

Prior arts:

D1: US20140074648A1 "Portion recommendation for electronic books" (13/03/2014)

D2: US20150178265A1 "Content Recommendation System using a Neural Network Language Model"

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FORM 2

THE PATENTS ACT, 1970 (39 of 1970) & THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

(See section 10 and rule 13)

SYSTEM AND METHOD FOR A DOUBLE SCREEN ELECTRONIC BOOK

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The following specification particularly describes the disclosure and the manner in which
is to be performed.

FIELD OF INVENTION

[0001] Embodiments of a present invention relate to an electronic reading, and more particularly, to a system and method for supporting a double screen electronic book.

BACKGROUND

[0002] Reading is the process of taking in the sense or meaning of letters, symbols, etc., especially by sight or touch. In a conventional approach, it is always followed to read books, magazines, newspapers, or the like which are printed on paper materials. The conventional way is considered as a most easy way to enable a user to read any content of their interest. However, in such conventional approach, hundreds of trees are cut in order to produce paper. Such limitations have repercussions on the nature.

[0003] With the growth in the technology, the style of reading had been changed from conventional books to electronic books (e-books), which is considered as a newer approach for the purpose of reading. However, such e-books come with a single display screen. The current e-books or e-readers cater to individual's reading requirement but does not cater to the overall requirement of an ecosystem such as an educational institution, which also needs collaboration between students and teachers. In addition, the newer approach is designed for single use at a time i.e., either reading or writing alone, which provided the users a difficulty in switching between the two.

[0004] Hence, there is a need for an improved system and method for supporting a double screen electronic book to address the aforementioned issues.

BRIEF DESCRIPTION

[0005] In accordance with one embodiment of the disclosure, a system for a double screen electronic book is provided. The system includes one or more processors. The system also includes an input module configured to receive one or more inputs from a plurality of users. The system also includes a profile generation module configured to generate a user profile based on the one or more inputs received. The system also includes a user tracking module configured to track one or more behaviours of the corresponding

plurality of users. The system also includes a recommendation module configured to generate a plurality of recommendations using one or more artificial intelligence techniques. The system also includes a data conversion module configured to translate data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique. The system also includes a monitoring module configured to monitor one or more activities of the plurality of users and to deny access to a pre-defined type of usage of the electronic book for the corresponding plurality of users.

[0006] In accordance with another embodiment, a method for facilitating a double screen electronic book is provided. The method includes receiving one or more inputs from a plurality of users. The method also includes generating a user profile based on the one or more inputs received. The method also includes tracking one or more behaviours of the corresponding plurality of users. The method also includes generating a plurality of recommendations using one or more artificial intelligence techniques. The method also includes translating data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique. The method also includes monitoring one or more activities of the plurality of users. Th method also includes denying access to a pre-defined type of usage of the electronic book for the corresponding plurality of users.

[0007] To further clarify the advantages and features of the present disclosure, a more particular description of the disclosure will follow by reference to specific embodiments thereof, which are illustrated in the appended figures. It is to be appreciated that these figures depict only typical embodiments of the disclosure and are therefore not to be considered limiting in scope. The disclosure will be described and explained with additional specificity and detail with the appended figures.

BRIEF DESCRIPTION OF THE DRAWINGS

The disclosure will be described and explained with additional specificity and detail with the accompanying figures in which:

[0008] FIG. 1 is a block diagram representation of a system for a double screen electronic book in accordance with an embodiment of the present disclosure;

[0009] FIG. 2 is a block diagram representation of an exemplary embodiment of the system for the double screen electronic book of FIG. 1 in accordance with an embodiment of the present disclosure;

[0010] FIG. 3 is a block diagram representation of an exemplary embodiment of a functional block diagram of the system for the double screen electronic book of FIG. 1 in accordance with an embodiment of the present disclosure;

[0011] FIG. 4 is a block diagram representation of an exemplary embodiment of a functional architecture of the system for the double screen electronic book of FIG. 1 in accordance with an embodiment of the present disclosure;

[0012] FIG. 5 is a block diagram of a computer or a server in accordance with an embodiment of the present disclosure; and

[0013] FIG. 6 is a flow chart representing steps involved in a method for facilitating the double screen electronic book in accordance with an embodiment of the present disclosure.

