miniProjet

Image16.png

Amina

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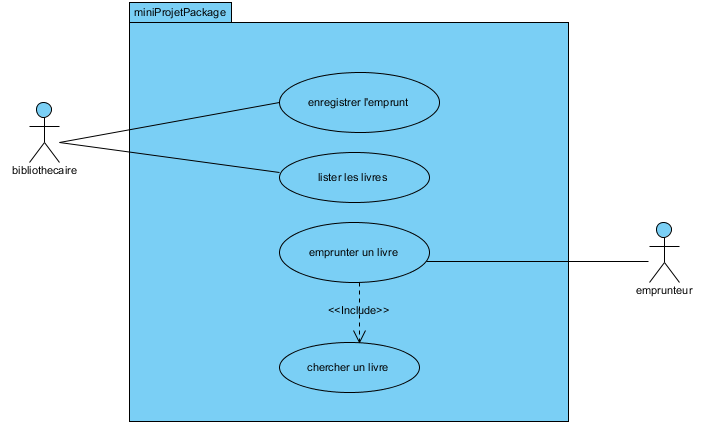
[emprunter un livre sequence](#RmnaQgGD.AAAAQwW)

[enregistrer l'emprunt sequence](#5ADqQgGD.AAAAQux)

[lister les livres sequence](#nsXqQgGD.AAAAQvU)

Use Case Diagram

# useCaseBib



|  |  |
| --- | --- |
| **Name** | **Value** |
| Name | useCaseBib |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:33:02 |
| Last Modified | 19 avr. 2022 15:15:23 |
| Show Extend Condition | false |

## Summary

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [bibliothecaire](#xPWHggGD.AAAAQbW) | c'est lui qui gère les emprunts |
| Image1.png [emprunteur](#H.uHggGD.AAAAQbc) | c'est l'utilisateur qui peut emprunter un livre ou plus. |
| Image2.png [miniProjetPackage](#Oxn7ggGD.AAAAQak) | Package des cas d'utilisations de gestion d'une bibliothèque |
| Image3.png [enregistrer l'emprunt](#k.YHggGD.AAAAQap) | la bibliothécaire enregistre tout les emprunts faits. |
| Image3.png [emprunter un livre](#OGSHggGD.AAAAQa.) | l'utilisateur emprunte un livre ou plus |
| Image3.png [lister les livres](#Yq7HggGD.AAAAQcS) | la bibliothécaire peut lister tout les livres emprunte ou non . |
| Image3.png [chercher un livre](#YxRyQgGD.AAAAQtu) |  |

## Details

### Image1.png bibliothecaire

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | c'est lui qui gère les emprunts |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:52:31 |
| Last Modified | 19 avr. 2022 14:09:31 |
| ID | AC01 |
| Visibility | public |
| Abstract | false |
| Leaf | false |
| Root | false |
| Business Model | false |
| Goals | * gerer les emprunts . * lister les livres avec leur etat . |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Association** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image3.png [enregistrer l'emprunt](#8.YHggGD.AAAAQaq) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:53:09 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:53:09 |
| Last Modified | 19 avr. 2022 12:59:19 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

|  |  |
| --- | --- |
| **Unnamed Association** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image3.png [lister les livres](#Yq7HggGD.AAAAQcT) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:58:06 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:58:06 |
| Last Modified | 19 avr. 2022 13:10:25 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

### Image1.png emprunteur

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | c'est l'utilisateur qui peut emprunter un livre ou plus. |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:52:41 |
| Last Modified | 19 avr. 2022 13:26:59 |
| ID | AC02 |
| Visibility | public |
| Abstract | false |
| Leaf | false |
| Root | false |
| Business Model | false |
| Goals |  |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Association** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image3.png [emprunter un livre](#uGSHggGD.AAAAQa_) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:53:59 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:53:59 |
| Last Modified | 19 avr. 2022 12:59:19 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

### Image2.png miniProjetPackage

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | Package des cas d'utilisations de gestion d'une bibliothèque |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:50:14 |
| Last Modified | 19 avr. 2022 14:51:23 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Visibility | public |

