Make online teaching more engaging

Riddlr

Starton Hackathon - Blackjack

The Team

Bernard

Vincent

Richard

How does COVID-19 affects our teachers?

Lucy, 50

We as teacher must adapt to the situation; know how to operate online learning tools, while still make sure students are active and interested in online class...

How does COVID-19 affects our teachers?

Lucy, 50

...but dealing with both is really hard. It's hard to keep students interested without engaging with students...

How does COVID-19 affects our teachers?

Lucy, 50

...making quiz and games online took extra effort. Tools like Kahoot, Quizziz or Google Form is foreign to me.

What does the teacher wants?

1

Keep students interested in online class

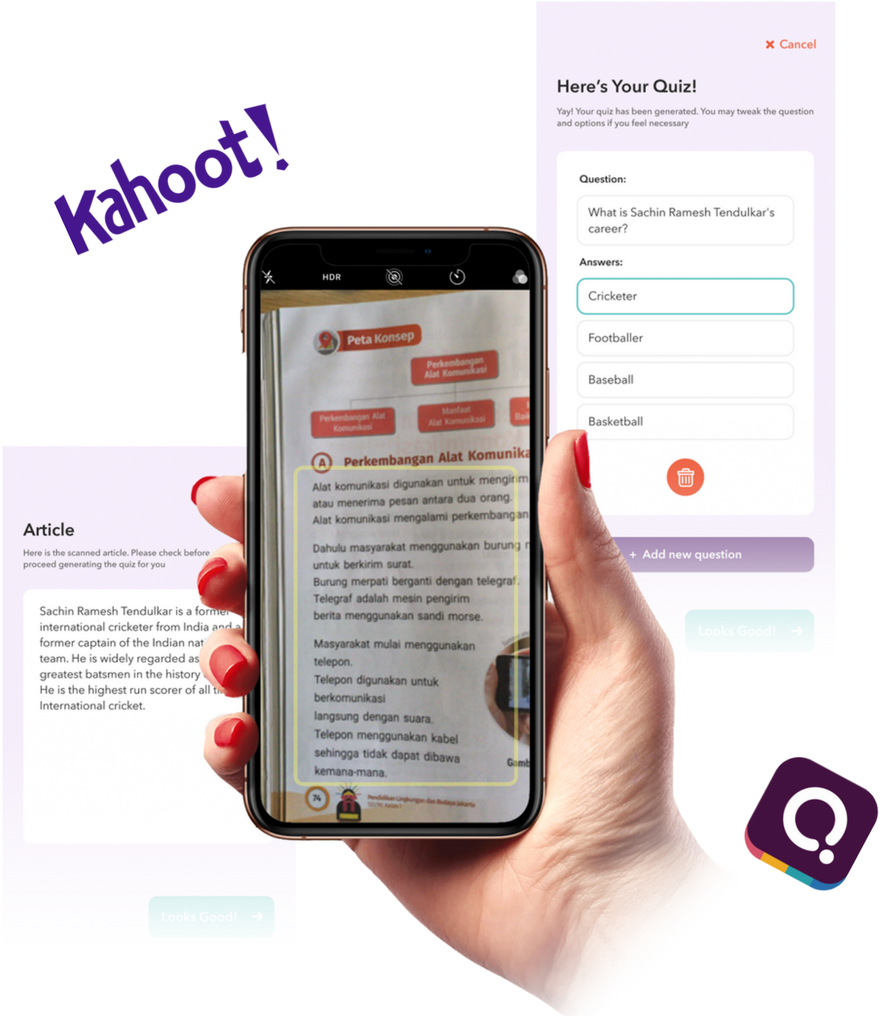
Focus on teaching and interacting with students

2

Reduce hassle in using online platforms

Tech tools to enables teacher, not as an obstacle

Our Solution



Riddlr

An app that generates a multiple-choice quiz by scanning an image of an article, which can be exported to quiz apps (Ex: Kahoot)

Flow

Tech

7

All the data and files are stored in Firebase

2

The application will translate the image of the textbook page into text by OCR

4

Use an AI model based on BERT & GPT-2, trained with SQuAD, to generate Q&A based on the text

6

User can export the quiz into spreadsheets, that can be used in quiz apps like Kahoot

1

Teacher usually have textbooks, which is their source for making quiz

3

Teacher can verify the result of the OCR, and can edit the result manually

5

User can view all the quizzes they've made, create, update and delete their quiz

How does the AI Works?

