Applying BERT on Facebook Children's Book Test CS410

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Description

Our task is to apply BERT on Facebook Children's Book Test Dataset. In the dataset, each question is constructed by taking 20 consecutive sentences from the book text and leaving the 21st as the query statement. A word from the query is selected and masked, and the model is tasked with selecting which word from the text (of the chosen type) should be used to fill this placeholder in the query

Facebook Children's Book Test (CBT)

`What is it?'

In the Children's Book Test, a collection of children's books were gathered from the Project Gutenberg archives. Each question is constructed by taking 20 consecutive sentences from the book text, and leaving the 21st as the query statement. A word from the query is selected and masked, and the reader is tasked with selecting which word from the text (of the chosen type) should be used to fill this placeholder in the query.

```
`The ogre is coming after us
But where is he?
`Over there
He only looks about as tall as a needle.
Then they both began to run as fast as they could, while the oare and his dog kept drawing always nearer
A few more steps, and he would have been by their side, when Dschemila threw the daming needle behind her.
In a moment it became an iron mountain between them and their enemy
`We will break it down , my dog and I , ' cried the ogre in a rage , and they dashed at the mountain till they had forced
a path through, and came ever nearer and nearer.
`What is it?'
`The oare is coming after us with his dog . '
`You go on in front then , ' answered he ; and they both ran on as fast as they could , while the ogre and the dog drew
`Thev are close upon us!'
cried the maiden, glancing behind, 'you must throw the pin.'
[gold]: dog
[answer canditates]: Cousin | cloak | dog | maiden | mountain | needle | path | pin | side | steps
```

Why this task

After taking the course, we find that there are unlimited possibilities to utilize machines to understand text content though it is still a challenging task. Therefore, we decided to apply the state-of-the-art BERT model to run on Facebook Children's Book Test Dataset in order to learn more about how it works while examining the best performance we can achieve.

Demo

- 1) how to install the software if applicable
- (2) how to use the software
- (3) A example of use case so as to allow a grader to use the provided use case to test the software.

Thank you!

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