checkbox"/> Q (4)	<input type="checkbox"/> Q (14)	<input type="checkbox"/> Q (24)	<input type="checkbox"/> Q (34)	<input type="checkbox"/> Q (44)	<input type="checkbox"/> Q (54)	<input type="checkbox"/> Q (64)	<input type="checkbox"/> Q (74)	<input type="checkbox"/> Q (84)	<input type="checkbox"/> Q (94)
<input type="checkbox"/> Q (5)	<input type="checkbox"/> Q (15)	<input type="checkbox"/> Q (25)	<input type="checkbox"/> Q (35)	<input type="checkbox"/> Q (45)	<input type="checkbox"/> Q (55)	<input type="checkbox"/> Q (65)	<input type="checkbox"/> Q (75)	<input type="checkbox"/> Q (85)	<input checked="" type="checkbox"/> Q (95)
<input type="checkbox"/> Q (6)	<input type="checkbox"/> Q (16)	<input type="checkbox"/> Q (26)	<input type="checkbox"/> Q (36)	<input type="checkbox"/> Q (46)	<input type="checkbox"/> Q (56)	<input type="checkbox"/> Q (66)	<input type="checkbox"/> Q (76)	<input type="checkbox"/> Q (86)	<input type="checkbox"/> Q (96)
<input type="checkbox"/> Q (7)	<input type="checkbox"/> Q (17)	<input type="checkbox"/> Q (27)	<input type="checkbox"/> Q (37)	<input type="checkbox"/> Q (47)	<input type="checkbox"/> Q (57)	<input type="checkbox"/> Q (67)	<input type="checkbox"/> Q (77)	<input type="checkbox"/> Q (87)	<input type="checkbox"/> Q (97)
<input type="checkbox"/> Q (8)	<input type="checkbox"/> Q (18)	<input type="checkbox"/> Q (28)	<input type="checkbox"/> Q (38)	<input type="checkbox"/> Q (48)	<input type="checkbox"/> Q (58)	<input type="checkbox"/> Q (68)	<input type="checkbox"/> Q (78)	<input type="checkbox"/> Q (88)	<input type="checkbox"/> Q (98)
<input type="checkbox"/> Q (9)	<input type="checkbox"/> Q (19)	<input type="checkbox"/> Q (29)	<input type="checkbox"/> Q (39)	<input type="checkbox"/> Q (49)	<input type="checkbox"/> Q (59)	<input type="checkbox"/> Q (69)	<input type="checkbox"/> Q (79)	<input type="checkbox"/> Q (89)	<input type="checkbox"/> Q (99)
<input type="checkbox"/> Q (10)	<input type="checkbox"/> Q (20)	<input type="checkbox"/> Q (30)	<input type="checkbox"/> Q (40)	<input type="checkbox"/> Q (50)	<input type="checkbox"/> Q (60)	<input type="checkbox"/> Q (70)	<input type="checkbox"/> Q (80)	<input type="checkbox"/> Q (90)	<input type="checkbox"/> Q (100)

e. Submit exam

After having reviewed all answers including marked questions and unanswered ones, the candidate is requested to submit his answers to CQF so that his answers are corrected by the system and results are generated.

7- Candidate Exam results announcement

The system has a facility to show or hide exam results after the submission of exam. Also if it is allowed to display the exam results to candidates, they can log to the site and download or print their exam score scripts later in the future and for a specific period of time.

8- Run exam Logistics

Although the exam generation feature ensures that every candidate has his own exam version, yet some measures should be taken in order to ensure maximum discipline. These include:

a. Space

The testing area should be large enough to allow for a minimum space of 1.5 m2 per tested candidate.

b. Duration

The time a candidate takes for an exam is monitored by the system and reported with results so that no candidates would take more than the allowed period.

c. ID Checking

Exam supervisors should also check the Ids of candidates in order to verify their identities. On the other hand the candidate's name, ID, birth date, start time and exam version are always displayed on the screen for ease of checking.

**AYMAN ALY RASHED**      **6/2/1976**

19/11/2004 06:22:05 ā

**4cai**      **Exam 1**

**Question (1):** Please enter the missing figure: 30, 29, 27, 26, 24, 23, 21, 20, ...

- (A)  21
- (B)  19
- (C)  18
- (D)  17

**Question (2):** Igor was both the 13th highest and the 13th lowest in a tennis tournament. How many people were in the tournament?

- (A)  28
- (B)  25
- (C)  27
- (D)  26

**Question (3):** Which activity does not belong in this group?

- (A)  Read
- (B)  Jump
- (C)  Run
- (D)  Jog

## 9- Monitoring

In order to help monitor the remote testing process, CQF avails a feature for viewing the status of candidates currently taking a test. The following online reports are provided:

- a. View candidates who finished exam along with their results
- b. View candidates who started the exam but have not submitted answers yet
- c. View scheduled candidates who have not started yet

## 10- Results

CQF provides a comprehensive set of exam reports including:

- a. View results of candidates per exam with different sorting options
- b. View results per exam per date with different sorting options
- c. View highest and lowest scores
- d. View statistics of those who took the exam
- e. Others...

## 11- Dual Language

Both CASS and CQF are dual language. Messages are displayed in both Arabic and English wherever needed.

## TECHNICAL STRUCTURE OF CQF...

CQF can operate in two different modes.

- 1- Candidates login directly to the CQF main server via the Internet, or

- 2- Testing Centers prepare CQF local servers at their sites where exams and candidates databases are downloaded from the main server to the local server and candidates do their exams on the local server. At the end of the testing day, operation data and results are uploaded to the main system.

The first mode of operation is a simple, easy to use mode that has been used regularly by IBM and OTS to run the filtration exams especially when exams are run in more than 15 locations at the same time and setting up all these local servers would be a waste of time. The following are some advantages of the first mode:

- a. No special setup needed
- b. Simple Central management
- c. Easy to monitor tests online

However, it is preferred to use the second mode in some cases when the quality of Internet connection or server is not guaranteed for the following reasons:

- a. Reduce delay of download due to Internet traffic
- b. Reduce traffic on the main server
- c. Reduce load on database and system resources thus increasing performance
- d. Reduce of risk of Internet disconnection during exam time



