**Placement Skills Assessment System and Benchmarking**

**Description:**

This project is built to enhance the students assessment and train them for their placements. The system provides an initial test that is called a mandatory test to all students of various departments during their beginner stage. Based upon the outcome, the system will generate an individual student report, where each and every student data will be analyzed and their benchmarks will be highlighted. Furthermore, test levels will be generated based upon their previous performance and questions will be randomly distributed for each student based upon their performance. The student can attempt the test multiple times to improve his/ her placement skills. The attempts made by the students and related scores will be updated to the respective faculty members and to the students.

The Existing Placement Online Assessment Training will not provide the analysis report of the student in an individual basis. Successful training program are well aware of the assessments that are vital part of improving aptitude skills,

Knowledge and their courage to face the interview. But there is no provision to train the students where they want to be trained in the specific field.

The proposed system provides the analysis report on students who takes the test and provides the high quality tests with varied difficulty levels based on the score obtained.

Planning to build the software using java

**Technology Details:**

Angularjs , Spring MVC & Oracle 10g: Eclipse/Toad.

**Screen Details:**

Common screens like login and dashboard will be done as a general purpose

**Other Screens Include:**

1.Student bulk upload / Student profile

2.Admin(faculty) bulk upload / Admin profile

3.Question setup / bulk upload

4.Student Assessment Page

5.Assessment Score

**1.Student bulk upload / Student profile**

We need to gather the student information and it consists of various field such as login, Register, Take test and View Report, the data are stored in TBL\_MST\_STUDENT table

**Details: Login table:TBL\_MST\_LOGIN**

Student ID Login ID

Student name Staff ID

Roll number Username

Batch Student ID

Department ID

**2.Admin(faculty) bulk upload / Admin profile**

The administrator module is also called as faculty module consist of tabs such as view report, upload questions and bulk registration, and the admin data are stored in TBL\_MST\_STAFF table.

**Details:**

Staff ID

Staff name

Department ID

Staff email

Staff code

**3.Question setup / bulk upload**

In this question module, faculty can upload questions to the portal and questions can be uploaded into the system in two forms. One method is through an User interface which asks for questions, choices and their answer. Another method is through Excel sheet upload and this is stored in TBL\_MST\_QUESTION table.

**Details:**

Question ID

Question name

Question choice

Question answer

**4.Student Assessment Page**

In this module test will be assessed based upon the data which is already stored in the database and this result will be stored in TBL\_TRS\_STUDENT\_ASSESSMENT table.

**Details:**

Student ID

Question ID

Question choice

Attempt count

Assess value

Actual answer

Date of assessment

**5.Assessment Score**

In this module, the score will be displayed based upon the test attempt. It can be either as individual or bulk of student score can be viewed from TBL\_MST\_SCORE\_PARAMETER table.

**Details:**

Score Parameter ID

Score from

Score to

**Database design:**

**PK –** Primary Key**; FK –** Foreign Key

**Master Tables:**

**1.TBL\_MST\_LOGIN**

NUM\_STUDENT\_ID NUMBER FK [**TBL\_MST\_STUDENT**]

VCH\_USERNAME VARCHAR2(100 BYTE)

VCH\_PASSWORD VARCHAR2(100 BYTE)

NUM\_STAFF\_ID NUMBER FK[**TBL\_MST\_STAFF**]

NUM\_LOGIN\_ID NUMBER PK

**2.TBL\_MST\_STUDENT**

NUM\_STUDENT\_ID NUMBER PK

VCH\_ROLL\_NO VARCHAR2(20 BYTE)

VCH\_STUDENT\_NAME VARCHAR2(200 BYTE)

NUM\_BATCH NUMBER

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

DTT\_CREATION\_DATE DATE

NUM\_MODIFIED\_BY NUMBER

VCH\_STUDENT\_EMAIL VARCHAR2(100 BYTE)

NUM\_DEPARTMENT\_ID NUMBER FK**[TBL\_MST\_DEPARTMENT]**

NUM\_CREATED\_BY NUMBER

DTT\_MODIFIED\_DATE DATE

**3.TBL\_MST\_STAFF**

NUM\_STAFF\_ID NUMBER, PK

VCH\_STAFF\_NAME VARCHAR2(100 BYTE)

NUM\_DEPARTMENT\_ID NUMBER FK[**TBL\_MST\_DEPARTMENT]**

VCH\_STAFF\_EMAIL VARCHAR2(100 BYTE)

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

DTT\_CREATION\_DATE DATE

NUM\_CREATED\_BY NUMBER

NUM\_MODIFIED\_BY NUMBER

DTT\_MODIFIED\_DATE DATE

VCH\_STAFF\_CODE VARCHAR2(50 BYTE)

**Level details:**

There are different level test where the level data are stored in TBL\_MST\_LEVELS table

**Details:**

Level ID

Level name

**Sub Levels details:**

Level 1 test

This test can be taken by all the students irrespective of department and it is Initial

tests are basic test and it consist of questions based upon problem solving skills such as Aptitude, and questions based upon Increasing communication skills through English.