#### Children

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image3.png [enregistrer l'emprunt](#k.YHggGD.AAAAQap) | la bibliothécaire enregistre tout les emprunts faits. |
| Image3.png [emprunter un livre](#OGSHggGD.AAAAQa.) | l'utilisateur emprunte un livre ou plus |
| Image3.png [lister les livres](#Yq7HggGD.AAAAQcS) | la bibliothécaire peut lister tout les livres emprunte ou non . |
| Image3.png [chercher un livre](#YxRyQgGD.AAAAQtu) |  |

### Image3.png enregistrer l'emprunt

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | la bibliothécaire enregistre tout les emprunts faits. |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:51:07 |
| Last Modified | 19 avr. 2022 15:11:36 |
| ID | UC01 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Stereotypes | UseCase |
| Business Model | false |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Association** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#FPWHggGD.AAAAQbX) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:53:09 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:53:09 |
| Last Modified | 19 avr. 2022 12:59:19 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

#### Sub Diagrams

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image4.png [enregistrer l'emprunt sequence](#5ADqQgGD.AAAAQux) |  |

### Image3.png emprunter un livre

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | l'utilisateur emprunte un livre ou plus |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:51:56 |
| Last Modified | 19 avr. 2022 17:28:10 |
| ID | UC02 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Stereotypes | UseCase |
| Business Model | false |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Association** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#H.uHggGD.AAAAQbd) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:53:59 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:53:59 |
| Last Modified | 19 avr. 2022 12:59:19 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

|  |  |
| --- | --- |
| **Unnamed Include** | |
| To | Image3.png [chercher un livre](#YxRyQgGD.AAAAQtu) |
| Author | Amina |
| Create Date Time | 19 avr. 2022 14:59:40 |
| Last Modified | 19 avr. 2022 15:01:33 |
| Visibility | Unspecified |
| Stereotypes | Include |

#### Sub Diagrams

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image4.png [emprunter un livre sequence](#RmnaQgGD.AAAAQwW) |  |

### Image3.png lister les livres

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | la bibliothécaire peut lister tout les livres emprunte ou non . |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:54:27 |
| Last Modified | 19 avr. 2022 15:15:33 |
| ID | UC03 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Stereotypes | UseCase |
| Business Model | false |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Association** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#FPWHggGD.AAAAQbX) | | Author | Amina | | Create Date Time | 19 avr. 2022 12:58:06 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 12:58:06 |
| Last Modified | 19 avr. 2022 13:10:25 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

#### Sub Diagrams

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image4.png [lister les livres sequence](#nsXqQgGD.AAAAQvU) |  |

### Image3.png chercher un livre

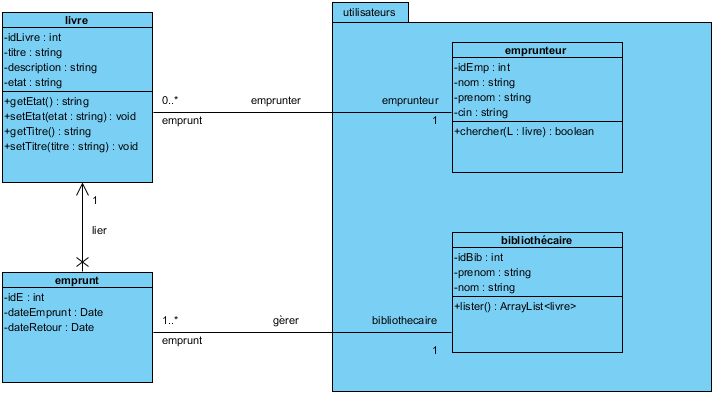
|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 14:51:00 |
| Last Modified | 19 avr. 2022 15:01:33 |
| ID | UC04 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Stereotypes | UseCase |
| Business Model | false |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Include** | |
| From | Image3.png [emprunter un livre](#OGSHggGD.AAAAQa.) |
| Author | Amina |
| Create Date Time | 19 avr. 2022 14:59:40 |
| Last Modified | 19 avr. 2022 15:01:33 |
| Visibility | Unspecified |
| Stereotypes | Include |