[0014] Further, those skilled in the art will appreciate that elements in the figures are illustrated for simplicity and may not have necessarily been drawn to scale. Furthermore, in terms of the construction of the device, one or more components of the device may have been represented in the figures by conventional symbols, and the figures may show only those specific details that are pertinent to understanding the embodiments of the present disclosure so as not to obscure the figures with details that will be readily apparent to those skilled in the art having the benefit of the description herein.

DETAILED DESCRIPTION

[0015] For the purpose of promoting an understanding of the principles of the disclosure, reference will now be made to the embodiment illustrated in the figures and specific language will be used to describe them. It will nevertheless be understood that no

limitation of the scope of the disclosure is thereby intended. Such alterations and further modifications in the illustrated system, and such further applications of the principles of the disclosure as would normally occur to those skilled in the art are to be construed as being within the scope of the present disclosure.

[0016] The terms "comprises", "comprising", or any other variations thereof, are intended to cover a non-exclusive inclusion, such that a process or method that comprises a list of steps does not include only those steps but may include other steps not expressly listed or inherent to such a process or method. Similarly, one or more devices or sub-systems or elements or structures or components preceded by "comprises... a" does not, without more constraints, preclude the existence of other devices, sub-systems, elements, structures, components, additional devices, additional sub-systems, additional elements, additional structures or additional components. Appearances of the phrase "in an embodiment", "in another embodiment" and similar language throughout this specification may, but not necessarily do, all refer to the same embodiment.

[0017] Unless otherwise defined, all technical and scientific terms used herein have the same meaning as commonly understood by those skilled in the art to which this disclosure belongs. The system, methods, and examples provided herein are only illustrative and not intended to be limiting.

[0018] In the following specification and the claims, reference will be made to a number of terms, which shall be defined to have the following meanings. The singular forms "a", "an", and "the" include plural references unless the context clearly dictates otherwise.

[0019] Embodiments of the present disclosure relate to a system and method for a double screen electronic book. As used herein, the term "double screen electronic book" is defined as an e-book or a e-reader which has dual screen integrated together to obtain a shape of an open book. In one embodiment, the dual screen may be along an edge at which the screens may be integrated, in order to make it portable and easy to carry.

[0020] Turning to FIGs. 1 and 2, FIG. 1 is a block diagram representation of a system (10) for a double screen electronic book (20) in accordance with an embodiment of the present disclosure. FIG. 2 is a block diagram representation of an exemplary embodiment of the double screen electronic book (20) of FIG. 1 in accordance with an embodiment of the present disclosure. The double screen electronic book (20) may be used in educational institutions for educational purposes, in companies to provide knowledge transfer to one of employees, employers or a combination thereof; by general public to utilise the same as a magazine, a novel, an encyclopedia, a newspaper, or the like. The double screen electronic book (20) may be designed to represent a book (as shown in FIG. 2). In one specific embodiment, the double screen electronic book (20) may include at least two display screen, which may be also touch enabled. In such embodiment, the at least two screens may be manufactured using an electronic paper display (EPD). In one embodiment, the EPD may be a colour screen EPD. As used herein, the term EPD also referred as electronic ink or electrophoretic display is defined as a type of display device that mimic the appearance of ordinary ink on paper such as a book, a newspaper or the like. In such embodiment, the at least two screens may be configured to display at least one multimedia content such as audio content, video content, or the like. In one exemplary embodiment, multiple EPDs may be integrated together via a centralised platform which may be accessed via a cloud server through one of the wireless communication mediums. Also, the at least two screens may be configured to enable the plurality of users for both reading and writing purposes. Since the at least two screens are touch enabled, the plurality of users may write on the same using a stylus pen. In one embodiment, the wireless communication mediums may include one of a bluetooth medium, a wireless fidelity (Wi-Fi) medium, a near field communication (NFC) medium, or the like.

[0021] The system (10) includes one or more processors (30) which are operatively coupled to the double screen electronic book (20). In one embodiment, the the double screen electronic book (20) may include the one or more processors (30) and the system (10) housed within the double screen 3-book (20). The system (10) also includes an input module (40) which is configured to receive one or more inputs from a plurality of users upon receiving a plurality of user details. The plurality of users includes at least one of one or more students, one or more teachers, one or more assistants, or a combination thereof.

