What are the different types of scoring algorithms supported by the testing platform?

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BrainCert's online testing platform supports 3 different types of scoring algorithms. You can select a scoring when creating or editing the test.

- Standard Scoring
- Partial-Credit Scoring
- Adaptive Scoring

Standard Scoring

Standard scoring requires all the answer choices for a question to be correct to receive full credit.

- **Use case scenario** - Practice exams where students can see answer for each question when taking the test.
- **Questions weight** - When creating test questions, you can set a weightage for each question. However, this does not apply for *Standard* scoring. Question weightage has no effect when grading open-ended questions. Instructor can grade either right or wrong to apply points.
- **Restrictions** - There are no restrictions. Student can see the answer for each question when taking the test. Student can go back and forth and review all questions before scoring.

Partial Credit

Some of the questions such as "multiple answer (checkbox) questions" will give partial credit for partially completed multiple answers type questions.

For example, if the question asks to "Choose 3" and you only choose 2 correct answers, the "standard scoring" system would count your answer as incorrect, but the "partial credit" scoring would give you partial credit depending on the number of correct choices you made on the question.

Each incorrect choice would deduct from your partial credit. For example, if the question asks "Choose 3" and the correct answers are "B", "D", and "F", and you picked "B", "D", and "E", the incorrect choice "E" would deduct the point. This means that if you choose "B" and "D" on this question, you will score higher than if you choose "B", "D" and "E". If you choose more incorrect answers than correct ones, the score for these questions will be zero. In other words, a single

question cannot have a score less than zero.

- **Use case scenario** - Best suitable for competitive and certification type of exams where you are required to give partial-credit for multiple answer (checkbox) questions.
- **Questions weight** - When creating test questions, you can set a weightage for each question. However, this does not apply for *Partial-Credit* scoring. Question weightage has no effect when grading open-ended questions. Instructor can grade either right or wrong to apply points.
- **Restrictions** - Student cannot see the answer for each question when taking the test. Student can go back and forth and review all questions before scoring.

Adaptive Scoring

BrainCert's adaptive scoring algorithm evaluates a response and determines the appropriate level of difficulty for the next question. This process helps ensure the test result is a true measure of the individual's knowledge, and not a reflection of their ability to learn and study test questions.

Question weights (difficulty level) are values assigned to each question measuring the difficulty level and relative importance of the material being tested. We are already capturing this using 1-5 rating stars when creating a question. When adaptive scoring is selected, questions are automatically drawn from all question sets and the next question is shown to the user based on the response of the student to the questions and the final score is calculated accordingly.

The test begins with a question of medium difficulty. If you answer it correctly, the test engine will usually select a more difficult question. If you answer the first question incorrectly, the next question will be easier. This process will continue until you complete the section, at which point, the computer will be able to accurately assess your ability level in the specific field in which you were questioned.

To summarize, an adaptive test typically begins by delivering an item of medium difficulty; if you get it correct, you get a tougher item, and if you get it incorrect, you get an easier item. This adaptive scoring algorithm continues until the test is finished. So, the difficult questions carry more marks while less difficult questions aren't worth many marks.

- **Use case scenario** - Best suitable for Computer Adaptive Testing (CAT), pre-hire, employee evaulation and certifications type of exams. CAT has been proven to increase student focus and engagement.
- **Questions weight** - When creating test questions, you can set a weightage for each question. Question weight is taken in to account when scoring. For open-ended tests such as 'essay' questions, instructor can manually set points for the question. This point cannot be higher than the question weight. For example, a question has a weight of 3. The max points the instructor can award for this question is 0,1,2 or 3.
- **Restrictions** - Student cannot see answers when taking the test. Student cannot navigate back to the previous question.