

# Digitalization in a Literature Examination

## Playing “Who Wants to Be a Millionaire?” on J. Milton and D. Mamin-Sibiriyak

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**Abstract** — The paper describes the experiment of creating a “Who Wants to Be a Millionaire?” game with the help of a Microsoft PowerPoint presentation. This presentation (or, rather, set of presentations) appears to be a useful test tool at literature examinations, thus opening new possibilities for test technologies. As today’s students get fed up with traditional tests, which include a closed set of answer variants, the “Millionaire” technology, non-traditional and computer-based is supposed to arise students’ interest in the subjects where facts are of no less importance than their interpretation. One of such subjects is literature at the university, so the samples of the questions are taken from the tests on one English writer (J. Milton) and one Russian (D. Mamin-Sibiriyak). The authors show the process of creating a “Millionaire” presentation, find out the difficulties and the possible ways to omit them. The literature test in the form of the “Millionaire” game is shown to have some problems for the teacher, who needs to take into account a lot of details concerning hyperlinks, “lifelines” (“50:50”, “Answer a Friend”, “Ask the Audience”), and the accompanying music. All this effort is compensated, however, by the students’ enthusiasm. They always wish to win the final prize, and thus are ready to read books for the examination. What makes the “Millionaire” even more useful is its compatibility with the “point rating system” accepted in a number of Russian universities.

**Keywords** — “Who Wants to Be a Millionaire?”; test technologies; digitalization of education.

### I. INTRODUCTION

Using test technologies as a tool for checking students’ knowledge can hardly be called new. Tests containing questions like multiple choice (the so-called “closed”) or continue-the-phrase (the so-called “open”) greatly facilitate and objectify the process of assessment. However, traditional tests become so common in the life of modern students, at least in Russia, that instead of being knowledge-oriented the students become test-oriented. In other words, they try to do as many analogical and demo-tests as possible to get ready for the final one. As a result, the real knowledge of the subject appears to be presented in the test form.

To make students study, the existing tests need rather not a cancel, but a serious update. For this purpose, we propose the form of popular TV show “Who Wants to Be a Millionaire?”. The already existing attempts of using this test form within the educational process [1; 2; 3] show its productivity and effectiveness for students’ motivation. Those who are to take

an examination get less afraid when informed that the procedure is going to be in the “millionaire” form [4; 5]. What is more, they prepare for the examination more deeply, paying attention, for instance, to the smallest details in the fiction text or to the best quotations of the grammarians cited in the textbook. This interest might be connected with the idea of the game – to reach the top of the 15 questions and to take the “million”, which makes it different from an ordinary set of multiple-choice questions.

### II. WORKING OUT THE “MILLIONAIRE” MODEL

The real game (in its original version) consists of 15 increasingly difficult questions, the first one being the cheapest, and the last one – the most expensive. Each question has four answer variants, and the only one is correct. The game is over at the first wrong answer (or if the player decides not to answer the next question and to take money). There are generally two “safety nets” – sums which are not lost if the answer is incorrect. The most common “lifelines” are “Ask the Audience”, “50:50”, and “Phone a Friend”; of these a player can use each only once per game, but more than one for a single question.

Although in the modern Russian version of “Millionaire” there have been made several changes (only one “safety net” is chosen by the player before the first question; two “lifelines” – “Change the Question” and “Risk Mode” are added, with the total number of five, out of which the player may choose four, etc.), our model is worked out according to the original version. This is because the examination demands to put a mark, and within the Ural Federal University, the so-called “point rating system” is used (wherein each student is assessed by 100-points rating, the 80–100 points corresponding to the “A” grade, the 60–79 points to the “B” grade, and the 40–59 points to the “C” grade). Logically, the player gets points instead of money. The sum of points grows not geometrically, like in the real game, but rather arithmetically, as the first five questions are supposed for the “C” grade (with the 40 points “safety net”), the next three for the “B” grade, and the next two for the minimum “A” grade (the second “safety net” of 80 points – see Fig. 1). The last five questions are the most difficult, and the student can try to answer them without the risk of losing the “A” grade (though the “B” grade can be lost if the player gives the wrong answer to the 9<sup>th</sup> or 10<sup>th</sup> question).

15		100
14		96
13		92
12		88
11		84
10	■	80
9	■	72
8	■	64
7	■	56
6	■	48
5	■	40
4	■	32
3	■	24
2	■	16
1	■	8

Fig. 1. The system of points given for each question of the game (worked out for Ural Federal University’s “point rating system”).