In one exemplary embodiment, the plurality of user details may include a name, a date of birth (DOB), a residential address, one or more areas of interest, one or more extra-curricular activities, a certification, one or more hobbies or a combination thereof associated to the corresponding one or more students. In another exemplary embodiment, the plurality of user details may include a name, a date of birth (DOB), a residential address, one or more areas of interest, one or more extra-curricular activities, a certification, one or more hobbies or a combination thereof associated to the corresponding one or more teachers.

[0022] Furthermore, the system (10) which includes a profile generation module (50) configured to generate a user profile based on the one or more inputs received. In one embodiment, the user profile may be personalised for the corresponding students, teachers, assistants or the like based on the corresponding user inputs received by the input module (40). In such embodiment, each of the double screen electronic book (20) may be communicatively coupled to the centralised platform. Also, the plurality of double screen electronic book (20) may be categorised based on pre-defined rules such as a specific class, a specific language, or the like in case of educational institutions. The pre-defined set of rules may vary based on the application of the double screen electronic book (20).

[0023] The system (10) further includes a user tracking module (60) configured to track one or more behaviours of the corresponding plurality of users. In one embodiment, the one or more behaviours of the plurality of user may be attendance for a corresponding one or more sessions. In such embodiment, the attendance may be tracked for each of the one or more students, the one or more teachers, the one or more assistants, or the like associated to the corresponding institution. The system (10) also includes a recommendation module (70) configured to generate a plurality of recommendations using one or more artificial intelligence (AI) techniques. The plurality of recommendations is associated to learning of the corresponding one or more users. As used herein, the term “AI technique” is defined as an intelligence demonstrated by machines, unlike the natural intelligence displayed by humans. In one embodiment, an AI model is built to learn multiple areas of interest of the plurality of users in order to analyse and generate recommendations for the corresponding plurality of users.

[0024] In one exemplary embodiment, the recommendation module (70) may be configured to analyse the profile generated in order to benchmark the user's performance in a pre-defined domain. In one exemplary embodiment, the student's performance in scoring for a particular subject may be benchmarked, likewise, the teacher's performance in teaching for a particular subject may be benchmarked, or the like. In another exemplary embodiment, the recommendation module (70) may be configured to recommend one or more career options to students based on the generated profile. In yet another exemplary embodiment, the recommendation module (70) may be configured to recommend extra-curricular activities to the one or more students based on their academic performance. In such embodiment, the system (10) may further include a notification module which may be configured to generate a recommendation notification for the corresponding plurality of users on the at least one screen of the double screen electronic book (20) based on the above generated recommendations.

[0025] Furthermore, the system (10) includes a data conversion module (80) configured to translate data received from one of the plurality of users, from at least one first mode to at least one second mode using an artificial intelligence (AI) technique. In one embodiment, the data may be scribble data. More specifically, the scribble data may be received by the system (10) when the corresponding plurality of users write the data on the one of the at least two screens, which may be analysed and processed further to convert the handwritten text into machine readable text using at least one AI technique. In one embodiment, the at least one AI technique may be one of a natural language processing (NLP) technique, an analytics engine such as predictive, cognitive, advanced analytics; computer vision, augmented reality technique which may include an image recognition and processing technique, a voice recognition analysis or a tone analysis, a machine learning technique, a deep learning technique, or a combination thereof. As used herein, the term "NLP technique" is defined as a branch of AI technique which is concerned with the interactions between computers and human language. Further, in such embodiment, the at least one first mode may include audio information in a first language and the at least one second mode may include audio information in a second language. In one embodiment, the audio information may include the voice & speech of the one or more users which may be other voice and languages using the NLP technique. In one specific embodiment, the data

conversion module (80) may support voice-based web-content search or may be integrated to a voice assistant device.

[0026] The system (10) also includes a monitoring module (90) configured to monitor one or more activities of the plurality of users. More specifically, the one or more activities may include online-offline activities on the double screen electronic book (20), by the corresponding plurality of users which may be monitored using the AI technique. The monitoring module (90) is also configured to control access to a pre-defined type of usage of the electronic book for the corresponding plurality of users. More specifically, the access to one or more restricted websites, unwanted usage on the double screen electronic book (20) may be restricted by denying the access. The one or more activities of the plurality of users may be analysed based on web content surfing, usage pattern or usage time of the double screen e-book (20) along with Recommended materials, websites, search keywords and other information are integrated along with the user profile settings, and the like. The recommendation module (70) may also be configured to monitor Learning and reading habits of the plurality of user's usage pattern analytics, performance and other metrics and base the assignments, suggested learnings for the plurality of users. This feature may be supplemented with reminders and tracking the progress of completion with date and timestamps. More specifically, the monitoring module (90) may be configured for setting limits for screen time based on prolonged usage of electronic devices, analysis pattern of various registered or linked electronic devices. More specifically, one or more electronic device may be integrated along with the double screen electronic book (20). In one specific embodiment, the monitoring module (90) may be configured to control the access to users, device Configurations, list of applications installed, controlled access to electronic media based on the student profile which may relate to the career options.