Class Diagram

# Class Diagram Bib



|  |  |
| --- | --- |
| **Name** | **Value** |
| Name | Class Diagram Bib |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:30:45 |
| Last Modified | 19 avr. 2022 15:03:36 |

## Summary

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image2.png [utilisateurs](#c2vgQgGD.AAAAQgP) |  |
| Image6.png [livre](#EFigQgGD.AAAAQfh) |  |
| Image6.png [emprunteur](#FZmgQgGD.AAAAQf3) |  |
| Image6.png [bibliothécaire](#LEqgQgGD.AAAAQfv) |  |
| Image6.png [emprunt](#ZMHoQgGD.AAAAQjH) |  |

## Details

### Image2.png utilisateurs

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:34:11 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Abstract | false |
| Leaf | false |
| Root | false |
| Visibility | public |

#### Children

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image6.png [emprunteur](#FZmgQgGD.AAAAQf3) |  |
| Image6.png [bibliothécaire](#LEqgQgGD.AAAAQfv) |  |

### Image6.png livre

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:31:12 |
| Last Modified | 19 avr. 2022 14:09:31 |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private idLivre : int** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:44:45 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png int | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity Detail | N/A | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private titre : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:45:00 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private description : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:45:09 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private etat : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:45:25 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

#### Operations

|  |  |
| --- | --- |
| **public getEtat () : string** | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:46:10 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public setEtat (etat : string) : void** | |
| Parameters | |  |  | | --- | --- | | **etat** | | | Author | Amina | | Create Date Time | 19 avr. 2022 13:46:10 | | Last Modified | 19 avr. 2022 13:49:07 | | Multiplicity | Unspecified | | Type | Image7.png string | | Direction | inout | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:46:10 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public getTitre () : string** | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:46:14 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

|  |  |
| --- | --- |
| **public setTitre (titre : string) : void** | |
| Parameters | |  |  | | --- | --- | | **titre** | | | Author | Amina | | Create Date Time | 19 avr. 2022 13:46:14 | | Last Modified | 19 avr. 2022 13:49:07 | | Multiplicity | Unspecified | | Type | Image7.png string | | Direction | inout | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:46:14 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

#### Relationships

|  |  |
| --- | --- |
| **emprunter : Association** | |
| From (emprunteur) | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [emprunteur](#FZmgQgGD.AAAAQf4) | | Author | Amina | | Create Date Time | 19 avr. 2022 13:47:33 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | 1 | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:47:33 |
| Last Modified | 19 avr. 2022 13:59:22 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

|  |  |
| --- | --- |
| **lier : Association** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [emprunt](#5MHoQgGD.AAAAQjI) | | Author | Amina | | Create Date Time | 19 avr. 2022 14:01:39 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | Unspecified | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | false | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 14:01:39 |
| Last Modified | 19 avr. 2022 14:09:31 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

### Image6.png emprunteur

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:31:44 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private idEmp : int** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:40:03 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png int | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity Detail | N/A | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private nom : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:40:22 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private prenom : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:40:30 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private cin : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:40:39 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

#### Operations

|  |  |
| --- | --- |
| **public chercher (L : livre) : boolean** | |
| Parameters | |  |  | | --- | --- | | **L** | | | Author | Amina | | Create Date Time | 19 avr. 2022 13:42:59 | | Last Modified | 19 avr. 2022 13:49:07 | | Multiplicity | Unspecified | | Type | Image6.png [livre](#lligQgGD.AAAAQfi) | | Direction | inout | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:42:11 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Ordered | false |
| Unique | true |
| Query | false |

#### Relationships

|  |  |
| --- | --- |
| **emprunter : Association** | |
| To (emprunt) | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [livre](#lligQgGD.AAAAQfi) | | Author | Amina | | Create Date Time | 19 avr. 2022 13:47:33 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | 0..\* | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:47:33 |
| Last Modified | 19 avr. 2022 13:59:22 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

