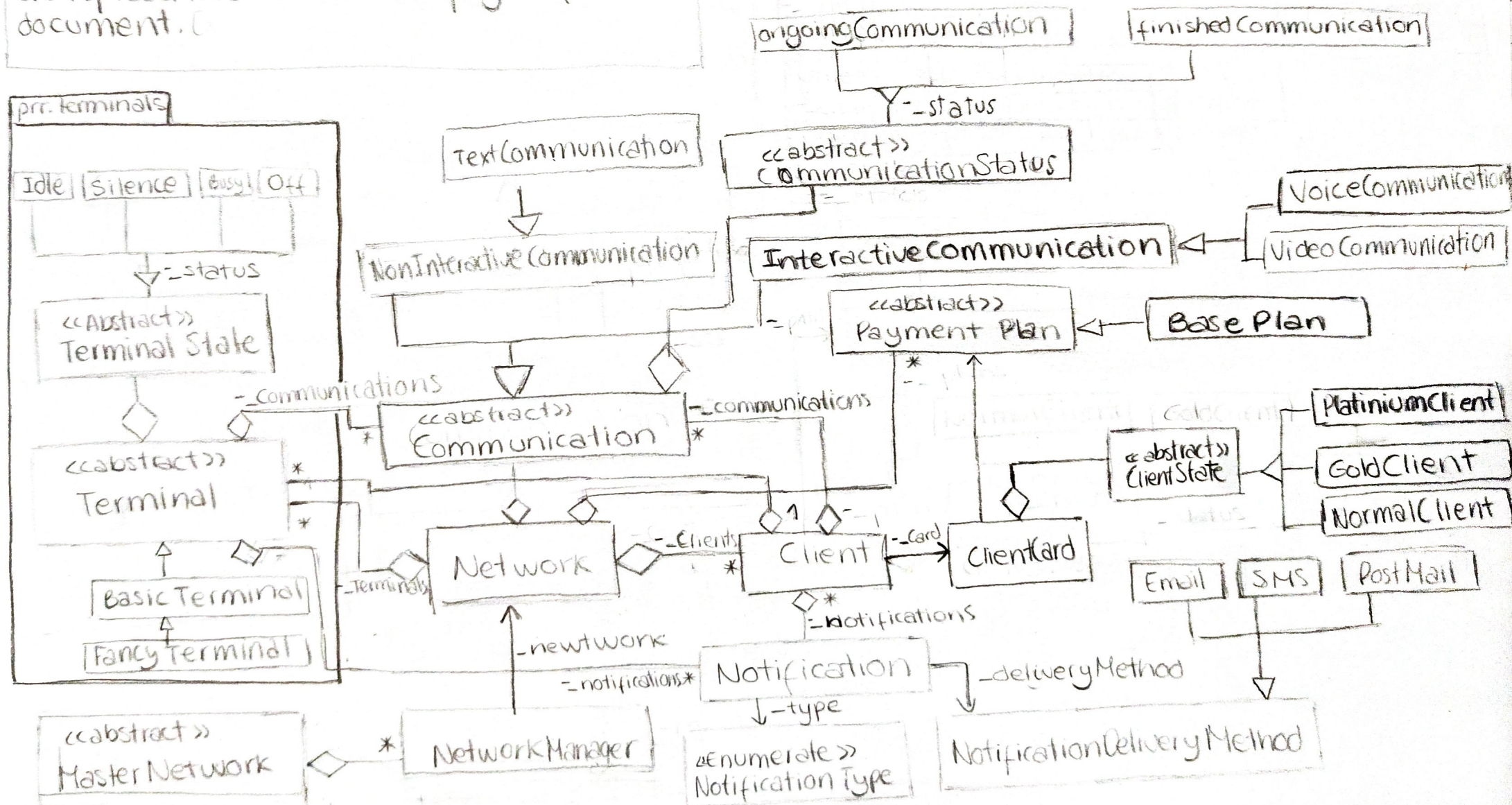


Methods "Equals" and "toString" have been omitted (since they are inherited from Object) as well as getters and setters. Class serial numbers have also been omitted. All classes except NetworkManager and Exception implement Serializable. Fields and methods of each class are represented on the next pages of this document.