[0027] In one exemplary embodiment, the monitoring module (90) may provide security posture of the users based on various social media accounts created, used or shared to login into various portals (Data Principle to Gov: All social media accounts, if not used for some time ca be notified & deactivated, deletion if possible).

[0028] In one specific embodiment, the system (10) may further include an access control module which may be configured to enable the authorised users to provide Cognitive Analytics based control through cyber security to protect the plurality of users from Cyber bullying, Cyber stalking, sexting, online-grooming, or the like.

[0029] In one exemplary embodiment, the system (10) may further include a GPS tracking module which may be operatively coupled to the GPS tracking device and the one or more processors (30). The GPS tracking module may be configured to keep a track of a location of the one or more users using the GPS tracking device. Furthermore, the notification module may also be configured to generate a location notification for one or more authorised users, wherein the location notification may be representative of the location of the plurality of users. In another exemplary embodiment, the notification module may also be configured to generate a behavioural notification representative of one of the behaviour, browsing history, connectivity pattern, or the like of the plurality of users.

[0030] In another exemplary embodiment, the system (10) may further include a search engine customisation module configured to generate a customised search engine for the corresponding plurality of users using the one or more artificial intelligence technique. The customised search engine may be generated based on one of the inputs provided by the user, the behaviour, the browsing history, the connectivity pattern or the like of the plurality of users. In such embodiment, the customised search engine may include a digital data library, wherein the digital data library may include Digital Books, Encyclopaedias, magazines, newspapers, and the like.

[0031] In yet another exemplary embodiment, the system (10) may further include a data module configured to provide remote access to one or more materials associated to the corresponding plurality of users. In one exemplary embodiment, the remote access may be given to labs for experimenting the learned concepts to one or more students. In one exemplary embodiment, the data module may enable smart meta data tagging of concepts and relevant material or information based on various influencing factors like assessment results, skill levels, performance, time taken, or the like along with the manual tagging by expert users.

[0032] In yet another exemplary embodiment, the system (10) may further include a health monitoring module which may be configured to monitor health of the plurality of users using one or more sensors which may be housed within the double screen e-book (20). In such embodiment, the one or more sensors may include a pulse oximeter, heart rate monitor device, and the like. Further, the notification module may generate a health notification representative of the health of the plurality of users to notify the authorised users.

[0033] In one specific embodiment, the system (10) may include one or more batteries which may be operatively coupled to the one or more processors (30) and may be housed within the system (10). The one or more batteries may be configured to power the at least two screen, one or more electrical components such as the sensors, the one or more processors (30), and the like within the double screen electronic book (20).

[0034] In an exemplary embodiment, the system (10) may a chat module which may be configured to enable a discussion among the plurality of students using one of a voice, text, or the like medium for communication.

[0035] In one embodiment, the notification module may generate an emergency notification representative of an SOS situation upon analysing the situation of the plurality of users. In one specific embodiment, the system (10) may include a feedback module which may be configured to generate a feedback by the plurality of users or the authorised users in one of a text, a voice, or the like form.

[0036] In one exemplary embodiment the system (10) may further enable a feature for interfacing for hosting or attending the virtual symposiums for user's using AR, VR or Mixed Reality device and means. The system (10) may also include a SIM port to insert a SIM card for connectivity purposes or a similar e- SIM option.

[0037] FIG. 3 is a block diagram representation of an exemplary embodiment of a functional block diagram of the system for the double screen electronic book of FIG. 1 in accordance with an embodiment of the present disclosure. The block diagram (100) represents different wireless means of communication medium (130) operatively coupled

to a CPU (140) comprising the one or more processors (30), a storage unit and a memory unit configured for the functioning of the double screen electronic book (20). The CPU is electrically coupled to a touch screen module (110) and display module (120) via a touch screen controller and a EPD controller respectively. The CPU (140) is also operatively coupled to a power management unit (150). The power management unit (150) includes one or more batteries, a battery manager, one or more power and data transfer ports to enable transmission of power and the data within the double screen electronic book (20).

