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Virtual assistant based study guide

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Virtual assistant based study guide

ABSTRACT

This disclosure describes a virtual assistant based study guide that helps students preparing for examinations. The virtual assistant is fed with textual material and past exam papers. The virtual assistant answers questions derived from the corpus and indicates how it arrived at an answer, e.g., by pointing to locations in the corpus that it used to construct the answer. The virtual assistant can also compose questions for the student to answer.

KEYWORDS

- Exam study guide
- Study aid
- Standardized test
- Entrance examination
- Virtual assistant
- Expert system
- Human-machine dialog
- Chatbot

BACKGROUND

A large number of students take standardized tests or entrance examinations throughout the world. Some of the problems faced by students in preparing for such tests include knowing what to study, e.g., in an exam-oriented manner; having access to textbooks, reference materials, and past questions; making efficient use of time; etc.

DESCRIPTION

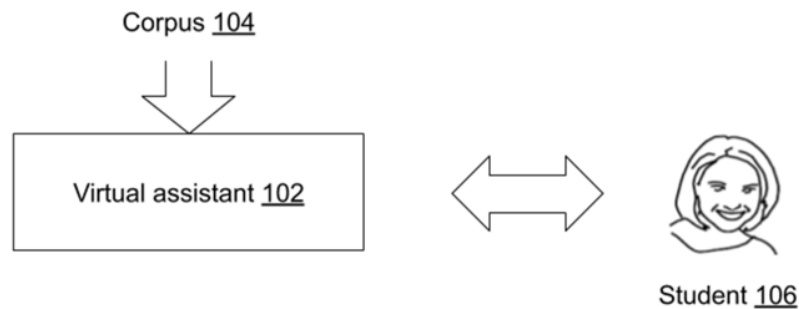


Fig. 1: Virtual assistant based study guide

Fig. 1 illustrates an example of a virtual assistant based study guide, per techniques of this disclosure. A corpus (104) of exam-related material, e.g., standard texts on various courses; reference material; past exam papers, text exercises, worksheet questions; etc. is fed into a virtual assistant (102). The virtual assistant trains on such exam-related material alongside samples of human-vetted solutions. A virtual assistant trained with the corpus then interacts with a student (106) in various ways, such as:

- The student asks the virtual assistant questions based on exam material. The virtual assistant provides answers to the student's questions and provides support for the answers by pointing to regions of the corpus from which the answers were constructed. The virtual assistant may also provide follow-up exploratory suggestions on the topic of the question.
- The virtual assistant asks the student questions based on the corpus, e.g., derived from exam-related material and similar to past exam papers. The virtual assistant assesses the student's answers. The virtual assistant also provides answers to the questions and provides support for the answers by pointing to regions of the corpus from which the answers were constructed.

In an assistant-student interaction, the virtual assistant can provide related concepts, suggestions, hints, etc. For example, if the student doesn't know the answer to a question posed by the virtual assistant, the virtual assistant can provide hints that guide the student towards the answer. The virtual assistant can also provide additional, topical insights and related questions around a given question-answer pair.

In this manner, the techniques of this disclosure enable students to build a habit around studying, provide study insights based on test performance, make exam content more accessible, and provide offline access to past questions and texts.

Further to the descriptions above, a user may be provided with controls allowing the user to make an election as to both if and when systems, programs or features described herein may enable collection of user information (e.g., information about user's questions or answers in interaction with the virtual assistant, a user's preferences, or a user's current location), and if the user is sent content or communications from a server. In addition, certain data may be treated in one or more ways before it is stored or used, so that personally identifiable information is removed. For example, a user's identity may be treated so that no personally identifiable information can be determined for the user, or a user's geographic location may be generalized where location information is obtained (such as to a city, ZIP code, or state level), so that a particular location of a user cannot be determined. Thus, the user may have control over what information is collected about the user, how that information is used, and what information is provided to the user.

CONCLUSION

This disclosure describes a virtual assistant based study guide that assists students preparing for examinations. The virtual assistant is fed with textual material and past exam

papers. The virtual assistant answers questions derived from the corpus and indicates how it arrived at an answer, e.g., by pointing to locations in the corpus that it used to construct the answer. The virtual assistant can also compose questions for the student to answer.

REFERENCES

[1] “JAMB: 76.2 percent scored below 50% ... ,” <https://rauexplore.com/uncategorized/jamb-76-2-percent-scored-below-50-and-49245-utme-results-withheld/> accessed on Dec. 9, 2019.