

AI-based Self-reading Platform

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Abstract- Designing a collaborative reading annotation tool with functionalities for annotating a digital English article can accumulate and share the knowledge of readers who participate in reading learning processes in a web-based learning environment. The annotated content helps new readers understand articles and helps readers who have read an article obtain a deeper and broader understanding than when reading digital article without annotations. However, the self-regulated learning ability of individual learner on reading learning materials and contributing reading annotations becomes a key factor affecting learning performance of collaborative reading annotation. Thus, this work proposes a self-regulated learning assisted mechanism in a collaborative reading annotation system which can promote learners' reading annotation abilities in order to facilitate more high quality reading annotations generated by learners during performing reading annotation processes. We are creating a web application which will be used by user to read the phrases and system will process it according to the trained data, system will also give notification to user which word is not yet completed with correct pronunciation.

Keywords: Machine Learning, Self-learning, Self-learning Mechanism, Authentication



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Introduction

Speech is the most natural, convenient and widespread communication interface for humans with either humans or machines via different languages. Language is a systematic means for communication through the use of speech or conventional symbols for each one. This software project is android application based that reads a text file to the user. The bot reads a text file and associated pronunciations in its temporary database. The bot then reads an entire word to the user. The pronunciations of articles and basic words have been fed to the bot, the rest of the words and complex ones are calculated and read accordingly. The bot can be effectively used to help read the text document for the user so that the user does not constantly need to look at the screen and read the entire document. Text to speech converter is a recent software project that allows even the visually challenged to read and understand various documents.

Literature Survey

1. A Collaborative Reading Annotation System with Formative Assessment and Feedback Mechanisms to Promote Digital Reading Performance: The collaborative reading annotation system (CRAS) has been proved its success in promoting reading performance in comparison with traditional paper-based reading. However, there is still a lack of an effective formative assessment and feedback mechanisms in the CRAS, which can assist learners to promote their self-regulated learning and reflection. Therefore, this study uses a C4.5 decision tree to develop a CRAS with formative assessment and feedback mechanisms (CRAS-FAFM) based on four considered social network indicators, which could forecast the learners with low reading comprehension and suggest them to interact with the learners who are predicted with high reading comprehension performance and infrequently interact in the digital reading activity in order to enhance their reading comprehension 6

Self-learning Platform for School English Listening through Interactive Discussion

Accordingly, this study intends to discuss the effects of learners who use the CRAS-FAFM and CRAS without formative assessment and feedback mechanisms (CRAS-NFAFM) on reading comprehension performance and interactive discussion. Analytical results show that the average prediction accuracy rate of the developed CRAS-FAFM in identifying the learners with low reading comprehension performance is as high as 68.33. Moreover, compared to CRAS-NFAFM, the CRAS-FAFM provides remarkable benefits in promoting the reading comprehension performance and interactive discussion on the discussion level of comparison, discussion, and analysis, particularly for the learners with low prior knowledge.

High Speed Interface for System-on-Chip Design by Self-tested Self-synchronization

Global synchronization has been commonly used to protect clocked I/O from data read failure due to metastability. For future high performance system-on-chip design, global synchronization is more difficult as both frequency and chip size increase quickly. This paper addresses a mesochronous clocking (MC) strategy which can be implemented with three self-tested self-synchronization (STSS) methods for parallel data transfer between processing elements (PEs). Compared with global synchronization, MC has many advantages: lower process cost; less power dissipation in clock distribution; no limit in system scale; less delay in long distance data transfer; more simplicity and flexibility in design. The STSS implementations are also very simple and robust, and the metastability in data read is avoided because STSS is completely insensitive to both clock skew and data delay.

Vector Transfer by Self-tested Self-synchronization for Parallel Systems

Communications between processing elements (Pes) in very large scale parallel systems become more challenging as the function and speed of the PEs improve continuously. Clocked I/O ports may malfunction if data read failure occurs due to clock skew. There are many drawbacks in global clock distribution utilized to reduce the clock skew. This paper addresses a self-tested self-synchronization (STSS) method for vector transfer between PEs. A test signal is added to remove the data read failure. The advantages of this method are: very high data throughput, less power consumption in clock distribution, no constraints on clock skew and system MET's Institute of Engineering 7 Self learning platform for school English listening scale, easy in design, less latency. A failure zone concept is used to characterize the behavior of storage elements. By using a jitter injected test signal, a robust vector transfer between PEs with arbitrary clock phases is achieved and the headache problem of the global synchronization is avoided.

