

## **ABSTRACT**

Book is the window to the world, because by reading books, we can improve our know*LED*ge about anything. To increase reading interest, even government participates in succeeding the program. Library is one of the government's efforts to facilitate people. There are also procurements of reading houses by several foundations or personal, those who care about the improvement of people's reading interest. In reading houses, there are miscellaneous collections which are not completely different from those in library. To keep and maintain the available book collections, and facilitate visitors to know the location and collections' availability, then a device is made. Besides, this device can interconnect reading houses. This device can also help to locate books, borrower's identity, and date of borrowing and returning. This device use decoder system for turn on *LED* indicator and use raspberry pi for provide digital signal.

The objectives of this research are designing and making PC Station Hardware. Also, it facilitates reading house's visitors and administrator to locate the book collections.

According to the trial analysis, the device results in cooperation system between Raspberry Pi with another devices in which Raspberry Pi can emit signal to decoder series that can turn *LED* lamp on in the shelf's row at which the collection is available.

Key Word : Raspberry Pi, Decoder, PC Station, Reading House.