[0038] FIG. 4 is a block diagram representation of an exemplary embodiment of a functional architecture of the system for the double screen electronic book of FIG. 1 in accordance with an embodiment of the present disclosure. The block diagram (160) represents a student (170), a teacher (180) and a parent (185) of the student connected to the double screen electronic book (20) via the cloud platform. The teacher (180), the parent (185) or the student (170) may enable the double screen electronic book (20) to display a primary dashboard (190) which may include list of applications, list of books, list of notes, a web browsing option which may be authenticated to enable the student to access the required content for educational purpose. The block diagram (160) represents a secondary dashboard (210) which may include details associated to libraries, drivers, operating system, storage unit, different applications and the like. The block diagram (160) represents a tertiary dashboard (210) which may include a mobile foundation unit (220), development and testing platform, development env, APIs, SDKs a set of rules and regulations, or the like.

[0001] FIG. 5 is a block diagram of a computer or a server in accordance with an embodiment of the present disclosure. The server (230) includes processor(s) (240), and a memory (250) coupled to a bus (260). As used herein, the processor(s) (240) and the memory (250) are substantially similar to the system (10) of FIG. 1. Here, the memory (250) is located in a local storage device.

[0002] The processor(s) (240), as used herein, means any type of computational circuit, such as, but not limited to, a microprocessor, a microcontroller, a complex instruction set computing microprocessor, a reduced instruction set computing

microprocessor, a very long instruction word microprocessor, an explicitly parallel instruction computing microprocessor, a digital signal processor, or any other type of processing circuit, or a combination thereof.

[0003] Computer memory elements may include any suitable memory device(s) for storing data and executable program, such as read only memory, random access memory, erasable programmable read only memory, electrically erasable programmable read only memory, hard drive, removable media drive for handling memory cards and the like. Embodiments of the present subject matter may be implemented in conjunction with program modules, including functions, procedures, data structures, and application programs, for performing tasks, or defining abstract data types or low-level hardware contexts. Executable program stored on any of the above-mentioned storage media may be executable by the processor(s) (240).

[0039] The memory (250) includes a plurality of modules stored in the form of executable program which instructs the processor(s) (240) to perform method steps illustrated in FIG. 6. The memory (190) has following modules: an input module (40), a profile generation module (50), a user tracking module (60), a recommendation module (70), a data conversion module (80) and a monitoring module (90).

[0040] The input module (40) is configured to receive one or more inputs from a plurality of users. The profile generation module (50) is configured to generate a user profile based on the one or more inputs received. The user tracking module (60) is configured to track one or more behaviours of the corresponding plurality of users. The recommendation module (70) is configured to generate a plurality of recommendations using one or more artificial intelligence techniques. The data conversion module (80) is configured to translate data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique. The monitoring module (90) is configured to monitor one or more activities of the plurality of users and to control access to a pre-defined type of usage of the electronic book for the corresponding plurality of users. In one embodiment, the control may include one of limiting or denying access to the electronic book.

[0041] FIG. 6 is a flow chart representing steps involved in a method (270) for facilitating the double screen electronic book in accordance with an embodiment of the present disclosure. The method (270) includes receiving one or more inputs from a plurality of users, wherein the plurality of users comprises at least one of one or more students, one or more teachers, one or more assistants, or a combination thereof, upon receiving a plurality of user details in step 280. In one embodiment, receiving the one or more inputs may include receiving the one or more inputs by an input module. In one specific embodiment, receiving the one or more inputs may include receiving a name, a date of birth (DOB), a residential address, one or more areas of interest, one or more extra-curricular activities, a certification, one or more hobbies or a combination thereof associated to the corresponding plurality of users.

[0042] The method (270) also includes generating a user profile based on the one or more inputs received in step 290. In one embodiment, generating the user profile may include generating the user profile by a profile generation module.

[0043] The method (270) also includes tracking one or more behaviours of the corresponding plurality of users in step 300. In one embodiment, tracking the one or more behaviours may include tracking the one or more behaviours by a user tracking module. In one exemplary embodiment, tracking the one or more behaviours may include tracking attendance of the corresponding plurality of users for corresponding one or more sessions.