Shruti: A Self-tuning Hierarchical Aggregation System

Current aggregation systems either have a single inbuilt aggregation mechanism or require applications to specify an aggregation policy a priori. It is hard to predict the read and write access patterns in large systems and hence applications built on such systems suffer from inefficient network usage. We present Shruti, a system that demonstrates a general approach for self-tuning the aggregation aggressiveness to the measured workload in the system, thus optimizing the overall communication costs (e.g., the number of messages exchanged on read and write operations).

Aim and Objectives

- To design a system which is user friendly for user not only that affordable as well.
- Digital dictionary using machine learning which will help user to get the correct information of word.
- Simple reading application.
- Scalable.

Motivation

Nowadays more and more data is adding into the world and there is a sudden increase of data in such a way that makes getting information by just reading the text very difficult and initiates the need for automatic information retrieval techniques from the large data sources. Due to larger number of word data we are not

able to get info as well as we are not able to pronounce the word correctly due to which user fails to get proper information of word.

Scope

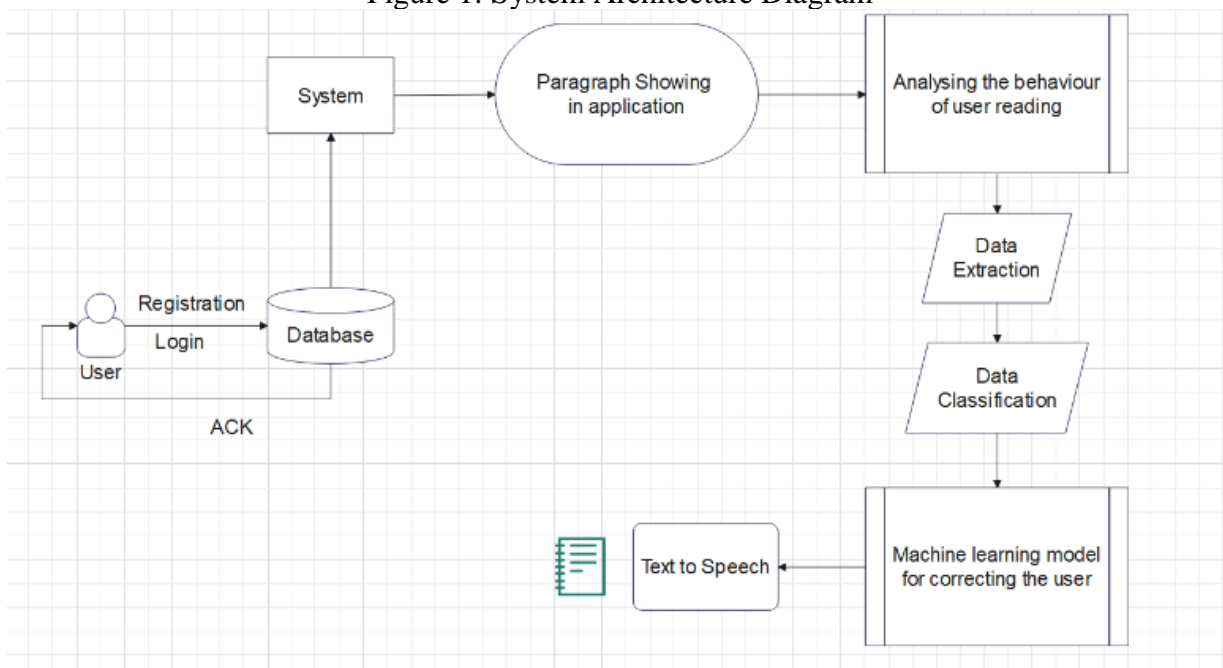
In recent years, the rapid development of AI assisted teaching and learning software has changed both teachers’ and students’ teaching and learning modes. The Ministry of education in India has especially issued the action plan for innovation of artificial intelligence in colleges and universities.

