```
                                              ┌─────────────────────┐
                                              │ "Specify if you are a│
                                              │ Resident or          │
                                              │ Management           │
                                              └─────────────────────┘
                                                        │
                              'm' || 'M'    ┌─────────────────────┐   'r' || 'R'
                         ┌──────────────────│   Read The Input    │───────────────────┐
                         │                  └─────────────────────┘                   │
              ┌─────────────────────┐                                    ┌─────────────────────┐
              │ Enter Management    │                                    │ Enter the Resident  │
              │ Account Mode        │                                    │ Mode                │
              └─────────────────────┘                                    └─────────────────────┘
                         │                                                          │
              ┌─────────────────────┐                                    ┌─────────────────────┐
              │ Ask for the details │                                    │ Enter Phone Number  │
              │ to enter the        │                                    └─────────────────────┘
              │ management Account  │                                               │
              └─────────────────────┘                                    ┌─────────────────────┐       'True;   ┌─────────────────────┐  'Parcel Found'  ┌─────────────────────┐   yes   ┌─────────────────────┐
                         │                                               │ System Checks for   │─────────────── │ System Checks for   │───────────────── │ Ask the Resident if │──────── │   Ask for OTP       │
              ┌─────────────────────┐                                    │ registeration       │                │ Parcel              │                  │ he/she wants to     │         └─────────────────────┘
              │ Read the account ID │                                    └─────────────────────┘                └─────────────────────┘                  │ receive Parcel      │                    │
              │ and the password    │                                               │ 'false'                               │ 'no parcel Found'               └─────────────────────┘           ┌──────────┴──────────┐
              └─────────────────────┘                                    ┌─────────────────────┐                ┌─────────────────────┐                          │ no                     │                     │
                         │                                               │ Exit with a polite  │                │ Exit with a polite  │◄───────── ┌─────────────────────┐    ┌─────────────────────┐    ┌─────────────────────┐   Ask Again 3x
   'Parcel Info'  'Search'  'Register'  'Update'                         │ kick out message    │                │ kick out message    │           │ The Resident does   │    │   Correct OTP       │    │   Wrong OTP         │──────────
   ┌──────┬────────┬─────────┬─────────┐                                 └─────────────────────┘                └─────────────────────┘           │ not want to receive │    └─────────────────────┘    └─────────────────────┘          │
   │      │        │         │                                                                                                                     │ parcel              │              │                         │                │
┌──────┐┌──────┐┌──────┐┌──────┐                                                                                                                   └─────────────────────┘    ┌─────────────────────┐    ┌─────────────────────┐         │
│ Get  ││Search││Reg-  ││Update│                                                                                                                                              │   Status Change     │    │   Ask Again         │─────────┘
│ info ││Funct-││ister ││Res-  │                                                                                                                                              └─────────────────────┘    └─────────────────────┘
│ From ││ion   ││New   ││ident │                                                                                                                                                         │                         │
│Parcel││      ││resi- ││Info  │                                                                                                                                              ┌─────────────────────┐    ┌─────────────────────┐
└──────┘└──────┘│dence ││      │                                                                                                                                              │   Unlock            │    │ Ask Management for  │
   │       │    └──────┘└──────┘                                                                                                                                              └─────────────────────┘    │ a manual            │
┌──────┐ ┌──────┐                                                                                                                                                                       │                  │ Verification.       │
│Checks│ │Phone │                                                                                                                                                            ┌─────────────────────┐    └─────────────────────┘
│from  │ └──────┘                                                                                                                                                            │   Update Data       │
│locker│ ┌──────┐                                                                                                                                                            └─────────────────────┘
│data- │ │Email │
│base..│ └──────┘
└──────┘ ┌──────┐
   │     │  IC  │
'emtpy'  └──────┘
┌──────┐ ┌──────────┐
│empty │ │Exit      │
└──────┘ │Program   │
   │     └──────────┘
┌──────┐
│Get   │
│empty │
│locker│
│ID    │
└──────┘
   │
┌──────┐
│Place │
│parcel│
└──────┘
   │
┌──────┐
│Enter │
│Detail│
└──────┘
   │
┌──────┐
│Change│
│locker│
│status│
│Locked│
└──────┘
   │
┌──────┐
│Gener-│
│ate   │
│pass- │
│code  │
└──────┘
   │
┌──────┐
│Sending│
│SMS   │
└──────┘
   │            'False'
┌──────┐ ─────────── ┌──────────┐
│If the│             │Program   │
│user  │             │end. Exit │
│didn't│             └──────────┘
│take..│
└──────┘
   │ 'True'
┌──────┐
│Send  │
│email │
└──────┘
   │            'False'
┌──────┐ ─────────── ┌──────────┐
│If the│             │Program   │
│parcel│             │End, Exit │
│wasn't│             └──────────┘
└──────┘
   │ 'True'
┌──────┐
│Notify│
│Manag.│
└──────┘
   │
┌──────┐
│Exit  │
└──────┘
```

"Specify if you are a Resident or Management

Read The Input

'm' || 'M' — Enter Management Account Mode

'r' || 'R' — Enter the Resident Mode

Ask for the details to enter the management Account

Read the account ID and the password

Enter Phone Number

System Checks for registeration
- 'True;' → System Checks for Parcel
- 'false' → Exit with a polite kick out message

System Checks for Parcel
- 'Parcel Found' → Ask the Resident if he/she wants to receive Parcel
- 'no parcel Found' → Exit with a polite kick out message

Ask the Resident if he/she wants to receive Parcel
- yes → Ask for OTP
- no → The Resident does not want to receive parcel → Exit with a polite kick out message

Ask for OTP → Correct OTP / Wrong OTP

Correct OTP → Status Change → Unlock → Update Data

Wrong OTP → Ask Again → (Ask Again 3x) → Ask Management for a manual Verification.

Management modes:
- 'Parcel Info' → Get info From Parcel
- 'Search' → Search Function
- 'Register' → Register New residence
- 'Update' → Update Resident Info

Get info From Parcel → Checks from locker database to see a list of empty locker

'emtpy' → empty → Get the empty locker ID → Place the parcel in the empty Locker → Enter Details of the resident in the data base → Change the locker status in the locker data base into [Locked] → Generate a passcode Using a randomizer based on time. → Sending SMS containing the Passcode to all the residents in that unit.

If the user didn't take the parcel in three days
- 'False' → Program end. Exit
- 'True' → Send an email

If the parcel wasn't collected for a week
- 'False' → Program End, Exit
- 'True' → Notify Management → Exit

Search Function:
- Phone
- Email
- IC
- Exit Program