[0044] Furthermore, the method (270) also includes generating a plurality of recommendations using one or more artificial intelligence techniques in step 310. In one embodiment, generating the plurality of recommendations may include generating the plurality of recommendations by a recommendation module. In one exemplary embodiment, generating the plurality of recommendations may include generating one of one or more career options, extra-curricular activities, or the like.

[0045] The method (270) also includes translating data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique in step 320. In one embodiment, translating the data may include translating the data by a data conversion module. In one exemplary

embodiment, translating the data may include translating the data in a first language to a data in a second language. In such embodiment, translating the data may include translating audio data.

[0046] The method (270) also includes monitoring one or more activities of the plurality of users in step 330. In one embodiment, monitoring the one or more activities may include monitoring the one or more activities by a monitoring module. In one exemplary embodiment, monitoring the one or more activities may include monitoring the one or more activities using artificial intelligence technique.

[0047] The method (270) also includes controlling access to a pre-defined type of usage of the electronic book for the corresponding plurality of users in step 340. In one embodiment, controlling the access may include one of limiting or denying the access by the monitoring module.

[0048] It should be noted that all the embodiments described in the system (10) of the FIG. 1 holds good for the corresponding features and elements of the method disclosed in FIG. 6.

[0049] Various embodiments of the present disclosure enable the system to provide Personalized experience for teachers & students with device designed & made for specific purpose. A single device is designed to store all subject books and notebooks whereby reducing the actual weight that the students carry today in the form of multiple books and notebooks to school every day. The system provides a Possibility of on-the-fly amendments to the course content during the middle of an academic year. Also, since the system is synced with the cloud platform, allow students to take real-time backups and share the documents to any other device, as necessary. Majorly, the system Reduces paper usage in turn tree cutting which is done today for the physical books, thereby provides Replacement for physical newspaper and magazines across household. The system provides overall school ecosystem which also collaborates between students and teachers. The system also device can store all subject books and notebooks whereby reducing the actual weight that the students carry today in the form of multiple books and notebooks to school every day.

[0050] In addition, the system enables the reading and the writing simultaneously for the users. Also, Newspaper and Magazines would no longer required to be printed thereby saving trees and nature. These could be easily delivered on schedule to users and users will not miss their subscription even when they are away from home. The design of the system gives the same 2-page book like experience. The system also brings in personalized and activity-based teaching experience for individual institutions of each grade along with books, other teaching, reading, writing and Lab materials published by educational institutions. Inclusive of teacher's training or learning materials and schedules.

[0051] Furthermore, the system enables submission of notes, video and audio recordings, lab materials online with restricted access and tracking mechanism for evaluation of the students. Also, the system will become as a media to transfer the Q and A and other content material in real time with ease. Teachers can maintain a database of materials with different versions with depth and breadth of knowledge in the online repository for distribution and further development depending on the student needs. In addition, the system provides class schedules with reminders for each class. The system also extends advanced features of the operating system with enhanced security protection, emergency location service, privacy controls, parental controls, digital ground rules, more intuitive gesture-based navigation, contaminant detection, with improved performance and power saving with dark mode and adaptive battery as applicable as compared to previous e-readers. The system may have its applications in various fields where any sort of book or paper related study or reading material is being used.

[0052] The system can Automatically Sync data to clouds and Auto Save \ based on the Battery Charge level and other sensors indicators. Also, the system has its application in with Platform, Network, OS and security applications.

[0053] While specific language has been used to describe the disclosure, any limitations arising on account of the same are not intended. As would be apparent to a person skilled in the art, various working modifications may be made to the method in order to implement the inventive concept as taught herein.

[0054] The figures and the foregoing description give examples of embodiments. Those skilled in the art will appreciate that one or more of the described elements may well be combined into a single functional element. Alternatively, certain elements may be split into multiple functional elements. Elements from one embodiment may be added to another embodiment. For example, order of processes described herein may be changed and are not limited to the manner described herein. Moreover, the actions of any flow diagram need not be implemented in the order shown; nor do all of the acts need to be necessarily performed. Also, those acts that are not dependent on other acts may be performed in parallel with the other acts. The scope of embodiments is by no means limited by these specific examples.