Problem Definition

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System Architecture

Figure 1: System Architecture Diagram

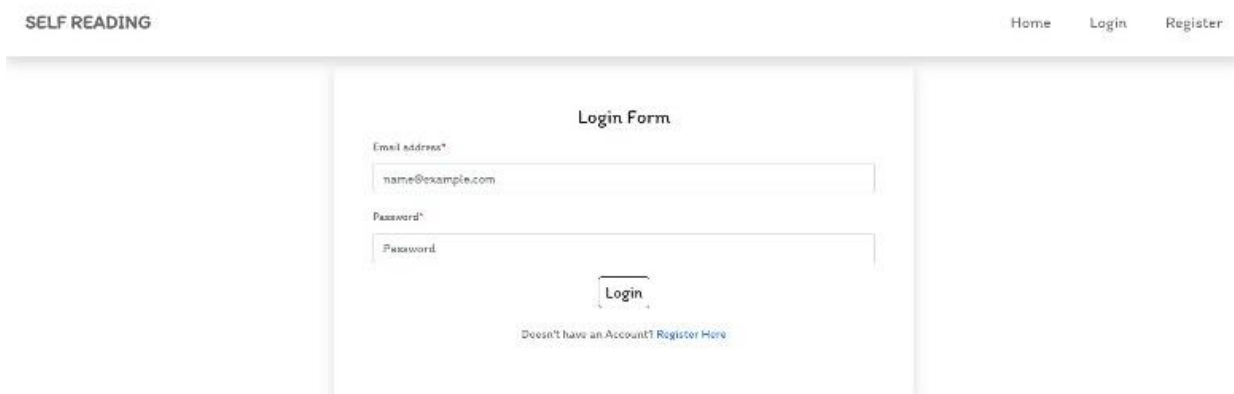
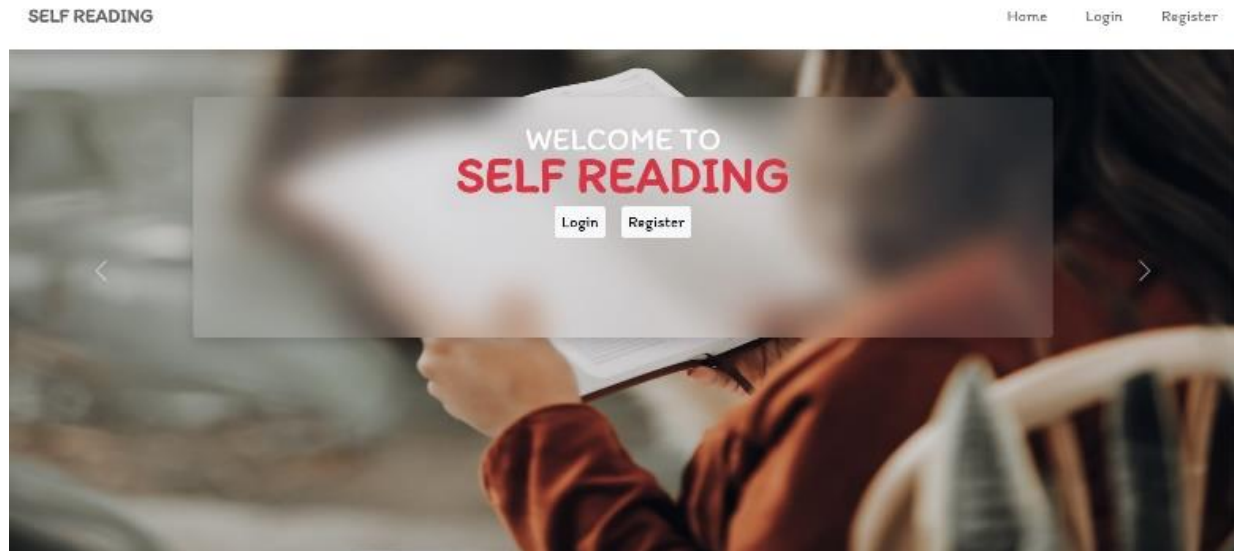


