

Abstract



**ASSIGN
BUSTER**

ABSTRACT The Smart NoteTaker is such a helpful product that satisfies the needs of the people in today's technologic and fast life. This product can be used in many ways. The Smart NoteTaker provides taking fast and easy notes to people who are busy one's self with something. With the help of Smart NoteTaker, people will be able to write notes on the air, while being busy with their work. The written note will be stored on the memory chip of thepen, and will be able to read in digital medium after the job has done. This will save timeand facilitate life. The Smart NoteTaker is good and helpful for blinds that think and write freely. Another place, where our product can play an important role, is where two people talks on the phone. The subscribers are apart from each other while their talk, and they may want to use figures or texts to understand themselves better. The product will be able to sense 3D shapes and motions that user tries to draw. The sensed information will beprocessed and transferred to the memory chip and then will be monitored on the displaydevice. The drawn shape then can be broadcasted to the network or sent to a mobile There will be an additional feature of the product which will monitor the notes, which were taken before, on the application program used in the computer. This application program can be a word document or an image file. Then, the sensed figures that were drawn onto the air will be recognized and by the help of the software program we will write, the desired character will be printed in the word document. If the application program is a paint related program, then the most similar shape will be chosen by the program and then will be printed on

the CHAPTER 1 INTRODUCTION 1. 1 About Note Taker: The Smart Note Taker is such a helpful product that satisfies needs of the people in today's technologic and fast life. This product can be used in many ways. The Note <https://assignbuster.com/abstract-8/>

Taker provides taking fast and easy notes to people who are busy one's self with something. With the help of Smart Note Taker, people will be able to write notes on the air, while being busy with their work. The written note will be stored on the memory chip of the pen, and will be able to read in digital medium after the job has done. This will save time and facilitate life. This product has many advantages over digital pen, since the smart note taker is a device that can store visual recordings and thus can be used widely. There will be an additional feature of the product which will monitor the notes, which were taken before, on the application program used in the computer. This application program can be a word document or an image file. Then, the sensed figures that were drawn onto the air will be recognized and by the help of the software program we will write, the desired character will be printed in the word document. If the application program is a paint related program, then the most similar shape will be chosen by the program and then will be printed on the screen. What are the functions of note taking? Note-takers take notes to fulfill two major functions: to record information and/or to aid reflection. Over and above the drawing up of a simple memory aid, such as a shopping list, or a record of actions, such as a diary, one of the major aims of note taking is to build up a stable external memory in a form that can be used at a later date. Confronted with a diverse range of information-transmission situations, note-takers are striving to avoid forgetting something. Note taking is an essential tool in many information-transmission situations. How are notes taken? The average writing speed of a student is around 0.3 to 0.4 words/second, whereas a lecturer speaks at a rate of around 2 to 3 words/second. Unless everything is said at dictation speed, or students develop exceptional shorthand skills, teachers will never

speak slowly enough for students to write down everything that is said. As a result, students intuitively develop processes and methods that allow them to record the content of lessons. Without going into detail about the linguistic processes used, which are well known, such as the use of abbreviations, truncating long words, and apocopes, we would like to briefly look at the markers in a speaker's text that signal, more or less explicitly, the importance of what is being said. Note-takers are very attentive to these markers, which have a considerable influence on the quantity of notes taken.

Comprehension through note taking: Very little work has been done on learning conditions and measuring the evolution of the knowledge and skills used in note taking, whether for school or university students.

Producing notes : Analyzing a corpus of notes taken by students presents the same problems as analyzing rough drafts of documents: the notes produced by students having attended the same lesson or having read the same book will be extremely varied (Hadwin, Kirby, & Woodhouse, 1999). When taking notes, students no longer follow the same conventions as for the production of standard text; spelling, syntax, and the layout of information on the page are subject to significant changes.

1. 2 FEATURES OF NOTE TAKER: 1) With the help of smart note taker handwritten notes will be instantly converted into editable text. 2) It is good and helpful for blinds that think and write freely. 3) Another place, where our product can play an important role is where two people talk on the phone. The subscribers are apart from each other while their talk and they may want to use figures or texts to understand themselves better. 4) It is also useful especially for instructors in presentation. The Instructors may not want to present the lecture in front of the board. The drawn figure can be processed and directly sent to the server