### Image6.png bibliothécaire

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:31:26 |
| Last Modified | 19 avr. 2022 13:59:22 |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private idBib : int** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:38:12 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png int | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity Detail | N/A | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private prenom : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:39:33 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private nom : string** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:38:47 | | |
| Last Modified | 19 avr. 2022 13:49:07 | | |
| Type | Image7.png string | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

#### Operations

|  |  |
| --- | --- |
| **public lister () : ArrayList** | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:41:05 |
| Last Modified | 19 avr. 2022 13:49:07 |
| Static | false |
| Leaf | false |
| Template Type Bind Info | N/A |
| Ordered | false |
| Unique | true |
| Query | false |

#### Relationships

|  |  |
| --- | --- |
| **gèrer : Association** | |
| To (emprunt) | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [emprunt](#5MHoQgGD.AAAAQjI) | | Author | Amina | | Create Date Time | 19 avr. 2022 13:54:10 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | 1..\* | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:54:10 |
| Last Modified | 19 avr. 2022 14:28:00 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

### Image6.png emprunt

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:51:18 |
| Last Modified | 19 avr. 2022 14:09:31 |
| Active | false |
| Business Key Mutable | true |
| Business Model | false |
| Visibility | public |
| Leaf | false |
| Root | false |

#### Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| **private idE : int** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:52:03 | | |
| Last Modified | 19 avr. 2022 13:59:22 | | |
| Type | Image7.png int | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity Detail | N/A | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private dateEmprunt : Date** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:52:16 | | |
| Last Modified | 19 avr. 2022 13:59:22 | | |
| Type | Date | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **private dateRetour : Date** | | | |
| Author | Amina | | |
| Create Date Time | 19 avr. 2022 13:52:33 | | |
| Last Modified | 19 avr. 2022 13:59:22 | | |
| Type | Date | | |
| Allow Empty Name | false | | |
| Getter | false | Setter | false |
| Derived | false | | |
| Multiplicity | Unspecified | | |
| Aggregation | None | | |
| Derived Union | false | | |
| Read Only | false | | |
| Leaf | false | | |

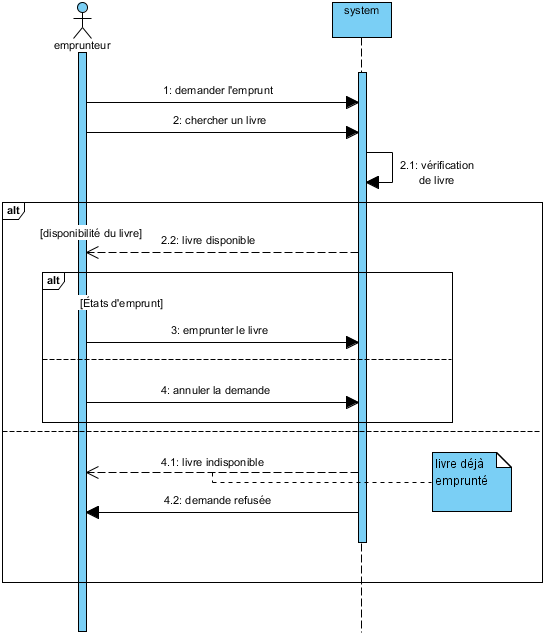
#### Relationships

|  |  |
| --- | --- |
| **lier : Association** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [livre](#lligQgGD.AAAAQfi) | | Author | Amina | | Create Date Time | 19 avr. 2022 14:01:39 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | 1 | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 14:01:39 |
| Last Modified | 19 avr. 2022 14:09:31 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

|  |  |
| --- | --- |
| **gèrer : Association** | |
| From (bibliothecaire) | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image6.png [bibliothécaire](#rEqgQgGD.AAAAQfw) | | Author | Amina | | Create Date Time | 19 avr. 2022 13:54:10 | | Provide Property Getter Method | false | | Provide Property Setter Method | false | | Multiplicity | 1 | | Visibility | Unspecified | | Aggregation Kind | None | | Navigable | true | | Derived | false | | Derived Union | false | | Read Only | false | | Static | false | | Leaf | false | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 13:54:10 |
| Last Modified | 19 avr. 2022 14:28:00 |
| Abstract | false |
| Leaf | false |
| Visibility | Unspecified |
| Derived | false |