I/WE CLAIM:

1. A system (10) for a double screen electronic book (20) comprising:
 - one or more processors (30),
 - an input module (40) operable by the one or more processors (30), and configured to receive one or more inputs from a plurality of users, wherein the plurality of users comprises at least one of one or more students, one or more teachers, one or more assistants, or a combination thereof, upon receiving a plurality of user details;
 - a profile generation module (50) operable by the one or more processors (30), and configured to generate a user profile based on the one or more inputs received;
 - a user tracking module (60) operable by the one or more processors (30), and configured to track one or more behaviours of the corresponding plurality of users;
 - a recommendation module (70) operable by the one or more processors (30), and configured to generate a plurality of recommendations using one or more artificial intelligence techniques, wherein the plurality of recommendations is associated to learning of the corresponding one or more users;
 - a data conversion module (80) operable by the one or more processors (30), and configured to translate data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique;
 - a monitoring module (90) operable by the one or more processors (30), and configured to:
 - monitor one or more activities of the plurality of users; and
 - control access to a pre-defined type of usage of the electronic book for the corresponding plurality of users.

2. The system (10) as claimed in claim **1**, wherein the plurality of user details comprises a name, a date of birth (DOB), a residential address, one or more areas of interest, one or more extra-curricular activities, a certification, one or more hobbies or a combination thereof associated to the corresponding one or more students.

3. The system (20) as claimed in claim **1**, wherein the data comprises scribble data.

4. The system (20) as claimed in claim **3**, wherein the at least one first mode comprises audio information in a first language, wherein the at least one second mode comprises audio information in a second language.

5. The system (20) as claimed in claim **1**, comprising:

a notification module operable by the one or more processors (30), and configured to generate a behavioural notification corresponding to one of behaviour, browsing history connectivity pattern associated to the corresponding plurality of users;

a search engine customisation module operable by the one or more processors (40), and configured to generate a customised search engine for the corresponding plurality of users using the one or more artificial intelligence technique; and

a data module operable by the one or more processors (50), and configured to provide remote access to one or more materials associated to the corresponding plurality of users.

6. A method (270) comprising:

receiving, by an input module, one or more inputs from a plurality of users, wherein the plurality of users comprises at least one of one or more students, one or more teachers, one or more assistants, or a combination thereof, upon receiving a plurality of user details; (280)

generating, by a profile generation module, a user profile based on the one or more inputs received; (290)

tracking, by a user tracking module, one or more behaviours of the corresponding plurality of users; (300)

generating, by a recommendation module, a plurality of recommendations using one or more artificial intelligence techniques; (310)

translating, by a data conversion module, data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique; (320)

monitoring, by a monitoring module, one or more activities of the plurality of users; and (330)

controlling, by the monitoring module, access to a pre-defined type of usage of the electronic book for the corresponding plurality of users. (340)

7. The method (270) as claimed in claim **6**, wherein the plurality of user details comprises a name, a date of birth (DOB), a residential address, one or more areas of interest, one or more extra-curricular activities, a certification, one or more hobbies or a combination thereof associated to the corresponding one or more students.

8. The method (270) as claimed in claim **6**, wherein the data comprises scribble data.

9. The method (270) as claimed in claim **8**, wherein the at least one first mode comprises audio information in a first language, wherein the at least one second mode comprises audio information in a second language.

10. The method (270) as claimed in claim **6**, comprising:

generating, by a notification module, a notification corresponding to one of behaviour, browsing history connectivity pattern associated to the corresponding plurality of users;

generating, by a search engine customisation module, a customised search engine for the corresponding plurality of users using the one or more artificial intelligence technique; and

providing, by a data module, remote access to one or more materials associated to the corresponding plurality of users.

Dated this **24th day of February 2021**

Signature

A handwritten signature in black ink, appearing to read "Harish".

Harish Naidu

Patent Agent (IN/PA-2896)

Agent for the Applicant

SYSTEM AND METHOD FOR A DOUBLE SCREEN ELECTRONIC BOOK

ABSTRACT

System and method for a double screen electronic book are provided. The system includes an input module configured to receive one or more inputs from a plurality of users, a profile generation module configured to generate a user profile based on the one or more inputs received, a user tracking module configured to track one or more behaviours of the corresponding plurality of users, a recommendation module configured to generate a plurality of recommendations using artificial intelligence techniques, a data conversion module configured to translate data received from one of the plurality of users, from at least one first mode to at least one second mode using at least one artificial intelligence technique, a monitoring module configured to monitor one or more activities of the plurality of users and to control access to a pre-defined type of usage of the electronic book for the corresponding plurality of users.

FIG. 1