RFID Technologies at Presidency University, Bangalore

PRESIDENCY UNIVERSITY

GAIN MORE KNOWLEDGE REACH GREATER HEIGHTS

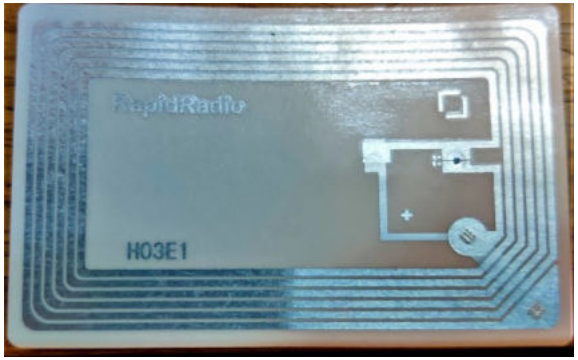
Private University Estd. in Karnataka State by Act No. 41 of 2013

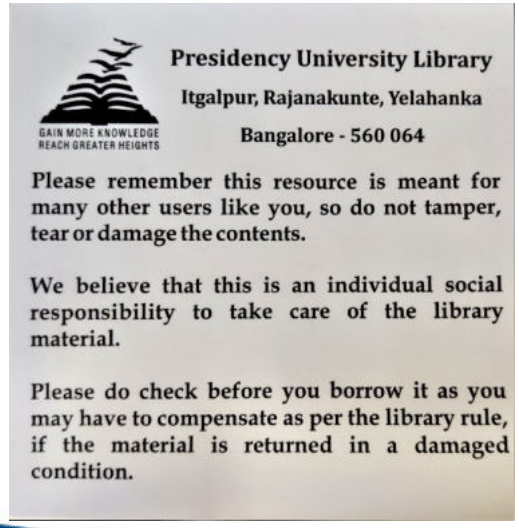
PRESIDENCY GROUP OVER 40 YEARS OF ACADEMIC WISDOM

RFID

- **RFID (Radio Frequency Identification)** is a technology that tracks and identifies tags attached to objects using wireless technology.
- Every RFID-secured library book will have RFID tag struck in the secret place.
- This tag interacts with the security gate sensors.
- Gates raises an alarm when anyone tries to steal a book.
- The security of Library resources can be made more effective.

RFID tags





Parameter	RRHFT01
Supported Standards	ISO 15693, ISO 18000-3
Transponder IC	I-Code SLI
Operating Frequency	13.56 MHz
Transmission Principle	ASK / FSK
User Programmable Memory	Upto 2048 Bits
Data Retention	40 Years
Programming Cycles	100000
Operating Temperature	-25°C to +70°C
Storage Temperature	-40°C to +85°C
Dimensions	Available in various dimensions and shapes

Readers

Parameter	RRHFLB03
Operating Frequency	13.56 MHz
Power Supply	USB Self Powered
Power Consumption	500 mW max
Transmitting Power	200 mW approx.
Read Range*	Up to 25 cm
Antenna	Internal
Communication Interface	USB (HID)
Supported Transponders	ISO 15693 and ISO 14443A
Indicators	Buzzer for read verification
Operating Temperature	0°C to +60°C
Dimensions	340 X 340 X 20 mm
Weight	Approx. 3 kg.
Housing Material	Corian Acrylic Polymer
Color	White

RFID Gate Antenna

RRHFGA3 is a three pedestal antenna to cover wider area for reading of tags.

