

The Infrared Library uses Infrared light as a link to share library books. The system is made up of three components. The Infrared Emitter and Receiver component is responsible for reliably sending the Infrared light and transmitting bits as well as reliably receiving what was sent. The Data Encoder and Decoder are responsible for breaking a file down into binary data and sending it to the Infrared Emitter or receiving the binary data corresponding to the file and reassembling it into its original form. The Data Decoder will then send the file up to the end user applications for reading. The end user applications are broken into two categories: Client Application, and Server Application. The Client Application gives library patrons the option to request books stored in the Server's database and view them inside the Client Application. The Server Application allows librarians to add books to the catalogue, register new patrons, giving them a username and library card ID, and manage the existing catalogue.