Review of related literature essay

ASSIGN BUSTER

Overview of the Current System and Related Systems Current System The proposed system lets the students view or print their transcript of records, statement of accounts, schedule of subjects and account balances without the need to request for these documents or log-in to their Integrated University Information System (IUIS) accounts. The current system in requesting for transcript of records and statement of accounts needs a request form or order of payment. The student then pays the specified amount in the cashier and presents the receipt to the registrar.

The requested documents are then released after several hours or even days. A receiving form is then filled up by the student upon receiving the requested document. Furthermore, for students to have a printed copy of their schedule, they need to log-in to Internet cafes and have their schedule of subjects printed from their IUIS account. Their balances are also monitored from their personal account. Related Systems VENDAPIN Model 5008P/5008T Series Instant PIN Printer Receipt Slip Vending Machine. The VendaPin Instant Receipt Printer Vending Machine prints a PIN receipt or ticket on a slip of thermal paper.

The 55008T (Touch Screen) or 5008P (Push Button) Series Vendor was designed for downloading “ Encrypted PIN’s” over the Internet. PIN’s in a variable 1 – 20 digit format are stored on a central main server. An unlimited number of model 5008P machines can be installed each with a unique IP address. Machines can be ordered with actual illuminated push buttons, or a metal keypad or without buttons. In operation, the model 5008P/5008T requests a down load automatically over the Internet of a preset group of PIN’s to be stored on the machine’s “ non-volatile memory”.

The files are sent over the Internet using a 128 bit encryption security technique. Other applications are vending of 4 digit PIN’s with location numbers for access to; parking locations, water jugs, firewood bundles, or for Propane Tank exchanges from combination locked cages. The customer inserts any combination of cash or optional cash and coins or cash, coins or a credit card. The PIN value is selected and instantly printed on a thermal receipt printer slip of paper. Then the PIN is used to open or access a door or other application.

As the PIN’s are instantly printed, the model 5008P automatically requests additional PIN’s to be replenished over the Internet for each value printed. It is also available with 8 flashing push buttons to use in lieu of the touch screen. The economical model 5008P from “ One to Eight Selection” push button Receipt Slip Instant Printer Vending Machine can have G6 e-Port Discover, Visa, Master Card & American Express “ Wireless” credit card terminal added for in lieu of the coin mechanism. It accepts $1 – $5 – $10 & $20 USA banknotes and coins, or optional credit/debit cards in lieu of coins.

This model is ideal for parking lot PINs, or Propane Tanks, Bottle Water Jugs, Firewood Bundles and other vending of products from a caged locker. (Vendapin LLC, 2010) Electronic coin mechanism and system. An improved electronic coin mechanism and coin operated dispensing system includes an electronic coin mechanism which controls operation of a vending machine and stores certain types of data. The data in raw form are read out by a reader which may be interfaced to a computer through a shuttle.

Due to the variety of information which may be collected, the computer is able to generate a variety of reports. The electronic coin mechanism is battery operated and designed for long service life. The mechanism includes an aperture rotatable coin wheel which detects the value of a coin by its diameter and compared the count with stored information in the coin electronics, the latter having an elapsed time relative counter. Time of first and last sale as well as sales per period are stored as well as total amounts received. Various levels of security are provided. (Jack S.

Chalabian et al, 1995) In a preferred form, the newsrack is equipped with an electronic mechanism which recognizes the coins deposited and if at least the correct amounts of valid coins are deposited, permits access to the interior of the dispenser. Usually this is accomplished by permitting the machine door to be opened. The machine electronics stores a wide variety of information such as total amount deposited, machine identification number, and relative time of the first and last sale as well as relative time of each sale. By relative time is meant elapsed time rather than chronological time.

The electronics of the machine, powered by a battery, operates in a low power sleep mode to conserve power, until activated by deposit of a coin. When activated, the machine system is powered up to perform a variety of functions including coin denomination recognition, summing of valid coins deposited and comparison against the purchase price, identification of relative time, and release of the door lock to permit access if at least the correct amount of money is deposited. The deposited money then falls to the machine bank. The total amounts of valid coins are totalized.

If less than the purchase price is deposited or invalid coins or slugs are deposited, the deposited coins or other items are diverted to a coin return and the door remains locked. The coin recognition system is unique in that it accepts and reads the value of each increment of coins from one cent to a dollar, for example, each of which is deposited sequentially in a coin chute. A rotatable coin wheel having a predetermined number of apertures with a single light source and a single detector is used for coin recognition in a unique way to be described. The use of a single light source and detector reduces the power needed for operation. Jeffrey W. Roberts, 2001) Vending Machine. The basic design of a vending machine begins with the cabinet, the steel outer shell that holds all internal components and which determines the machine’s overall size and shape. Inside the cabinet is a steel inner lining called the tank. The tank and the cabinet fit closely together, leaving enough room in-between for a layer of polyurethane foam insulation. In combination, the tank and the foam insulation help keep internal temperatures stable and protect products against temperature extremes outside the cabinet.