Declaro por minha honra que este diagrama foi realizado apenas pelos membros que constituem este grupo.

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-prr.exceptions

Import File Exception

Missing File Association Exception

Unavailable File Exception

--filename : String

+ getFilename(): String

Unrecognized Entry Exception

--entrySpecification: String

+ getEntrySpecification(): String

Exception

```
classDiagram
    class Exception
    class ImportFileException
    class MissingFileAssociationException
    class UnavailableFileException
    class UnrecognizedEntryException
    Exception <|-- ImportFileException
    Exception <|-- MissingFileAssociationException
    Exception <|-- UnavailableFileException
    Exception <|-- UnrecognizedEntryException
```


Network

```
+ import File ( filename : String ) : void
+ disableClientNotifications ( client : Client ) : void
+ enableClientNotifications ( client : Client ) : void
+ registerClient ( id : String , name : String , taxId : int ) : void
+ showAllClients ( ) : void
+ showClient ( client : Client ) : void
+ showClientPaymentsAndDebts ( client : Client ) : void
+ showAllCommunications ( ) : void
+ showClientsWithDebts ( ) : void
+ showClientsWithoutDebts ( ) : void
+ showCommunicationsFromClient ( client : Client ) : void
+ showCommunicationsToClient ( client : Client ) : void
+ showTerminalsWithPositiveBalance ( ) : void
+ showUnusedTerminals ( ) : void
+ showGlobalBalance ( ) : void
+ openMenuTerminalConsole ( ) : void
+ registerTerminal ( id : String , type : String , clientId : String ) : void
+ showAllTerminals ( ) : void
+ getClientById ( id : String ) : Client
+ getCommunicationById ( id : int ) : Communication
+ getTerminalById ( id : String ) : Terminal
+ calculateGlobalBalance ( ) : double
+ getPaid ( ) : double
+ getDebt ( ) : double
```

<<abstract>>
Terminal

- _id : String
- friends : HashMap <String, Terminal>

+ addFriend(friend : Terminal) : void
+ IdleTerminal() : void
+ performPayment(communication : Communication) : void
+ removeFriend(friend : Terminal) : void
+ searchFriend(id : String) : Terminal
+ sendTextCommunication(receiver : Terminal, text : String) : void
+ showOngoingCommunication() : void
+ showTerminalBalance() : void
+ calculateTerminalBalance() : double
+ silenceTerminal() : void
+ getDebt() : double
+ turnOffTerminal() : void
+ turnOnTerminal() : void
+ getCommunicationById(id : int) : Communication
+ getpaid() : double
+ notifyClient() : void
+ get

Network Manager

```
+ Save(): void  
+ load(filename: String)  
+ saveAs(filename: String)  
+ importFile(filename: String)
```

NonInteractiveCommunication

```
- name: String
```

Text Communication

```
- message: String  
- getNumberOfChars(): int
```

InteractiveCommunication

```
- duration: int  
- name: String
```

Voice Communication

Video Communication

<<abstract>> Communication

```
- id: int  
- sender: Terminal  
- receiver: Terminal  
- price: double  
- paid: boolean  
+ isFinished(): boolean
```

<<abstract>> Communication Status

```
- name: String
```

Ongoing Communication

Finished Communication

Email

SMS

Post Mail

<<abstract>> Master Network

```
+ addNetworkManager(): void
```

Notification Delivery Method

Notification

<<enumeration>> Notification Type

O2S
O2I
B2I
S2I

Client

```
- id: String  
- name: String  
- taxId: int  
- activeNotifications: boolean
```

```
+ disableClientNotifications(): void  
+ enableClientNotifications(): void  
+ registerClient(): void  
+ getDebt(): double  
+ getBalance(): double  
+ getPaid(): double  
+ showNotifications  
+ showPaymentsAndDebts(): void  
+ hasDebt(): boolean  
+ getCommunicationById(Id: int): Communication  
+ getTerminalById(Id: String): Terminal  
+ handleClientState(balance: double): void  
+ setCommunicationPrice(id: int): void
```