computer in the room. The server computer then can broadcast the drawn shape through network to all of the computers which are present in the room. By this way lectures are aimed to be more efficient and fun. 5) It recognize up to 22 Languages : English — Canada , English - GB, English-US , German , Simplified Chinese, Traditional Chinese , Korean Danish, Spanish, Spanish - Mexico, Finnish, French , French-Canada, Greek, Italian, Japanese, Dutch, Norwegian, Portuguese , Portuguese-Brazil, Russian, Swedish. 1. 3 WORKING Smart note taker will be simple but powerful. The product will be able to sense 3D shapes and motions that user tries to draw. The sensed information will be processed and transferred to the memory chip and then will be monitored on the display device. The drawn shape then can be broadcasted to the network or sent to a mobile device. fig1. 3: Smart note taker There will be an additional feature of the product that will monitor the notes, which were taken before, on the application program used in the computer. This application program can be a word document or an image file. Then, the sensed that were drawn into the air will be recognized and with the help of the software program software we will write the desired character will be printed in the word document. If the application program is a paint related program, then the most similar shape will be chosen by the program and then will be printed on screen. CHAPTER 2 CONSTRUCTION Since, JAVA applet is suitable for both the drawings and strings, all these applications can be put together by developing a single JAVA applet program. The java code that we will develop will also be installed on the pen so that the processor in the pen will and type and be able to draw desired text on the display panel. 2. 1 Applet: Applet is a function of java which for example, is a kind of container (file) which contains a set of programs made

in java. Java is a high level language. It is widely used in making various application. Based on java. It is one of the best features of java. The various strings, drawings etc will be made using a class file and this file will not be a single file. It will be a set of files linked together in a single Database: The system installed in the pen will consist of a database which will help the processor to recognize various words made visually in the air. Each word written in the air will resemble to a word in the database and the word present in the database will be printed. This will remain the basic principle of the working of a smart note taker.

2. 2 TECHNICAL DEFINITION OF THE PRODUCT:

In order to meet the technical requirements of the product we need Operating System Like Windows or Linux in order to implement software part of the project, Displacement Sensors to recognize the displacement of the pen in three dimensions, parallel cable to communicate with computer, software to solve the displacement data and finds the individual coordinate displacements in three axes and transform the data into text format, analog to digital converter to process analog displacement data and convert them into digital format, switch to control the pen and Rechargeable battery. - Operating System - Software program to convert data into text or string format - Displacement Sensor - Parallel cable - Analog to digital converter - Switch & Rechargeable Battery

In the current market there are many similar products that are trying to convert handwritten documents into digital typed documents. In these products, optical sensors are being widely used to perceive the motion. Ink is also used on these products to be functioned as an ordinary pen. There are optical sensors on the pen. However, they have some lacks and imperfections such as being wired, limited in work space, non-practical and limited in 2D.

CHAPTER 3

TYPES OF NOTE TAKERS Two types of Note taking are currently available. The director or/Access services Advisor will help you determine which type will be most useful for individual students. **Standard Note Taker** The Note Taker either takes notes on carbontype paper or photocopies their notes and then deposits them in the students file folder is located in the Note Taking box in the OSD officer reception. **Computerized Note Taker** In Some cases Note Taker may take notes using a portable word processor or computer. This system is used for students who requires notes in an alternative format. These will also deposited file folder or sent electronically via e-mail.

QUALIFICATIONS FOR NOTE TAKER: Note takers have required to have the following qualifications: $\frac{1}{4}$ Strong communication skills $\frac{1}{4}$ Knowledge of the content area $\frac{1}{4}$ Ability to listen and store information while writing or keyboarding with speed and accuracy

CHAPTER 4 THREATS IN THE MARKET

Companies had succeeded to make similar products and put them in the market . Putting a newly invented, innovative product in the market is not easy. The prices in the market must be well observed for similar products. The prices of 2-D digital pens are about 50 dollars to 90 dollars. The new product is 3-D Smart Note Taker that has a memory chip on it in addition to the features that the previous pens have.

4. 1 SMART NOTE TAKER'S CONSUMER PROFILE AND PURCHASE POWER : Smart note taker is incompatible among the other products. It has some significant differences from it's potential competitors. This plays crucial role in the marketing strategy and attractiveness of product in the segmented market. The prior market is educational services and schools. In today's fast and information based life; the faster and easier you get information, the more successful you are. The customers are going to be generally teachers and indirectly

students. While lecturing the usage of the board for teachers and note-taking for students cause dilute of time and sometimes it is embarrassing. In order to utilize the time and to take more attention of students smart note taker is a great solution, which transfers the notes of the teacher on the board to software directly. It optimizes efficiency of time that is used during the lecturing and it is desirable for the educational.