- We propose a system with the primary goal of developing a web application where users can check any web data for any trace of terrorist activity.
- Will provide the feature of uploading the dataset of the web the user wants to scan.
- Our system will detect patterns, keywords and relevant information in unstructured texts in a web-page using web mining as well as data mining.
- Our system should be helpful in anti-terrorism and cyber security response departments.
- User first register to the system, after registration he/ she can perform login to our system with the help of email id and password, if the user first registered then and then only he can able to perform login, therefore for this user require acknowledgment for login to our system.
- Then user can come to the dashboard, On the dashboard uploaded paragraphs are display on the screen, user can select one of these paragraphs and start reading.
- The system can capture the voice of the user with speech recognition system and convert that input voice to the text then match that text with already uploaded text. if some words are not match then system will show that words as unpronounceable words, and display those words on the screen. with the help of google translator or Stochastic Gradient Descent (SGD) system can give the meaning of words unpronounceable words in selected native tongue. with the help of speech recognition module system will also pronounce that word.

Application

- In education
- In organization
- Research

Result



Register

FirstName*

LastName*

Email address*

Password*

Repeat Password*

Register

Paragraph for Reading :

Lorem ipsum dolor sit amet consectetur adipiscing elit. Magni quos doloribus omnis, temporibus maiores ratione. Natus distinctio veniam, hic adipisci perferendis laudantium, qui. Aliquid debitis, vitae est assumenda quidem possimus.



Success !

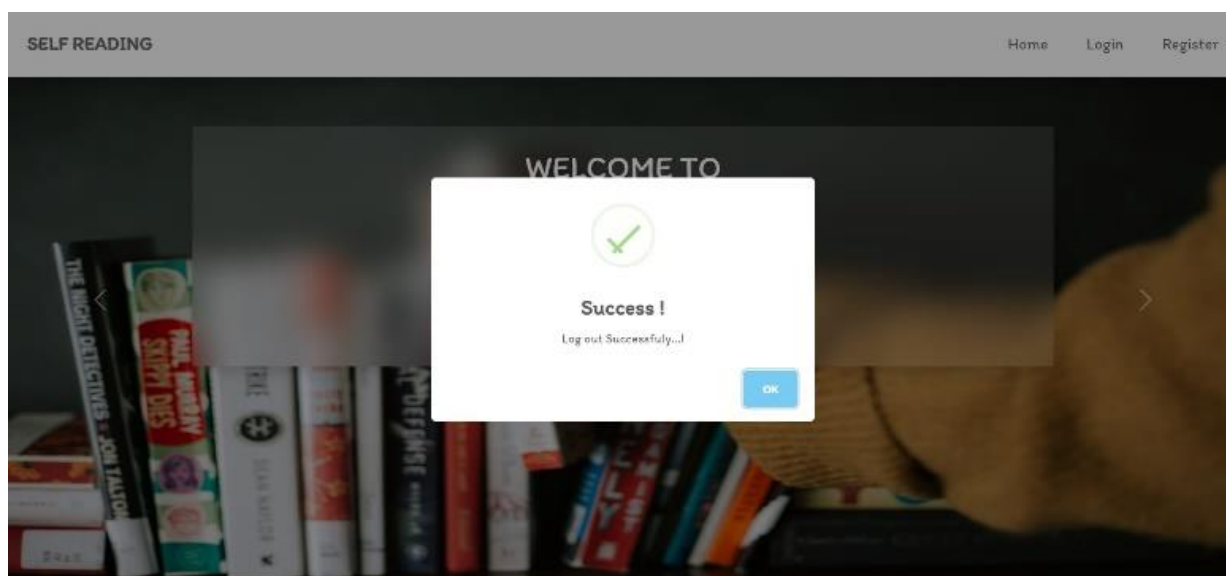
Log In Successful...

OK

Paragraph for Reading :

Lorem ipsum dolor sit amet consectetur adipiscing elit. Magni quos doloribus omnis, temporibus maiores ratione. Natus distinctio veniam, hic adipisci perferendis laudantium, qui. Aliquid debitis, vitae est assumenda quidem possimus.

Read Passage



Conclusion

Hence, we are developed a system which is allow only authenticate user to enter in the dashboard. System allows the user to choose the language which they want their query to be solved. AI based system will observe the user behavior to understand the user and correct him. System then flashes the paragraph on screen and user will start reading the paragraph. If user gets stuck in reading some word our AI based system will correct the user by pronouncing the word and also give the meaning of word in selected native tongue.

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