As can be seen from Fig. 1, each of the first ten questions “costs” 8 points, whereas each of the last five only 4. To some extent, this might seem illogical, as the number of points should increase alongside with their difficulty. It is this model, however, that showed maximum effectiveness during the examinations. The problem of setting a geometrical progression, like in the real game, here faces the problem of “safety nets” corresponding to the points given for a grade (40 for “C”, 60 for “B”, 80 for “A”). To make the player risk and give an answer to the most difficult questions seems impossible unless (s)he is sure that 80 points will stay with him/her forever. The audience, on the contrary, wishes to see as many questions as possible, and the higher is the level of the question, the more things are revised during the procedure of the examination. Thus, the result of the 15<sup>th</sup> question reached (not necessarily answered) seems to be the most desirable for any teacher who loves his/her subject.

### III. CREATING THE “MILLIONAIRE” PRESENTATION

#### A. The “main” presentation

The presentation containing all the fifteen questions with all the possible hyperlinks (called “main” hereafter) is created with the help of Microsoft PowerPoint templates. This idea makes it easier for those who do not know programming languages and to some extent agrees with modern computer technologies of testing [6; 7; 8]. Within the presentation, two types of slides are prepared: containing questions and supplementary ones (displaying the number of the question, the number of the points received, as in Fig. 1, etc.).

The slides with the questions should take into account all possible scenarios of the game. In other words, the player can theoretically choose any of the four variants suggested. Therefore, the first question slide (Fig. 2) has four hyperlinks to the next four slides, which contain the possible variants chosen (“the answer locked-in”, as in Fig. 3, when the player has given his/her “final” answer and cannot change it

anymore). These four slides are one-to-one hyperlinked, correspondingly, to the next four slides, of which three show that the given answer is incorrect (Fig. 4), whereas the last one shows that the player is right and “lets” him/her go further (Fig. 5). The slides showing that the answer is incorrect are hyperlinked to one of the very last slides, which says that the game is over and tell the player’s final score.

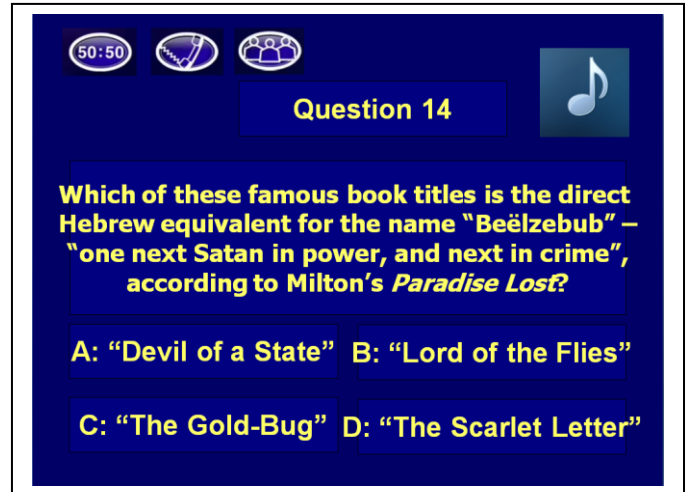


Fig. 2. A sample of a question slide.



Fig. 3. A sample of “the answer locked-in” slide.

So, as we can see, each question demands to create nine slides. Two more slides are inserted after every nine question ones: the first displaying the level passed (see Fig. 1), the second being the title for the following question. Eleven slides for each question give the total number of 165, with a few more to start and to finish the game. Obviously, the user does not need to create each slide separately; most of them can be copy-pasted, with the necessary coloring and hyperlinking afterwards.

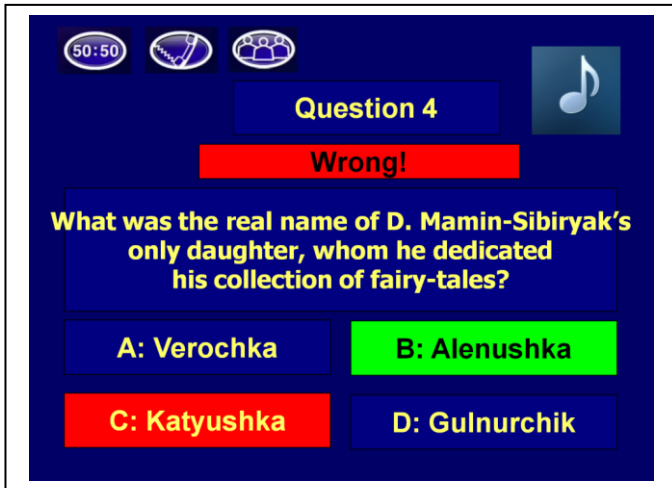


Fig. 4. A sample of “the answer is incorrect” slide.



