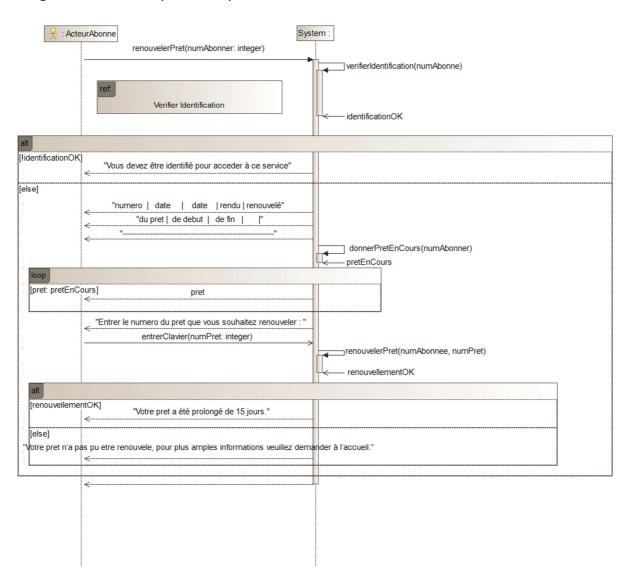
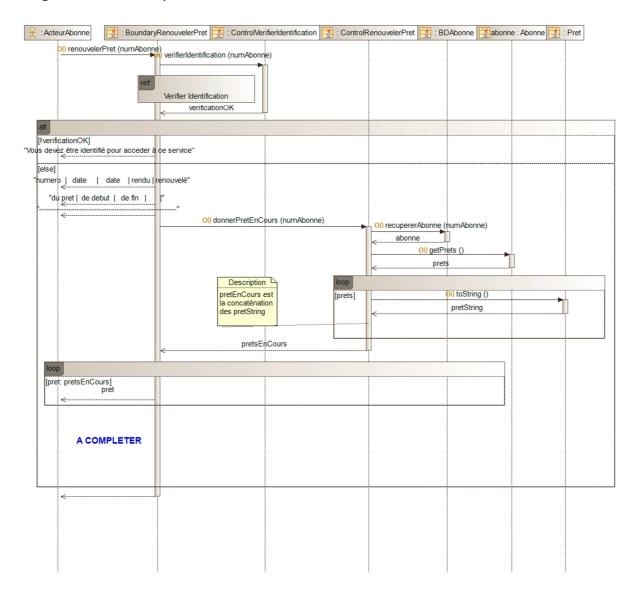
## Proposition réalisé en TD

