A Voice-Enable Video Quiz and an Unrestricted Transcript Editing System

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What is the video quiz and the video quiz system?

- The video quiz is a type of quiz designed for students to study while watching the video learning material. Questions and answers for each quiz are related to the content of a specific scene in the video.
- The video quiz system is an integrated environment for video quiz designing and displaying. Separated views with different functions are implemented to fulfill the different needs of teachers and students.

Main features

- Duel-view
- Caption system
- Text-to-speech
**Module & Functions**

**Designer view**
- Editing quiz
- Multiple choice supported
- Setting the related video segment

**User view**
- Taking quiz
- Playing corresponding video segment
- Displaying caption
- Reading question and answers
- Recording user choice
Designer View

- Quizzes will be saved in XML format:

```xml
<QUIZ Name="quiz1" To_Position="40" From_Position="22">
  <Content>test quiz</Content>
  <MultipleChoices>
    <Choices Checked="False" Text="1"/>
    <Choices Checked="True" Text="2"/>
    <Choices Checked="True" Text="3"/>
    <Choices Checked="False" Text="4"/>
    <Choices Checked="False" Text="5"/>
  </MultipleChoices>
</QUIZ>
```
User View

- Caption system
- Automatically searching from Database
- Symbol db
- Text-to-speech q/a read out
- Microsoft TTS engine
The Unrestricted Transcript Editor

• What is The unrestricted transcript editor?

The free transcript editor is a convenient tool for teachers to correct and edit the transcript automatically generated by the speech recognition engine.

• What is the difference between our editor and the normal text editor?

The difference between the transcript editing and the normal text editing is that a transcript has timestamps which must be kept, so that the transcript can be played synchronously to the video. Since each editing method, e.g. add, change or delete, may influent timestamps afterward, the editor should be able to distinguish different operations such as insertion, deletion, merge or change.
Editor View

Key Words:
Simple, easy to use

• Operations:
  insert, delete, replace, change lines.

some Internet criminal specialized in another kind of spam basin so called fishing emails to use more often than not fishing schemes start with emails that claim that a bank or other financial institution generally have a link that supposed to be a legitimate web site that will clear up the problem but the site is freight although it may look like the real thing it often ask for names on the account so if you ever get an email like this the best thing for you to do is delete it.
Distinguish the Operations

Key words:
Color is the key

- Add: Original < Changed
- Delete: Original > Changed
- Replace: Original = Changed
Adjust the Timestamps

- The transcript is saved in XML format:
  
  ```xml
  <LINE>
  <CAPTION CNT="1" VISIBILITY="TRUE"
  LENGTH="370" SYNC="1520"
  CAPTIONTEXT="some" ID="0"/>
  <CAPTION CNT="1" VISIBILITY="TRUE"
  LENGTH="444" SYNC="1890"
  CAPTIONTEXT="Internet" ID="1"/>
  <CAPTION CNT="1" VISIBILITY="TRUE"
  LENGTH="444" SYNC="2334"
  CAPTIONTEXT="criminal" ID="2"/>
  </LINE>
  ```

- Our goal is to minimize the influence to the original time stamps.

- Keep as many original SYNC tags as possible.

- Reduce the influence of the length of each word.
Preliminary results show that our quiz system can easily create and take video quizzes, and the new caption and TTS features can help students with disabilities to understand the video content easily.

The results also show that our transcript editor can help teachers to edit the transcript freely without any restrictions, which can save them a lot of time in transcript editing.
The End