Fig. 5. A sample of “the answer is correct” slide.

As soon as the initial presentation is ready, its author can pass over to other hyperlinks – that is, to music files and to the so-called “lifelines”. The music files corresponding to a new question, to “the answer is locked-in” (and the following “suspense”) and to “the answer is correct” are easily downloaded from the Internet and then not less easily hyperlinked to the picture in the top right corner of the slide (see Figs. 2–5). A bit more difficult thing is to make the “lifelines” get crossed like in the real game when they are used (see the top left corner of Fig. 6). Though this can be done within one and the same presentation, our experience shows that it is better to create additional presentations.

*B. Additional (“supplementary”) presentations*

The number of such presentations can be easily calculated if we imagine all the possible combinations of the “lifelines” crossed (as in Fig. 6). If we take the traditional version of the game with the three “lifelines” (“Ask the Audience”, “50:50”, and “Phone a Friend”), we obviously need seven “supplementary” presentations: three for each of them crossed separately, three more for their being crossed in pairs, and one

with all the three crossed. As the player can take each of them only once, every time he/she will be hyperlinked to a new presentation, and thus continue the game in it. Therefore, it is logical to copy the whole “main” presentation in the same folder, and then to replace the necessary icons in the top left corner with their crossed analogues. After it, the icons on each question slide of the “main” presentation are hyperlinked to the corresponding slides of the three presentations where the “lifelines” are crossed separately. On these slides, the “unused lifelines” are hyperlinked to the corresponding slides of the presentations where two of them are crossed, and in these three ones, in the same way, each “lifeline” left is hyperlinked to the corresponding slide of the seventh presentation. The possible variants of the order of using the “lifelines” can be therefore neglected, as MS PowerPoint makes it possible to hyperlink any object not only to the whole presentation, but also to a certain slide in it.

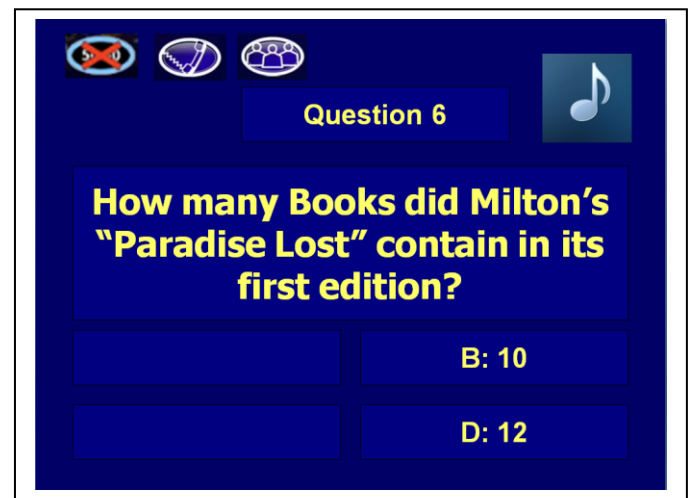


Fig. 6. A sample of “the 50:50” slide.

The so-called “50:50” lifeline demands to prepare four more presentations, wherein for each question two variants will disappear. These four presentations (with only “50:50” crossed; with “50:50” and “Ask the Audience” crossed; with “50:50” and “Phone a Friend” crossed; with all the three icons crossed) are a kind of a “bridge” between the game before using this “lifeline” and after it. Each question looks unusually in it – with only two variants left. After the player chooses the correct one, we are hyperlinked to the presentations with the “normal” number of answers and the corresponding icons crossed. The wrong variant leads to the last slide of the presentation saying “GAME OVER”. Again, all the possible scenarios of the game are taken into account.