4. 2 CURRENT PRODUCTS:

MOBILE NOTE TAKER

The Ultimate Handwriting Capture Device Mobile Note Taker TM is the world's first portable handwriting capture device based on natural handwriting as an input. Attach plain paper of any kind and use Pegasus the electronic pen to capture , store and share handwritten drawings, sketches, notes, and memos at meetings, lectures, and conferences. Mobile Note Taker works in two modes :- mobile mode and Connected mode. In mobile mode note taker receiver unit is not connected to a PC via USB cable. In connected mode the base unit is connected to a PC through Capture, Organize, and Share Your Notes Digitally-Anywhere, Anytime!

Fig 4. 2. 1: Mobile note taker Mobile Mode Enables capture and storage of notes and sketches digitally at meetings, lectures, and conference. Specifications: Coverage area: up to A4 size paper Resolution: 100DPI Communication: USB (connected mode) Memory: 2MB flash memory Power: Pen - 3 X SR41 batteries Package Contents Electronic Pen Memory Unit : 1*Refill 3* SR41 batteries 2* AAA batteries Quick Start Guide Memory Unit - 2 X AAA batteries

PC NOTE TAKER

PC Notes Taker is the world's first device that captures natural handwriting on any surface onto a PC in real time. Based on a revolutionary electronic pen, PC Notes Taker displays the user's handwritten notes, memos or drawings on the computer, and stores the image for future use. PC Notes Taker is ideal for markets where

handwritten input is essential, such as health, educational and financial sectors. Supplied with user-friendly software, PC Notes Taker is compatible with PCs and notebooks. Adds Handwriting Input to any Computer PC Notes Taker is the world's first device that captures natural handwriting on any surface onto a PC in real time. Based on a evolutionary electronic pen, PC Notes Taker displays the user's handwritten notes, memos or drawings on the computer, and stores the image for future use. PC Notes Taker is ideal for markets where handwritten input is essential, such as health, educational and financial sectors. Supplied with user-friendly software, PC Notes Taker is compatible with PCs and notebooks. Fig 4. 2. 2: PC note taker Package Contents: if~ Cordless electronic pen, including standard refill and batteries. if~ Detachable base unit including USB cable if~ CD software applications; Pen2Text, Annotator I-PEN PRODUCT FEATURES : Fig 4. 2. 3I-pen - Save your inputs and e-mail it. - Compact and light: perfect for laptop users. - Convert handwriting to text. - Annotate Web Pages. - Pen-on-paper feeling: Natural handwriting by sensing contact pressure. - No special pad or tablet required: Free to use on almost any surface - Ergonomic design: fits comfortably on your hand - Standard USB connection: Just plug and play - Includes four application software's: Finger IE Memo (Web-Memo, Finger White, rite Pen, rite Mail) - Instantly recognizes any handwriting accurately. - Send handwritten notes and emails. - Create memos and highlight within any application - No conflict between regular mouse and i-Pen (have both plugged in at the same time) - Create professional designs - simple and natural to use - Works with all graphics software for both PC and Mac. (Adobe, Corel, etc.) - Install the driver and application software. HOW TO USE? - Install the driver and application software. - Plug-in the USB connector

of into your computer's available USB port. - After successfully installing driver software begin testing by moving it around. When navigating, have it in an upright position for best accuracy and ease. - Switch between Mouse mode and Pen mode . SPECIFICATIONS - Size: 6. 0" (Length) x 0. 75" (Width) x 1. 0" (Height) - Connection: USB - Power: 5V (using PC power via USB port) - Pen Tip: Soft Micro Switch SMART PEN The Smart Pen is a device that resembles a fat pen or stylus, but contains a tiny computer and a set of sophisticated sensors that record and analyze every motion, and then transmit this information to a nearby computer via infrared, radio or direct electric signal . A Smart Pen helps a computer to recognize handwritten or drawn input. A computer is treated as 1 level of Complexity higher in its ability to recognize the handwriting of anybody who uses a Smart Pen. Costs \$50, weight is negligible. SOLO PEN This is a progressive development of the Smart Pen: a pen with sufficient processing power to recognize handwriting on its own with the equivalent of Complexity 1. It can also be used as a Smart Pen. Every Solo Pen has a long, narrow screen that displays the writing for the user to check. The user of a Solo Pen can write on a regular writing surface, as the Solo Pen has a normal writing tip. TL8 Solo Pens have trouble with the spatial relationship of writing, so if the user writes three lines on paper and then wants to write a heading above the first line, the Solo Pen might put it a line higher or lower than desired. The user can also write in the air, but this requires an IQ roll to avoid mistakes. TL8 Solo Pens are great for short notes on the run, not for novel writing. CHAPTER 5 ARCHITECTURE OF SMART NOTE TAKER How Does Smart Pen Work? Fig 5: architecture . The Smart Pen system includes the Smart Pen and a pen cradle connected to an internet-enabled computer. As CRFs are filled out, the <https://assignbuster.com/abstract-8/>