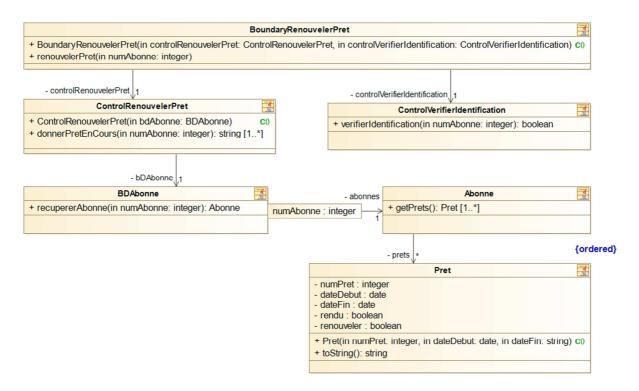
# Diagramme de séquence système



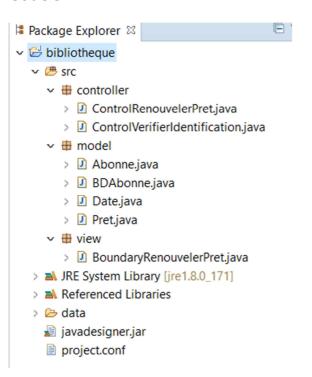
## Diagramme de séquence détaillé



#### Diagramme de classes participantes



#### Code JAVA



```
@objid("f6bd0aea-e238-404f-b7f3-3cc9d4eaf4ad")
public class BoundaryRenouvelerPret {
  @objid("8c0b69aa-280a-402d-9c9d-f33b661a0e78")
  private ControlRenouvelerPret controlRenouvelerPret;
  @objid("f97e261f-3a36-47da-be29-4def2e48c5b0")
  private ControlVerifierIdentification controlVerifierIdentification;
  @objid("c0427596-a5f1-488f-a860-7954cddad765")
  public BoundaryRenouvelerPret(ControlRenouvelerPret controlRenouvelerPret,
       ControlVerifierIdentification controlVerifierIdentification) {
     this.controlRenouvelerPret = controlRenouvelerPret;
     this.controlVerifierIdentification = controlVerifierIdentification;
  }
  @objid("5c393153-89ab-4bfc-bc4d-5b376a6b0fea")
  public void renouvelerPret(int numAbonne) {
     boolean verifierOK =
controlVerifierIdentification.verifierIdentification(numAbonne);
     if (!verifierOK) {
       System.out.println("Vous devez etre identifie pour acceder a ce service");
       System.out.println("numero date
                                                   date | rendu |
renouvele");
       System.out.println("du pret | de debut | de fin
                                                                   ");
       System.out.println("-----
-");
       List<String> pretsEnCours =
controlRenouvelerPret.donnerPretEnCours(numAbonne);
       for (String pret : pretsEnCours) {
          System.out.println(pret);
       }
     }
  }
}
@objid("dab9e7a0-6449-4481-ae11-6d1557aa5ee1")
public class ControlVerifierIdentification {
      @objid("15385b59-4464-4cfa-a86f-be7ca1b68b49")
      public boolean verifierIdentification(int numAbonne) {
            // TODO a implementer
            return true;
      }
}
```

```
@objid("0f855539-1d1e-4d9a-8cd5-00c05acfddd4")
public class ControlRenouvelerPret {
  @objid("4a7cc06a-7873-47c2-b565-c4f6fa93db59")
  private BDAbonne bdAbonne;
  @objid("3b1f7b9e-a2a5-4e4c-b45b-3fbbfb994fb5")
  public ControlRenouvelerPret(BDAbonne bdAbonne) {
     super();
     this.bdAbonne = bdAbonne;
  }
  @objid("b54c9ec4-4528-426c-87ba-7430698ec436")
  public List<String> donnerPretEnCours(int numAbonne) {
     Abonne abonne = bdAbonne.recupererAbonne(numAbonne);
     List<Pret> prets = abonne.getPrets();
     List<String> pretsEnCours = new ArrayList<>();
     for (Pret pret : prets) {
       pretsEnCours.add(pret.toString());
     return pretsEnCours;
  }
}
@objid("98f0cce9-9d8c-4c54-ad28-a1a2dd38eb45")
public class BDAbonne {
  @objid("b2eb8e62-5772-4f2e-94a3-da9aa970149a")
  private Map<Integer, Abonne> abonnes = new HashMap<>();
  @objid("9446fa81-b1f8-41fe-a35e-30d1aaae4d04")
  public Abonne recupererAbonne(int numAbonne) {
     return abonnes.get(numAbonne);
  }
}
@objid("cae27b60-99cc-4039-a9d8-677ca8c5983c")
public class Abonne {
  @objid("ceada542-8ccf-4822-868c-681b8ab6ba3c")
  private List<Pret> prets = new ArrayList<>();
  @objid("f3c551db-15b7-42cb-9c1a-f9d5c6be9516")
  public List<Pret> getPrets() {
     return prets;
}
```

```
@objid("505c57e5-4ce4-474d-af2f-5884e5e0a410")
public class Pret {
  @objid("6d0ec215-f88c-4c60-a41c-5f91d9998214")
  private int numPret;
  @objid("f972eb2e-1011-459d-a2df-9a0eccc3c864")
  private Date dateDebut;
  @objid("b561150e-d8d1-415e-9951-987032ef38b5")
  private Date dateFin;
  @objid("35158e0b-f7d7-49cc-bffe-f24c547b056c")
  private boolean rendu = false;
  @objid("2606ae48-84a9-49c3-9edc-5dee255f1eb4")
  private boolean renouveler = false;
  public Pret(int numPret, Date dateDebut, Date dateFin) {
     super();
     this.numPret = numPret;
     this.dateDebut = dateDebut;
     this.dateFin = dateFin;
  @objid("9710f5e1-94b2-48e9-8e58-90ad7b97ee3f")
  public String toString() {
     StringBuilder chaine = new StringBuilder(" " + numPret + " | " +
dateDebut + " | " + dateFin + " | ");
     if (rendu) {
       chaine.append(" vrai | ");
     } else {
       chaine.append(" non | ");
     if (renouveler) {
       chaine.append(" vrai | ");
     } else {
       chaine.append(" non | ");
     return chaine.toString();
  }
}
```

```
public class Date {
  private int jour;
  private int mois;
  private int annee;
  public Date(int jour, int mois, int annee) {
     super();
     this.jour = jour;
     this.mois = mois;
     this.annee = annee;
  }
  @Override
  public String toString() {
     StringBuilder date = new StringBuilder();
     if (jour < 10) {
        date.append("0");
     }
     date.append(jour + "/");
     if (mois < 10) {
        date.append("0");
     date.append(mois + "/");
     date.append(annee);
     return date.toString();
}
```