Specifications	
Parameter	**RRHFGA3**
Operating Frequency	13.56 MHz
Power Supply	AC 230V / 50Hz
Power consumption	30W max
Transmitting Power	0.5W to 6W variable
Read Range*	Up to 1 m with pair of Gates
Communication Interface	RS-232 / Ethernet
Supported Transponders	ISO 15693
Operating Temperature	-10°C to +60°C
Communication Parameters	Baudrate: 115200 bps
Dimensions	1530 X 550 X 30 mm
Weight (1 Panel)	20kg
Housing Material	ABS

Self Check-In Check-Out Kiosk

RRHFLB02 is a stand alone multi protocol self check-in check-out kiosk primarily for issue and return of books in Library

Specifications	
Parameter	**RRHFLB02**
Operating Frequency	13.56 MHz
Power Supply	240 V AC 50Hz
Transmitting Power	200mW approx.
Read Range*	3 to 4 books of average size (Up to 250 mm)
Antenna Size	300 X 300 mm
Communication Interface	Ethernet
Supported Transponders	ISO 15693 and ISO 14443A
Operating Temperature	-10°C to +70°C
Dimensions	585 X 585 X 1475 mm
Weight	100 kg approx.
Display	17” LED touchscreen display

Book Drop Box

RRHFBD01 is stand alone book return station primarily used for returning library books.

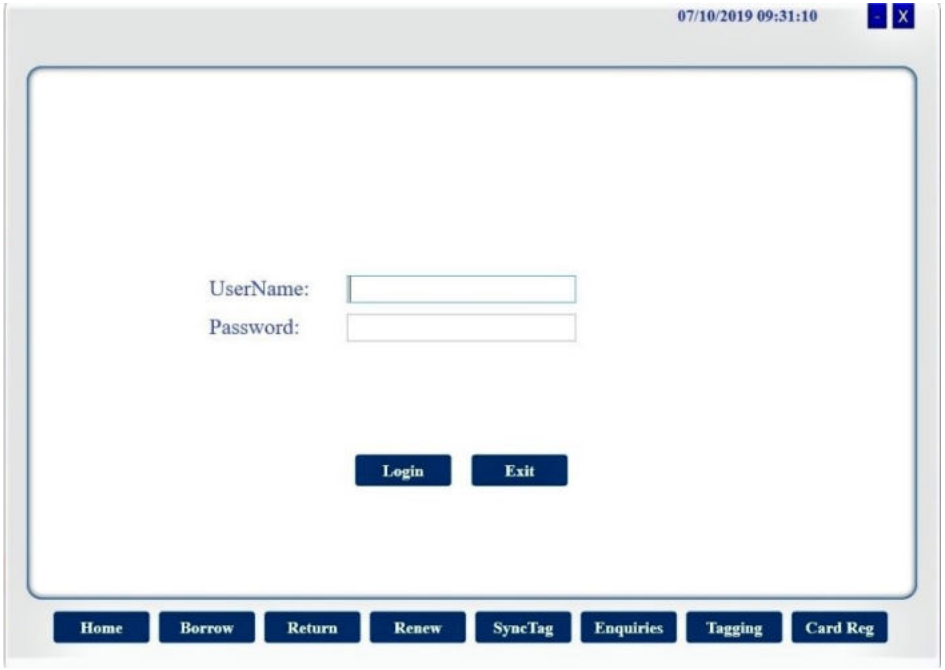
Specifications	
Parameter	**RRHFBD01**
Operating Frequency	13.56 MHz
Power Supply	240 V AC 50Hz
Transmitting Power	200mW
Cart Size	Up to 150 books
Drop Method	One book at a time
Antenna Size	300 X 300 mm
Communication Interface	Ethernet
Supported Transponders	ISO 15693-3 ICODE
Operating Temperature	-10°C to +70°C
Dimensions	915 X 717 X 1664 mm
Weight	150 kg approx.
Display	17” LED touchscreen display