Smart Pen records each stroke. It identifies each CRF and where it is on the page through a very fine grid pattern that appears as a light gray background shading on the CRF. The Pen is then placed in the cradle, activating a password-protected Internet link to Health Decisions. Data are interpreted into fields and validation can occur immediately, with queries returned to sites quickly over the Internet. The process also creates an exact copy of the original CRF that can be read for notation and comparison with interpreted data fields. Health Decisions takes the best technology and applies it to your clinical trials. The digital pen captures the user's handwriting. By itself, the pen works like a regular ballpoint pen. When you use it with digital paper, you now have the added benefit of an electronic copy of the completed paperwork as well as a hardcopy backup. The ExpeData solution works with pen hardware from leading manufacturers both in a docking version where you need a PC to upload data and a Bluetooth version, which is paired with a Bluetooth cell phone. Pens are very durable and can hold up to 100 pages.

CHAPTER 6 APPLICATIONS - Write a letter or take note. It converts your handwriting into text. Any handwriting is recognized 99.9% accurately. Write in cursive or print, even a combination!

- Tired of Printing, then signing, then faxing documents just to add a signature? You can input your signature on any document.
- Mark and highlight a document for changes in any application. Add handwritten captions on photographs. Write a note right on a web page as if you were marking a newspaper. Then save and send.
- Make a point of importance on any Presentation.
- Art / Graphics Pen Mouse - compatible with all graphics software

CHAPTER 7 ADVANTAGES AND DISADVANTAGES ADVANTAGES -

With the help of smart note taker we can write notes on any surface even in

<https://assignbuster.com/abstract-8/>

air. That is we can write notes any time with using a paper. So we get information in very fast and easy way. Hence it is time saving. - Smart note taker is reliable and powerful. - It is helpful for blinds that think and write freely. - Smart note taker is used for instructors in presentations. - It is used along with paint and JAVA graphics so we can say this product is compatible with all graphics software. - Easy-to-use wireless connection. - Drawer (Contents outline, library, history).

DISADVANTAGES - The only disadvantages of smart note taker are high cost. Companies had succeeded to make similar products and put them in the market. - Putting a newly invented, innovative product in the market is not easy. - The prices in the market must be well observed for similar products. - The prices of 2-D digital pens are about 50 dollars to 90 dollars. So the price of smart note taker will be high . But this disadvantage definitely be eliminated in near future

CONCLUSIONS The system will try to improve a pen, which helps people get rid of typing problems on computer by the technology, which converts your handwriting to text format on your PC. However, the technology provides opportunity to write on air, which means it, needs no any item to convert the typing to your computer such as 3D view. Beside this, it can also be used like all other classical pens. Therefore, this device will increase the capacity of noting the texts, lessons and projects you work on. One other fact that appears is similar products generally works in a way that they store the writing by memory systems and direct the data to computer. We will vanish this time lag by using a technology that the data will be sent to PC directly not by stored. It is sure it will be hard to eliminate the other products as our rivals, but our advantage in this market will be the properties of the device, which come to be its high mobility, versatile design and its ideal weight. The

device takes a practical extent since it offers high mobility. This property may seem useless at first side but the high mobility will help the teachers or individuals, who have dynamism as they do their jobs, by giving them opportunity to write anywhere. . On the other hand, the price of innovation will be reasonable for the sectors that can use it effectively in their business or lessons.

REFERENCES [1]. Barbier, M. L., Faraco, M., Piolat, A., & Branca, S. (2004). [2]. N. Andrieux-Reix, S. Branca, & C. Puech (Eds.). [3] . toire [Abbreviative procedures: daily activities and historic perspective] (pp. 143-161). [4]. Gap: Editions Orphys. Bessonnat, D. (2000). [5]. Une année de réécriture en troisi^{ème} [A Year of Rewriting at Secondary School], *Pratiques*, 105-106, 83-111. [6]. Boch, F. (1999). *Pratiques d'écriture et de réécriture À l'université. La prise de notes, entre texte source et texte cible* [Writing and Rewriting at University. Example of Note Taking]. Paris : Presses Universitaires du Septentrion. Boch, F. (2001).