Sequence Diagram

# emprunter un livre sequence



|  |  |
| --- | --- |
| **Name** | **Value** |
| Name | emprunter un livre sequence |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:05:40 |
| Last Modified | 17 avr. 2022 06:55:04 |

## Summary

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [emprunteur](#25naQgGD.AAAAQwa) |  |
| Image9.png [system](#zqUmQgGD.AAAAQ1B) |  |
| Image10.png [disponibilité du livre](#b9YCbAGD.AAAAQ6h) |  |
| Image11.png [Operand](#lPYCbAGD.AAAAQ6m) |  |
| Image11.png [Operand2](#hI4CbAGD.AAAAQ6t) |  |
| Image12.png [note](#kLwibAGD.AAAAQ8d) | livre déjà emprunté |
| Image10.png [États d'emprunt](#Z.aSbAGD.AAAAQ_Z) |  |
| Image11.png [Operand3](#SxaSbAGD.AAAAQ_d) |  |
| Image11.png [Operand4](#DZaSbAGD.AAAAQ_j) |  |

## Details

### Image1.png emprunteur

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:05:40 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Visibility | public |
| Abstract | false |
| Leaf | false |
| Root | false |
| Active | false |
| Business Model | false |
| Referenced Actor | Image1.png [emprunteur](#H.uHggGD.AAAAQbd) |

#### Relationships

|  |  |
| --- | --- |
| **demander l'emprunt : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:52:21 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:52:21 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **chercher un livre : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:15:58 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:15:58 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Return Message | Image13.png livre disponible |
| Type | Message |
| Sequence Number | 2 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **emprunter le livre : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:51:23 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:51:23 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 3 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **annuler la demande : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:51:59 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:51:59 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Return Message | Image13.png livre indisponible |
| Type | Message |
| Sequence Number | 4 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **demande refusée : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:53:30 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:53:30 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 4.2 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **livre indisponible : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:43:08 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:43:08 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 4.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 17 avr. 2022 06:43:39 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |
| Relationships | |  |  | | --- | --- | | **Unnamed Anchor** | | | To | Image12.png [note](#kLwibAGD.AAAAQ8d) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:44:43 | | Last Modified | 17 avr. 2022 06:54:20 | |

|  |  |
| --- | --- |
| **livre disponible : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:41:18 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:41:18 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 2.2 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 17 avr. 2022 06:41:18 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

### Image9.png system

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:15:33 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Multiplicity | Unspecified |
| Active | false |
| Stopped | false |
| Multi Object | false |

#### Relationships

|  |  |
| --- | --- |
| **livre disponible : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:41:18 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:41:18 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 2.2 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 17 avr. 2022 06:41:18 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

|  |  |
| --- | --- |
| **vérification de livre : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#ViUmQgGD.AAAAQ1A) | | Author | Amina | | Create Date Time | 16 avr. 2022 17:37:02 | |
| Author | Amina |
| Create Date Time | 16 avr. 2022 17:37:02 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Self Message |
| Sequence Number | 2.1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **demande refusée : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:53:30 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:53:30 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 4.2 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **livre indisponible : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:43:08 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:43:08 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 4.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 17 avr. 2022 06:43:39 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |
| Relationships | |  |  | | --- | --- | | **Unnamed Anchor** | | | To | Image12.png [note](#kLwibAGD.AAAAQ8d) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:44:43 | | Last Modified | 17 avr. 2022 06:54:20 | |

|  |  |
| --- | --- |
| **demander l'emprunt : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:52:21 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:52:21 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **emprunter le livre : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:51:23 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:51:23 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Type | Message |
| Sequence Number | 3 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **annuler la demande : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 17 avr. 2022 06:51:59 | |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:51:59 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Return Message | Image13.png livre indisponible |
| Type | Message |
| Sequence Number | 4 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **chercher un livre : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:15:58 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:15:58 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Return Message | Image13.png livre disponible |
| Type | Message |
| Sequence Number | 2 |
| Asynchronous | false |