Handheld Reader

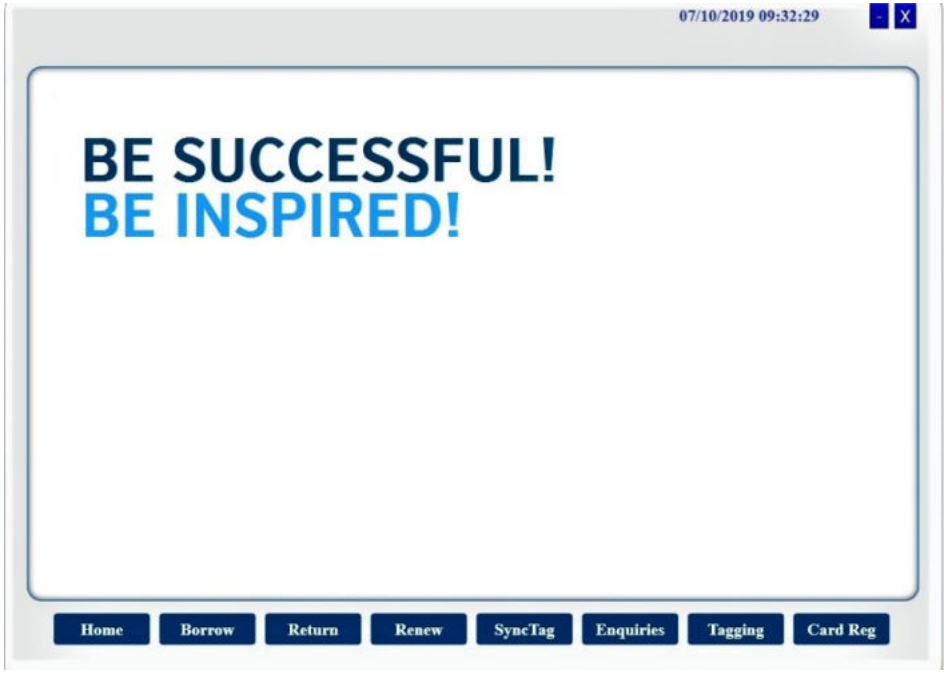
RRHFHH3 is a high end handheld reader loaded with WIN CE platform for easy application development.

Specifications	
Parameter	**RRHFHH3**
Operating Frequency	13.56 MHZ
Power Supply	5 V / 3 A DC Adapter
Antenna	Internal Antenna
Main Battery	Lithium Ion 3.7V, 2800mAh (Rechargeable)
CPU	CPU
Transmitting Power	Upto 1 W max.
Read Range	Up to 10cm*
Communication Interface	USB
Supported Transponders	ISO 18000-3 Mode 1
Indicators	Touchscreen Display, Buzzer
Operating Temperature	0°C to 40°C
Storage Memory	Expandable Upto 1 GB
Weight	500 gms approx.
Dimensions	500 gms approx.