Although all products and dispensing mechanisms are contained in the cabinet, in the strictest sense, they are actually installed within the tank. The outer surfaces of the cabinet are coated with an acrylic powder finish that is baked into place. Powder coatings enable the machine to withstand extreme temperatures, salt or sand, abuse by customers, and other conditions requiring high surface durability. Some vending machines, especially cold drink vendors, have two doors. The internal door seals the inside of the machine and provides additional insulation.

The outer door contains the electronic controls that allow customers to purchase and receive goods. The outer door also includes signage and illustrations, generally silk-screened onto a panel of Lexan that fits into the front panel of the door. Lighting for the front panel is generally installed behind the Lexan panels. The outer door includes heavy-duty hasps, locks, and hinges to deter theft and vandalism. (Bailey, Jane M. , 1991) Mobile Printing Solution. This technology makes it possible to print while on-the-go from any smartphone, tablet or laptop simply by sending an email to a PrinterOn-enabled printer.

Mobile printing apps are also available for these devices which allow you to search via GPS or keyword for printers located in your area and then print to them. Public print locations include hotels, airports, libraries and cafes. It has over 6000 print locations worldwide. (PrinterOn, 2011) Public Printing. Printing in public areas can be done from the public workstations or directly from your laptop through the wireless network. The public workstations in the libraries and residence halls automatically send print jobs to the pay for print station.

To release your print job, simply swipe your copy card or Pony express card in the card reader. Your job will then be released to the printer. Black and white copies are 10 cents per page while color copies are 50 cents per page. Color printing is not available in all locations. A copy card can be purchased at Images in Hughes-Trigg or at card vending machines in Fondren Library Center and Hamon Arts Library. A completely blank copy card is $1. 00. If purchased from a vending machine, a single dollar bill is required.

After purchase, value may be added to the card with $1, $5, $10, or $20 bills. Vending machines do not accept change. (Southern Methodist University, 2011) Value Loader. Printing on any of the public facilities at London School of Economics and Political Science (LSE) one will need credit on one’s printing account. One can add credit online, or pay by cash or credit/debit card. Paying with coins only will mean the use of the value loaders. To use a value loader, one must swipe his LSE ID card through the slot or type the username and password in using the keyboard.

The current balance will be shown on the display. One must enter coins until the desired balance is reached (the display will update one’s balance as coins are deposited). Pressing the Finish button will complete the deposit. (London School of Economics and Political Science, 2010) Card System. Using this system, the student printing accounts are allotted a credit balance of $20. 00 per semester for printing/copying services. Each print made to a public printer is deducted from the student printing account balance.

Public printers can be found in many locations across campus, and in your list of available printers, are identified by location. This card system will allow students to make copies on campus copiers and charge those copies against their allotted network printing account. This system uses the magnetic stripe on the back of each student ID to identify the student and charge the student print account. An email statement is sent to each student as they cross $1. 00 increments. This statement provides information related to the most recent print job and also provide the remaining balance on the account.

The account may also be checked online. (Card System, 2004) Electronic Coin Dispenser. The invention is embodied in a coin dispenser with calculating capabilities and with a printer for recording calculations made prior to coin dispensing transactions. The apparatus of the present invention more particularly includes a coin- holding means for holding coins in stacks of different denominations, a plurality of coin ejectors for selecting coins in individual stacks for ejection, and a payment driver for driving the coin ejectors to dispense the selected coins.

The coin dispenser also includes a print head for forming alphanumeric characters in respective columns across the width of a record- keeping tape. Means are provided to enable portions of the print head to print characters in selected columns on the tape. A keyboard is provided for entering calculating and coin dispensing commands and operands associated with these commands. The printing and coin dispensing elements are controlled by a microcomputer which generates signals to actuate the printing and coin dispensing elements.

The coin dispenser employs a microcomputer and a minimal amount of hardware interfacing it with the printer, the coin ejectors, the payment driver, and a tape advance mechanism. With data being coupled between the microcomputer and a serial-to-parallel converter through a serial data line, the major portion of the I/O capacity of the microcomputer is reversed for other functions. The serial-to-parallel converter can be loaded with both print and coin dispense data. Although the printing and coin dispensing elements are alternately operated, the speed of the coin dispenser is such that it is