

LibraryBot

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Group code repository: https://github.com/PJGHB0/LibraryBot		

Our system will accept books (in random order and orientation), to be returned into the library system. The 'user' will deposit books into a chute, allowing the book to slide down into the desired location. An RFID sensor & tag will be used to identify each book as they come in (*figure 1*). Once the book has been identified, a robotic manipulator will grab the book and move it to the desired shelf location. The motion of the book will need to be smooth, and the placement of the book into the correct shelf location will have to be linear. Therefore, resolved rate motion control will be required in moving the book. We intend to use the Han's Cute robot with pincer gripper, as this is the only robot with the required reach.



Figure 1