Level 2 test

This test is considered to be as an intermediate test and it is specific to each department. Domain Knowledge can be increased in this field.

Level 3 test

This test is Advanced category test. Test questions are based upon various companies. Different companies have different criteria to evaluate a student and based upon that criteria, questions are generated.

These data can be stored in TBL\_MST\_SUBLEVELS table

**Details:**

Sublevel ID

Sublevel name

Level ID

Department ID

**4.TBL\_MST\_LEVELS**

NUM\_LEVEL\_ID NUMBER PK

VCH\_LEVEL\_NAME VARCHAR2(100 BYTE)

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

DTT\_CREATION\_DATE DATE

NUM\_CREATED\_BY NUMBER

**5.TBL\_MST\_SUBLEVELS:**

NUM\_SUBLEVEL\_ID NUMBER PK

VCH\_SUBLEVEL\_NAME VARCHAR2(100 BYTE)

NUM\_LEVEL\_ID NUMBER FK[**TBL\_MST\_LEVELS**]

NUM\_DEPARTMENT\_ID NUMBER FK[**TBL\_MST\_DEPARTMENT]**

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

DTT\_CREATION\_DATE DATE

NUM\_MODIFIED\_BY NUMBER

DTT\_MODIFIED\_DATE DATE

NUM\_CREATED\_BY NUMBER

**6.TBL\_MST\_DEPARTMENT:**

NUM\_DEPARTMENT\_ID NUMBER PK

VCH\_DEPARTMENT\_NAME VARCHAR2(100 BYTE)

**7.TBL\_MST\_QUESTIONS:**

NUM\_QUESTION\_ID NUMBER PK

NUM\_LEVEL\_ID NUMBER FK[**TBL\_MST\_LEVELS]**

NUM\_SUBLEVEL\_ID NUMBER

VCH\_QUESTION\_NAME VARCHAR2(3000 BYTE)

VCH\_QUESTION\_CHOICE\_1 VARCHAR2(2000 BYTE)

VCH\_QUESTION\_TEXT\_ANSWER VARCHAR2(2000 BYTE)

NUM\_CREATED\_BY NUMBER FK[**TBL\_MST\_STAFF]**

DTT\_CREATION\_DATE DATE

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

NUM\_CHOICE\_ANSWER NUMBER

VCH\_QUESTION\_CHOICE\_2 VARCHAR2(2000 BYTE)

VCH\_QUESTION\_CHOICE\_3 VARCHAR2(2000 BYTE)

VCH\_QUESTION\_CHOICE\_4 VARCHAR2(2000 BYTE)

**8.TBL\_MST\_SCORE\_PARAMETER:**

NUM\_SCORE\_PARAMETER\_ID NUMBER PK

NUM\_SCORE\_FROM NUMBER

NUM\_SCORE\_TO NUMBER

NUM\_CREATED\_BY NUMBER

DTT\_CREATION\_DATE DATE

NUM\_MODIFIED\_BY NUMBER

DTT\_MODIFIED\_DATE DATE

CHR\_ACTIVE\_STATUS CHAR(1 BYTE)

**Transaction tables:**

**1.TBL\_TRS\_STUDENT\_ASSESSMENT**

NUM\_STUDENT\_ID NUMBER FK[**TBL\_MST\_STUDENT]**

NUM\_QUESTION\_ID NUMBER FK[**TBL\_MST\_QUESTIONS]**

NUM\_ANSWER\_CHOICE NUMBER

VCH\_ANSWER\_TEST VARCHAR2(2000 BYTE)

NUM\_ACTUAL\_ANSWER\_CHOICE NUMBER

NUM\_ASSESS\_VALUE NUMBER

NUM\_ATTEMPT\_COUNT NUMBER

DTT\_DATE\_OF\_ASSESSMENT DATE

NUM\_ASSESSMENT\_ID NUMBER PK

NUM\_CREATED\_BY NUMBER

DTT\_CREATION\_DATE DATE

VCH\_ACTUAL\_ANSWER\_TEXT VARCHAR2(2000 BYTE)

**2.TBL\_TRS\_STUDENT\_SCALING:**

NUM\_STUDENT\_ID NUMBER FK[[**TBL\_MST\_STUDENT]**

NUM\_ATTEMPT\_COUNT NUMBER

NUM\_SUBLEVEL\_ID NUMBER FK[**TBL\_MST\_SUBLEVELS]**

NUM\_TOTAL\_SCORE NUMBER

DTT\_MODIFIED\_DATE DATE

NUM\_MODIFIED\_BY NUMBER

NUM\_CREATED\_BY NUMBER

DTT\_CREATION\_DATE DATE

NUM\_SCALING\_ID NUMBER PK