* + 1. Class diagram explanation
       1. Ticket Type

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a ticket type |
| Name | String | Private | Name of the ticket type |
| Price | Double | Private | Price of the ticket type |
| Description | String | Private | Description of the ticket type |
| Status | String | Private | Status of the ticket type |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. Ticket

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a ticket ticket |
| CardID | String | Private | Unique identififer of the NFC card |
| TicketTypeId | Integer | Private | Unique identifier of the ticket type |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. Bus Route

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a bus route |
| Code | String | Private | Unique code of the bus route |
| Name | String | Private | Name of the bus route |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + 1. Passenger

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a passenger |
| NotificationCode | String | Private | Notification code of a passenger |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

1.1.5 NFC Card

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| CardId | String | Private | Unique identifier of an NFC card |
| CardName | String | Private | Name of the NFC card |
| RegistrationDate | Date | Private | Date of registration of the NFC card |
| Balance | Double | Private | Balance of the NFC card |
| Status | String | Private | Status of the NFC card |
| UserId | String | Private | Indentifier of the NFC’card holder |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. Payment Transaction

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | String | Private | Unique identifier of a payment transaction |
| CardId | String | Private | Identifier of the NFC card |
| CreditPlanId | Date | Private | Identifier of the credit plan |
| TransactionId | String | Private | Identifier of the payment transaction |
| Total | Double | Private | Total cost of the payment transaction |
| PaymentDate | Date | Private | Date of payment |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. User

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a user |
| PhoneNumber | String | Private | User’s phone number |
| Password | String | Private | User account’s password |
| Fullname | String | Private | User’s fullname |
| Status | String | Private | User’s statatus |
| RoleId | Integer | Private | User’s role identifier |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. Manager

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a manager |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + - 1. Promotion

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a promotion |
| Name | String | Private | Name of the promotion |
| Description | String | Private | Description of the promotion |
| Status | String | Private | Status of the promotion |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + 1. Credit plan

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a credit plan |
| Name | String | Private | Name of the credit plan |
| Description | String | Private | Description of the credit plan |
| Price | Double | Private | Price of the credit plan |
| Status | String | Private | Status of the credit plan |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |

* + 1. Role

**Attributes**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Type** | **Visibility** | **Description** |
| Id | Integer | Private | Unique identifier of a role |
| Name | String | Private | Name of the role |

**Methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Return type** | **Visibility** | **Description** |
| Getter | Attribute type | Public | Get attribute value |
| Setter | Void | Public | Set value of attribute |