List of UML diagrams needed:

* Class Diagram (with attributes, operations, navigability arrows (Fig 13.2), inheritance (Fig 13.9))
  + Classes (Nouns and noun forms) , Attributes (Descriptive words and phrases), Operations (Verbs and verb phrases)
  + Composition relationships (Page 331 of JfP 2nd Ed)
  + Aggregation relationships (Page 332 of JfP 2nd Ed)
* Activity Diagrams for operations
* Collaborations (Fig 12.22 of JfP 2nd Ed)
* Communication diagrams (Fig 12.24 of JfP 2nd Ed)
* Sequence diagrams (Fig 12.25 of JfP 2nd Ed)

**Classes: Nouns and noun phrases:**

User, Friend(s), Bill(s), Groups, Bill Payer, Bill Title, Category, Notifications, Settings

***Filtered Nouns:***

User

Friends

Bills

Groups

(Design contd. In BillRive.uml in the shared folder. Install StarXML to open it)

References:

* <http://publib.boulder.ibm.com/infocenter/rsdvhelp/v6r0m1/index.jsp?topic=%2Fcom.ibm.xtools.modeler.doc%2Ftopics%2Fcgeneral.html>
* JfP 2nd Ed
* Entity Diagram

1. Data representation of various objects whose data is eventually persisted
2. Com.billrive.entity (package)
3. Sample classes:
   1. Com.billrive.entity.user (extends humanEntity implements genericEntity)
   2. Com.billrive.entity.friend (extends humanEntity implements genericEntity)
   3. Com.billrive.entity.group(implements genericEntity)
   4. Com.billrive.entity.setting(implements genericEntity)
   5. Com.billrive.entity.bill(implements genericEntity)

* Services Diagram
  1. Modelling of service objects provided by the application
     + Com.billrive.service (package)
       - BillService com.billrive.service.BillService
         * Attribute –genericDao (type: oracleDB)
         * Operation: Com.billrive.entity.bill array Getbills(uid)

Run genericDao(uid)

Cleanup and data modifications as necessary

Array build (of Com.billrive.entity.bill)

return

* + - * UserService com.billrive.service.userService
      * SettingService
      * FriendService
* DAO diagram
  1. Abstraction for database. Provides data access for service classes (writing data to & from database)
     + Com.billrive.dao(package)
       - Com.billrive.dao.oracleDB(implements genericDAO)
         * queryBills(uid)