

Solution for Online Exam

A multiple online examination framework for aptitude testing, personality testing, IQ testing, and technical subject based assessments

Our client is a temenos-certified services partner that provides banking implementation solutions to the global financial services industry. They serve high-performance technology needs of all market participants, including institutional investors, professional traders, brokerage firms, exchanges, and regulatory agencies. They offer a comprehensive front-to-back trading solution on the market, putting investors and traders on a level playing field with the world's top-tier high frequency trading firms.

Problem

The client employees needed to be continuously trained and assessed on their level of assimilation of the existing and new products introduced in the market. They also needed to assess the level of understanding of their customers' employees before they could start servicing the end customers. Our client was conducting the assessment test manually through paper based multiple choice questions. The numbers of tests to be conducted in the year were many with an average frequency of two tests per month for a group of 20 to 30 examinees. Manual testing took a lot of effort and time from paper preparation to administering the test and to checking answer sheets and compiling results. The test results had to be verified for possible errors thus taking additional time and effort. The client needed to develop a solution to conduct these assessment tests online such that the effort and time would be reduced considerably.

Solution

Web Access team of technical and educational experts visualised a shrink-wrapped solution for the client that would enable not only the specific tests needed by the client but also be a generic online examination system.

This versatile online testing framework enables you to create a question bank of one or multiple subjects, design the format of tests, create one or multiple tests, create and designate examiners for the tests, administer the tests to multiple users and view reports. It provides required flexibility in test design and can be used in multiple environments and organisations such as educational and training institutions for conducting admission tests, progress tests, assimilations or term end examinations, by corporate for recruitment and selection tests, to assess training assimilation, by government departments to conduct promotion examinations and by e-learning organisations to carry out self-test in a self- learning environment.

The architecture is based on Java/Hibernate/Apache/MySQL. It has the following functional modules.

Question bank: Uses three levels of hierarchy in creating question bank and allows you to categorise the questions into various subjects/groups/categories. The questions and the multiple choices associated with questions can be in the form of text as well as images and the questions can also be based on paragraphs. You can add unlimited number of questions per subject/category/group.

Test creation: Using question pool from the question bank you can create any number of tests. The tests can be single or multiple sections with common marks for all questions or differing marking schemes per question or a group of questions. Negative marking can also be enabled. The questions are randomised from within the pool of questions selected for the test when presented to the examinee.

Reports: The test results are presented in summary as well as detailed format. You can enable display of test results to the examinee upon submission of the test.

User friendly interface: Presents a simple to use interface to the examinee with a timer on top of the screen and easy navigation to select, flag and unflag questions.

This software has been used extensively to conduct assimilation and recruitment tests by our clients over the last four years.