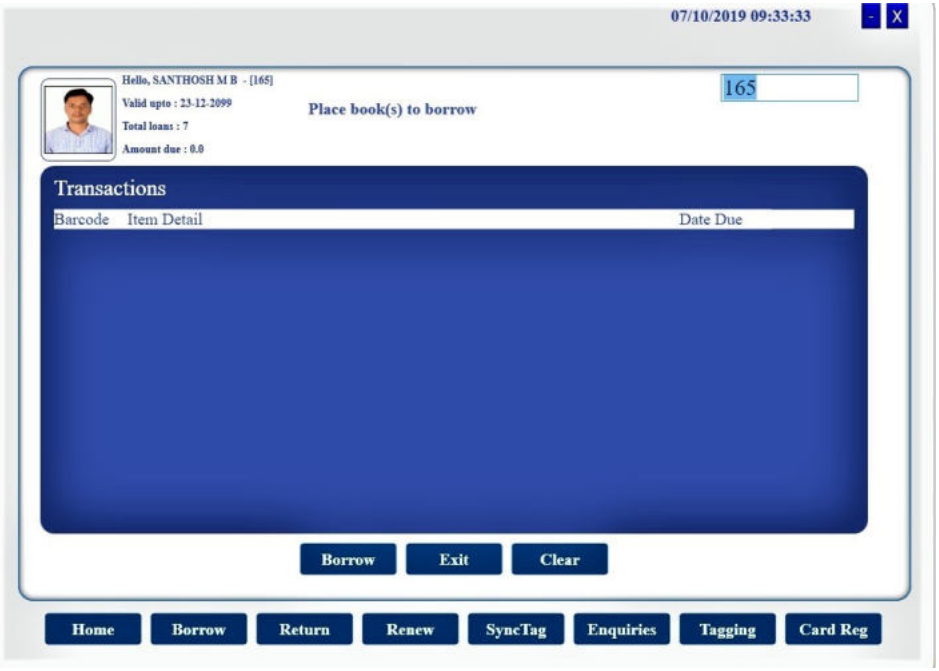
Login Page



Home Page

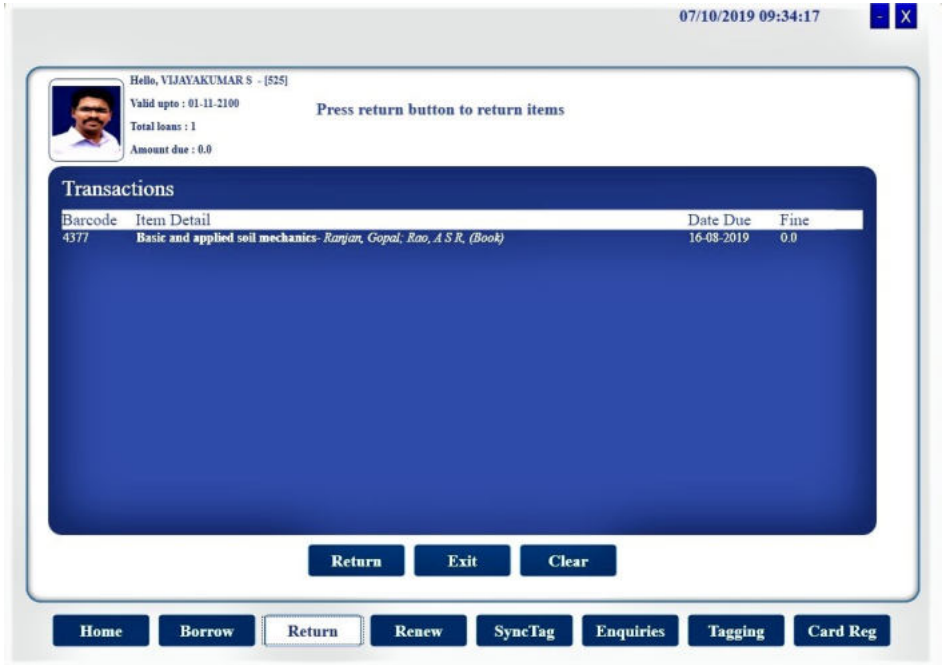


Book Borrow

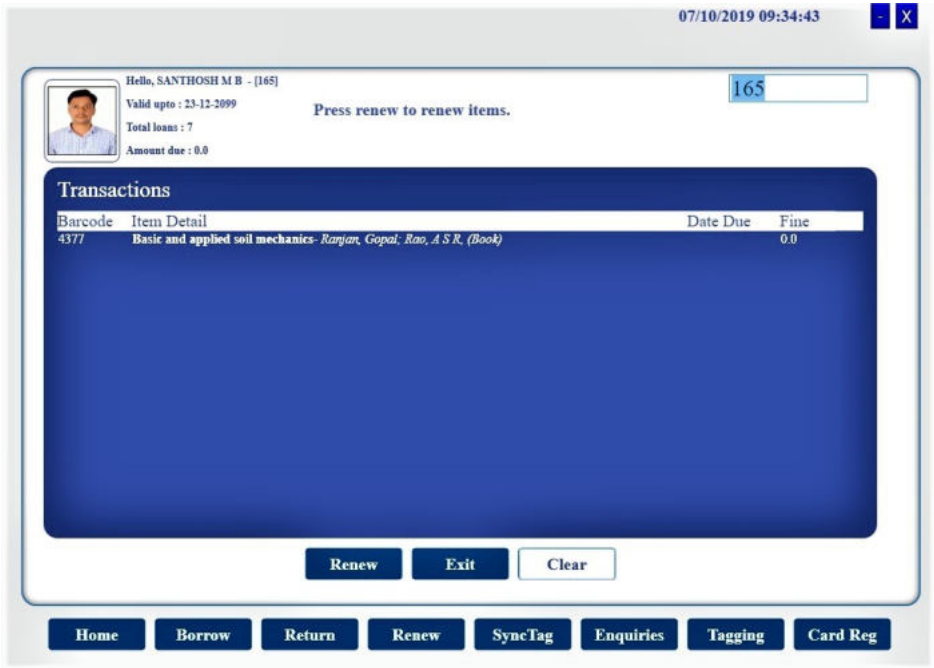

07/10/2019 09:33:33
Hello, SANTHOSH M B - [165]
Valid upto : 23-12-2099
Total loans : 7
Amount due : 0.0
Place book(s) to borrow
165
Transactions
Barcode
Item Detail
Date Due
Borrow
Exit
Clear
Home
Borrow
Return
Renew
SyncTag
Enquiries
Tagging
Card Reg