The fact that the two other “lifelines” are easier to be shown in the presentation is explained by their communicative effect. In other words, we only need to make them crossed, but nothing additional is to be shown in the presentation. In our version of the game, the player asks the audience to raise the hands and to vote for the variant “A”, then for the variant “B”, and so forth [see also: 8]. The majority of the answers is not calculated by the computer, as it is obvious from the number of the hands raised for every variant (each student can vote only once). “Phone a Friend” is generally provided by asking a

friend in class, the latter having a chance to look for the correct answer anywhere. To some extent, these changes might seem curious, as they spoil the objective results of the game (the audience can as well look anywhere). However, understanding that we do not have the same possibility of phoning anywhere outside as in the real game, and of checking half a minute sharp, we suppose that these little things will both help the player and increase the communicative effect of the game. (What is more interesting, in some cases the Russian players also “phoned” the friend sitting just behind them among the audience?).

#### IV. SAMPLE SETS OF QUESTIONS

The scheme described above seems to be applicable to any kinds of topics and subjects, which are supposed to check the students’ knowledge of a certain number of facts. For this paper, we took two examples out of two tests on different writers studied in Russian universities (typically, in literature courses). These are John Milton (1608–1674) and Dmitry Mamin-Sibiryak (1852–1912). The authors are intentionally taken from different periods, countries and university courses (of course, this does not mean that a separate set of presentations should be created on every author). Typically, Russian students get acquainted with Milton in the winter semester of their second year of studies (the course is named “Foreign Literature of the 17–18<sup>th</sup> centuries” or “The History of Europe”, as Milton was also famous as a politician [9; 10; 11]). Mamin-Sibiryak is studied at the fourth year within the course of Ural Literature.

Though some of the questions have already been shown above, in this section we are going to write out all the 15 ones concerning Milton and all the 15 on Mamin-Sibiryak. For someone who knows any of them well, there might appear certain doubts on the correspondence between the level of the question and its difficulty. We should add here that the tests are created mainly for Russian students; in their understanding, Milton is a representative of the foreign culture [13], and Mamin-Sibiryak, though being Russian, has certain regional peculiarities (mainly connected with the Urals [14; 15; 16]). These “shades of meaning” certainly reflect on the questions to be asked within the “Millionaire” game.

In the questions given below, the variants of answer (“A”, “B”, “C” and “D”) are given in brackets. The correct variant is italicized.

##### A. Sample questions about John Milton and his works

- Number 1 (8 points): In which century was Milton born? (XVI; *XVII*; XVIII; XIX)
- Number 2 (16 points): During whose protectorate Milton did his best as a political leader? (Charles I; Charles II; *Cromwell*; Churchill)
- Number 3 (24 points): Which is the second title for Milton’s “A Masque of the Same Author Presented at Ludlow Castle, 1634 Before the Earl of Bridgewater Then President of Wales”? (“*Comus*”; “*Sinus*”; “*Tarsus*”; “*Arius*”)

- Number 4 (32 points): What are Adam and Eve named at the very beginning (I, 29) of “Paradise Lost”? (*grandparents*; grand grandparents; grand grandgrandparents; grand grandgrandgrandparents)
- Number 5 (40 points, the first “safety net”): In which of these languages Milton did not write? (Latin; Greek; Italian; *Russian*)
- Number 6 (48 points): How many Books did Milton’s “Paradise Lost” contain in its first edition? (9; *10*; 11; 12)
- Number 7 (56 points): Whose speeches are the longest in Book I of “Paradise Lost”? (*Satan*; God; Adam; Eve)
- Number 8 (64 points): Which Arch-Angel leads the first people out of the Paradise? (Raphael, Uriel; Abdiel; *Michael*)
- Number 9 (72 points): Which Book contains the main event of the poem “Paradise Lost” and is thus the longest? (III; VI; *IX*; XII)
- Number 10 (80 points, the second “safety net”): Which of these names is a part of a title of Milton’s three greatest poems? (*Samson*; Dagon; Homer; Aristotle)
- Number 11 (84 points): What can a reader find at the very beginning of each Book of “Paradise Lost”? (*Argument*; File; Reason; Case)
- Number 12 (88 points): Which of these orators wrote “*Areopagitica*” long before Milton, thus giving the source for his most famous speech published in 1644? (Demosthenes; Gorgias; *Isocrates*; Lycias)
- Number 13 (92 points): How many Books are there in “Paradise Regained” – the sequel of “Paradise Lost”? (4; 6; 9; 12)
- Number 14 (96 points): Which of these famous book titles is the direct Hebrew equivalent for the name “Beëlzebub” – “one next Satan in power, and next in crime”, according to Milton’s “Paradise Lost”? (“*Devil of a State*”; “*Lord of the Flies*”; “*The Gold-Bug*”; “*The Scarlet Letter*”)
- Number 15 (100 points): To what part of speech belongs the very first word in the main text of “Paradise Lost”? (*preposition*; conjunction; article; verb)