### Image10.png disponibilité du livre

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:40:33 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Operator Kind | alt |

#### Interaction Operands

|  |
| --- |
| **Value** |
| Operand |
| Operand2 |

#### Covered LifeLines

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) |  |
| Image9.png [system](#ViUmQgGD.AAAAQ1A) |  |

### Image11.png Operand

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:40:34 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Guard | |  |  | | --- | --- | | **Name** | **Value** | | Author | Amina | | Create Date Time | 17 avr. 2022 06:40:59 | | Constraint | disponibilité du livre | |

#### Children

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image10.png [États d'emprunt](#Z.aSbAGD.AAAAQ_Z) |  |

### Image11.png Operand2

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:40:34 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Guard | |  |  | | --- | --- | | **Name** | **Value** | | Author | Amina | | Create Date Time | 17 avr. 2022 06:40:34 | |

#### Children

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image12.png [note](#kLwibAGD.AAAAQ8d) | livre déjà emprunté |

### Image12.png note

|  |  |
| --- | --- |
| **Name** | **Value** |
| Documentation | livre déjà emprunté |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:44:43 |
| Last Modified | 17 avr. 2022 06:54:20 |

#### Relationships

|  |  |
| --- | --- |
| **Unnamed Anchor** | |
| From | Image13.png livre indisponible |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:44:43 |
| Last Modified | 17 avr. 2022 06:54:20 |

### Image10.png États d'emprunt

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:50:22 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Operator Kind | alt |

#### Interaction Operands

|  |
| --- |
| **Value** |
| Operand3 |
| Operand4 |

#### Covered LifeLines

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [emprunteur](#nBnaQgGD.AAAAQwZ) |  |
| Image9.png [system](#ViUmQgGD.AAAAQ1A) |  |

### Image11.png Operand3

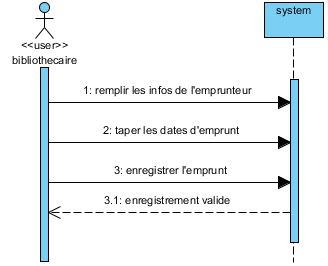
|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:50:22 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Guard | |  |  | | --- | --- | | **Name** | **Value** | | Author | Amina | | Create Date Time | 17 avr. 2022 06:50:54 | | Constraint | États d'emprunt | |

### Image11.png Operand4

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 17 avr. 2022 06:50:22 |
| Last Modified | 17 avr. 2022 06:54:20 |
| Guard | |  |  | | --- | --- | | **Name** | **Value** | | Author | Amina | | Create Date Time | 17 avr. 2022 06:50:22 | |

Sequence Diagram

# enregistrer l'emprunt sequence



|  |  |
| --- | --- |
| **Name** | **Value** |
| Name | enregistrer l'emprunt sequence |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:00:39 |
| Last Modified | 16 avr. 2022 17:37:10 |

## Summary

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [bibliothecaire](#91DqQgGD.AAAAQu1) |  |
| Image9.png [system](#2Ap6QgGD.AAAAQxP) |  |

## Details

### Image1.png bibliothecaire

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:00:41 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Visibility | public |
| Abstract | false |
| Leaf | false |
| Root | false |
| Stereotypes | user |
| Active | true |
| Business Model | false |
| Referenced Actor | Image1.png [bibliothecaire](#FPWHggGD.AAAAQbX) |

#### Relationships

|  |  |
| --- | --- |
| **remplir les infos de l'emprunteur : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#vvJ6QgGD.AAAAQxO) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:09:28 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:09:28 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **taper les dates d'emprunt : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#vvJ6QgGD.AAAAQxO) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:10:57 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:10:57 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 2 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **enregistrer l'emprunt : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#vvJ6QgGD.AAAAQxO) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:11:27 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:11:27 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Return Message | Image13.png enregistrement valide |
| Type | Message |
| Sequence Number | 3 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **enregistrement valide : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#vvJ6QgGD.AAAAQxO) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:12:05 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:12:05 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 3.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 19 avr. 2022 15:12:05 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