STRENGTH OF MATERIALS
FOURTH EDITION
S S BHAVIKATTI

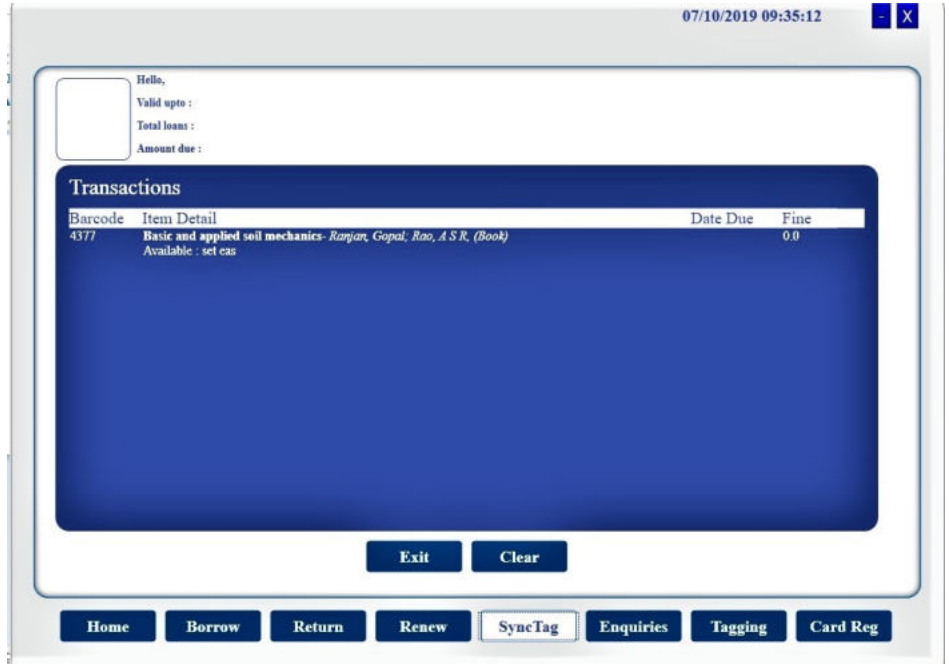
Return



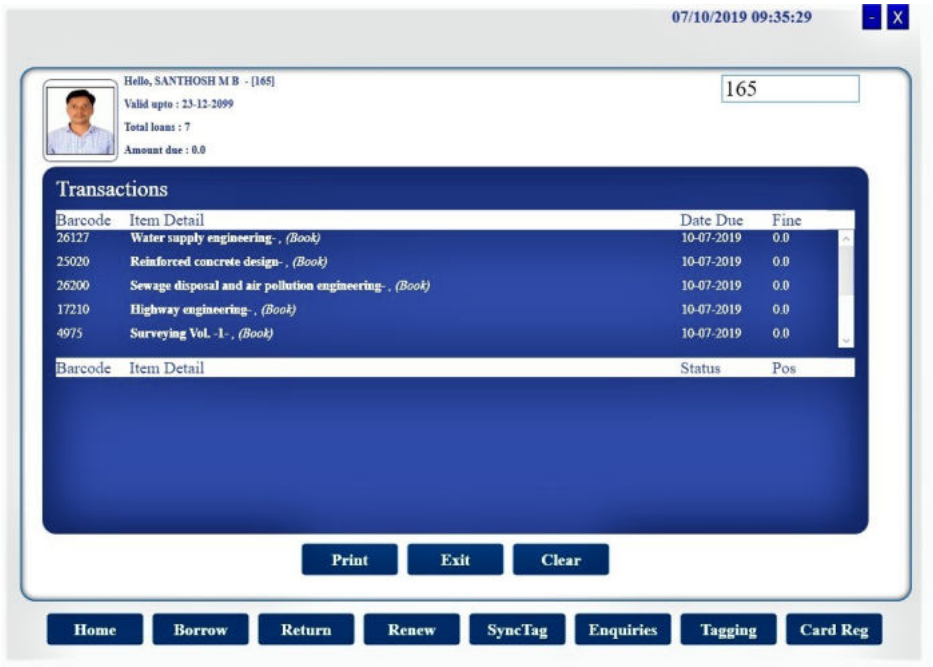
Renew



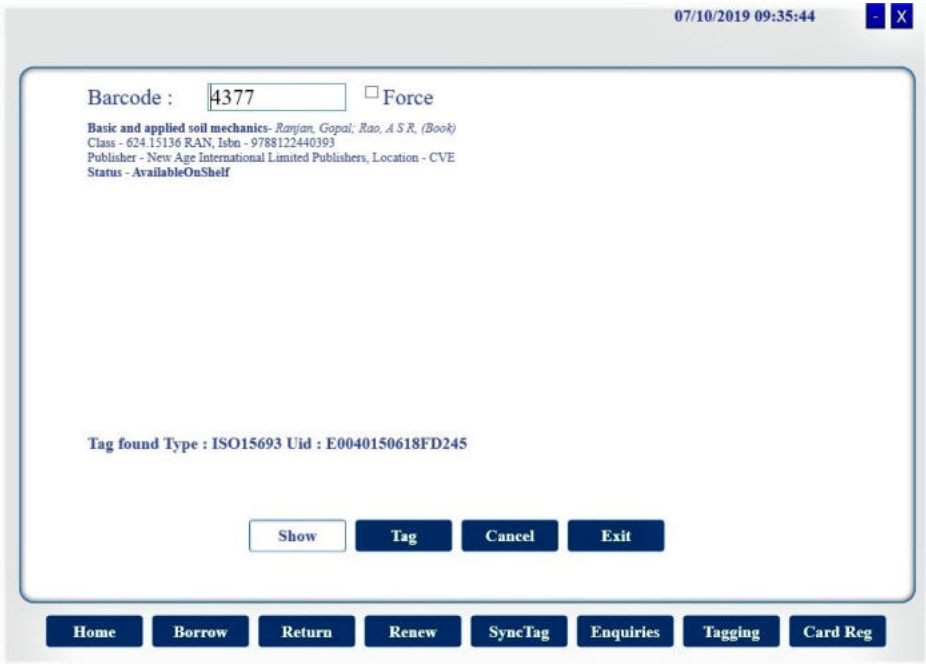
Synchronize



Enquiry



Tag Show



Tagging