##### B. Sample questions about Dmitry Mamin-Sibiryak and his works

- Number 1 (8 points): What was the original surname of Dmitry Mamin-Sibiryak? (*Mamin*; Sibiryak; Tolstoi; Turgenev)
- Number 2 (16 points): What was produced at the Visim factory near which Mamin was born? (jewellery; *ore*; furniture; pottery)

- Number 3 (24 points): Which of these cities is closer to the place of Mamin's birth? (Moscow; Saint Petersburg; *Yekaterinburg*; Astrakhan)
- Number 4 (32 points): What was the name of D. Mamin-Sibiryak's only daughter, whom he dedicated his collection of fairy-tales? (*Verochka*; *Alenushka*; *Katyushka*; *Gulnurchik*)
- Number 5 (40 points, the first "safety net"): What region is most often met in Mamin-Sibiryak's early works? (the Urals; Siberia; the Crimea; Ruhr Valley)
- Number 6 (48 points): In which year did Mamin-Sibiryak write his most famous historic essay "The City of *Yekaterinburg*"? (1888; 1892; 1895; 1900)
- Number 7 (56 points): What genre Mamin-Sibiryak did not try himself in? (tales; legends; plays; *lyrics*)
- Number 8 (64 points): Which of Mamin-Sibiryak's novels was published first? ("The *Privalov Fortune*", "Traits from the Life of *Pepko*"; "Bread"; "*In the Maelstrom of Passion*")
- Number 9 (72 points): Which pseudonym Mamin did not use? (E. Tomsy; *Uralets*; *Sibiryak*; *Onik*)
- Number 10 (80 points, the second "safety net"): Whom are D. Mamin-Sibiryak's stories "Grey Neck" and "Summer Lightning" written for? (*the children*; the disabled; the old; the rich)
- Number 11 (84 points): Within what subtype of Realism did Mamin work? (*Critical*; Romantic; Socialistic; Neorealism)
- Number 12 (88 points): Which *Yekaterinburg* theater was D. Mamin-Sibiryak most connected with via his wife? (Opera; Ballet; *Dramatic*; Circus)
- Number 13 (92 points): How many tales are there in "Tales for *Alenushka*"? (5; 8; 10; 13)
- Number 14 (96 points): Which of these specialties D. Mamin-Sibiryak did not study for at seminaries, academies and other institutions? (theologian; lawyer; veterinarian; *writer*)
- Number 15 (100 points): Which of these scholars called the main periods of Mamin's work as "the first debut" and "the second debut"? (I. Dergachev; A. Gruzdev; *G. Shchennikov*; E. Bogolyubov)

These questions can obviously be changed according to the material read and analyzed with the students during the semester.

## V. CONCLUSION

Two games built with the help of the model described were successfully played by the students in the literature exams, both concerning two important English and Russian writers – that is (as can be seen from the questions in Figs. 1–5), correspondingly, John Milton and Dmitry Mamin-Sibiryak. The game proved to be very convenient when checking factual

material – this, in particular, concerns literature subjects and courses, very often visited by students who are too far from reading and discussing what has been read. The players feel the importance of reading books, as they can play it in small teams, and knowing the plot will "save" both them and their friends. Therefore, the suggested game appears to be the stimulating factor for the students.

The "Millionaire" format of the examination has its certain drawbacks. To prepare the system of 12 or 13 presentations described is not a 15-minute task for a teacher. Several evenings are definitely to be spent for this. However, this is compensated by the fact that one and the same game can be used every year, and the examiner will not need to change the questions, unless he/she gets bored. Moreover, the game appears to be corresponding to the so-called "point rating system" (BRS), which is adopted, in particular, in UrFU and in a number of other universities. As a result, it becomes possible to draw the difference between, for example, 48 and 56 points, or between 88 and 92. In a traditional literature examination, this might be difficult, especially if there are only two questions given to each student, and the number of the students exceeds 100.

Finally, the "Millionaire" format, beyond economizing time and teacher's effort, seems convenient for those who do not know any programming languages. All the operations and manipulations with MS PowerPoint described above might seem too complicated to programmers and specialists in computer technologies. However, the professors in humanities very often do not have time and necessity to study Java or C++, and this idea appears to be practically realizable, though demanding more time for practical solution.

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