Eight firefighters work at Napford station. They are volunteers. This means they work for free. They don't get paid. The fire station gets money from the government. It uses this money to take care of the fire station and the fire truck

Gather key sentences as context

BERT (Bidirectional Encoder Representations from Transformers)

Generate questions and answer from the given context

T5 Transformer, trained with SQuAD (Stanford Question Answering Dataset)

Generate options/distraction answers

WordNet

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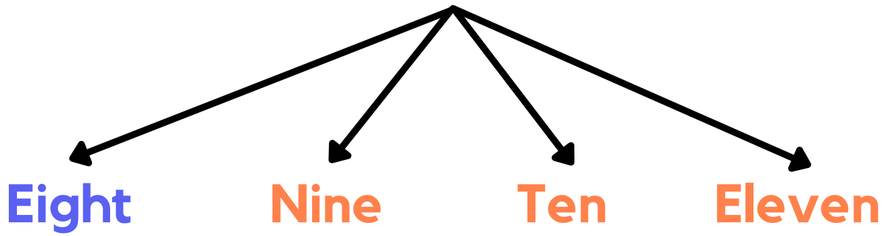
Generate options with **WordNet**

Number



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Eight firefighters work at Napford station

How many firefighters work at Napford station?

- Eight ✓
- Nine
- Ten
- Eleven

Demo Time!

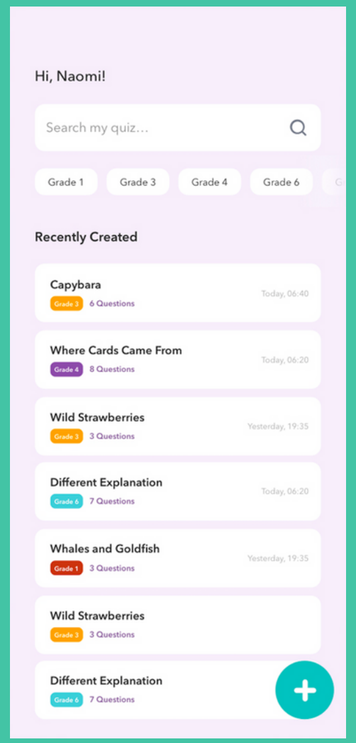
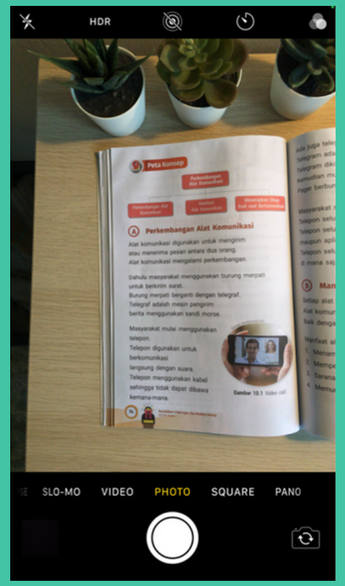
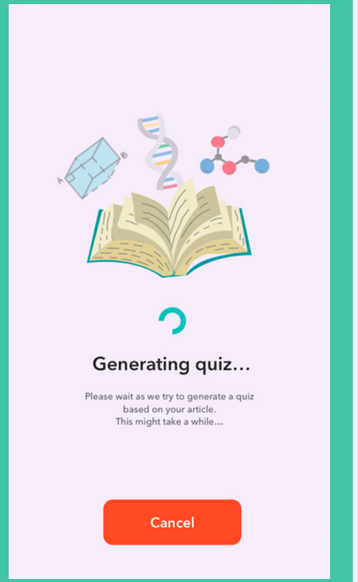
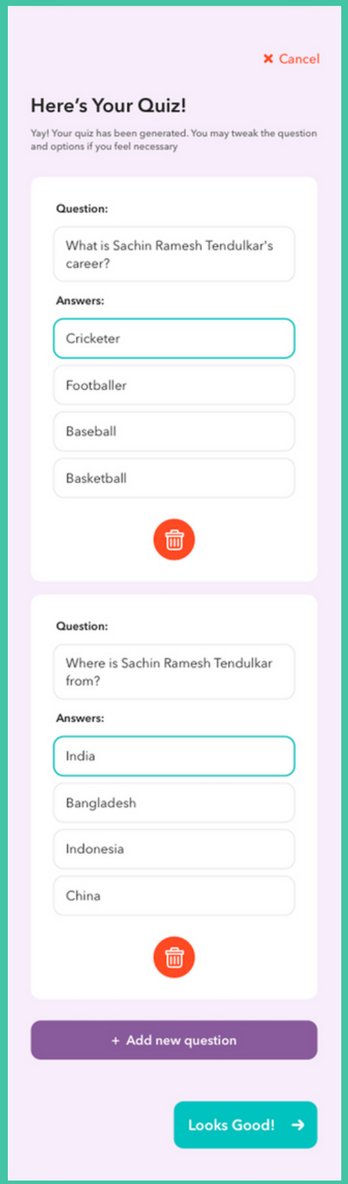
Future Ideas

For further improvements

An all-in-one system for school to store and generate quiz, exams, report card, sentiment analysis

Support more quiz-based apps format like Quizziz and Google Form

Automate the integration on quiz-based apps

Thank You!

Please ask if you have any questions