### Image9.png system

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:08:38 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Multiplicity | Unspecified |
| Active | false |
| Stopped | false |
| Multi Object | false |

#### Relationships

|  |  |
| --- | --- |
| **enregistrement valide : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#QJDqQgGD.AAAAQu0) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:12:05 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:12:05 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 3.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 19 avr. 2022 15:12:05 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

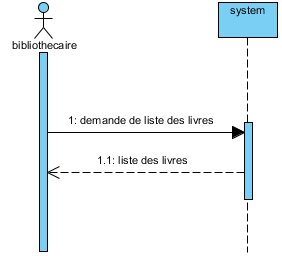
|  |  |
| --- | --- |
| **remplir les infos de l'emprunteur : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#QJDqQgGD.AAAAQu0) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:09:28 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:09:28 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **taper les dates d'emprunt : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#QJDqQgGD.AAAAQu0) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:10:57 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:10:57 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Type | Message |
| Sequence Number | 2 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **enregistrer l'emprunt : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#QJDqQgGD.AAAAQu0) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:11:27 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:11:27 |
| Last Modified | 19 avr. 2022 15:12:37 |
| Return Message | Image13.png enregistrement valide |
| Type | Message |
| Sequence Number | 3 |
| Asynchronous | false |

Sequence Diagram

# lister les livres sequence



|  |  |
| --- | --- |
| **Name** | **Value** |
| Name | lister les livres sequence |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:01:21 |
| Last Modified | 19 avr. 2022 15:15:24 |

## Summary

|  |  |
| --- | --- |
| **Name** | **Documentation** |
| Image1.png [bibliothecaire](#663qQgGD.AAAAQvY) |  |
| Image9.png [system](#OMhGQgGD.AAAAQzG) |  |

## Details

### Image1.png bibliothecaire

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:01:25 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Visibility | public |
| Abstract | false |
| Leaf | false |
| Root | false |
| Active | false |
| Business Model | false |
| Referenced Actor | Image1.png [bibliothecaire](#FPWHggGD.AAAAQbX) |

#### Relationships

|  |  |
| --- | --- |
| **demande de liste des livres : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#dkhGQgGD.AAAAQzF) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:13:43 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:13:43 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Return Message | Image13.png liste des livres |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |

|  |  |
| --- | --- |
| **liste des livres : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image9.png [system](#dkhGQgGD.AAAAQzF) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:14:27 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:14:27 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Type | Message |
| Sequence Number | 1.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 19 avr. 2022 15:14:27 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

### Image9.png system

|  |  |
| --- | --- |
| **Name** | **Value** |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:12:45 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Multiplicity | Unspecified |
| Active | false |
| Stopped | false |
| Multi Object | false |

#### Relationships

|  |  |
| --- | --- |
| **liste des livres : Message** | |
| To | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#3C3qQgGD.AAAAQvX) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:14:27 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:14:27 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Type | Message |
| Sequence Number | 1.1 |
| Action Type | |  |  | | --- | --- | | **Name** | **Value** | | Name | Return | | Author | Amina | | Create Date Time | 19 avr. 2022 15:14:27 | | Iteration | false | | Asynchronous | false | |
| Asynchronous | false |

|  |  |
| --- | --- |
| **demande de liste des livres : Message** | |
| From | |  |  | | --- | --- | | **Name** | **Value** | | End Model Element | Image1.png [bibliothecaire](#3C3qQgGD.AAAAQvX) | | Author | Amina | | Create Date Time | 19 avr. 2022 15:13:43 | |
| Author | Amina |
| Create Date Time | 19 avr. 2022 15:13:43 |
| Last Modified | 19 avr. 2022 15:15:33 |
| Return Message | Image13.png liste des livres |
| Type | Message |
| Sequence Number | 1 |
| Asynchronous | false |