



@startuml

```
class User {  
    +email: String  
    +password: String  
    +userId: integer  
    +history(): void  
    +invoiceUpload(): void  
    +invoiceCorrection(invoiceId: int): void  
    +invoiceDeletion(invoiceId: int): void  
    +refundRequest(invoice: Invoice): void  
}
```

```
class Administrator extends User {  
    +adminId: integer  
    +refundExport(): void  
    +payrollExport(user: User, payroll: double): void  
    +invoiceOverview(): List  
    +searchUser(userId: integer): User  
    +editUser(email: String, password: String, userId: integer): void  
    +editRefund(invoiceId: Invoice): double  
    +markAnomalies(user: User): void  
}
```

```
class Invoice {  
    +id: int  
    +date: Date  
    +amount: float  
    +category: String  
}
```

```
class OCR {  
    +textRecognition(file: Invoice): String  
    +invoiceClassification(type: String): String  
    +amountRecognition(file: Invoice): double  
}
```

```
class Refund {  
    +state: String  
    +getAmount(invoiceType: String): double  
    +dayLimitation(date: Invoice, userId: User): boolean  
    +notAdmin(admin: Administrator, user: User): boolean  
}
```

```
class Authentication {  
    +login(email: String, password: String): void  
    +logout(user: User): void  
}
```

User "1" --> "*" Invoice : "uploads"
User --> Authentication : "has to login"
User --> Refund : "requests"

Administrator --> Refund : "administrates"

OCR --> Invoice : "analyses"

Refund --> User : "receives confirmation"
Refund --> OCR : "uses"
OCR --> Refund : "supports"
@enduml