Caso di studio: “Alberi di decisione”
Metodi avanzati di programmazione (a.a. 2012/2013)

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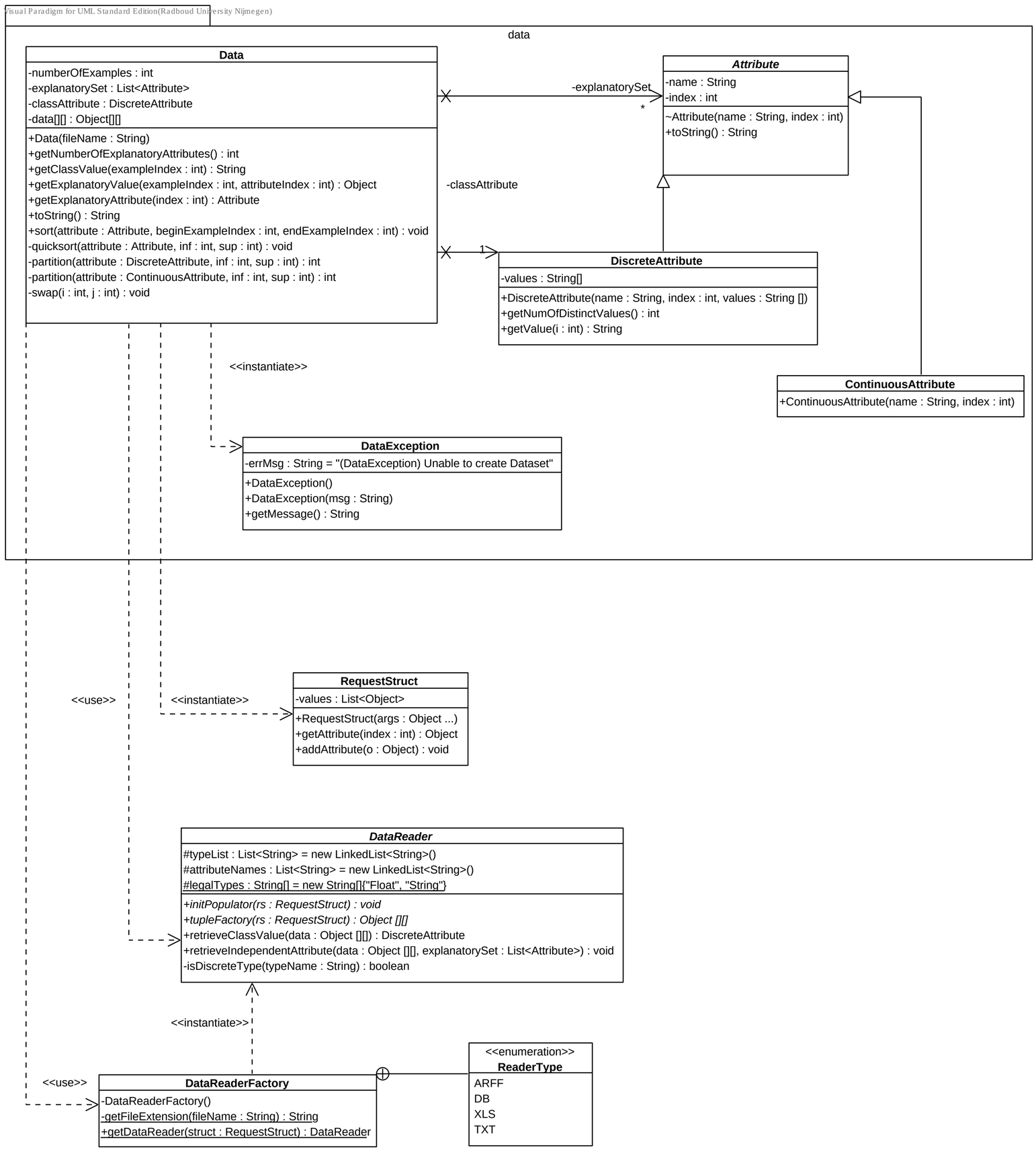
Diagrammi di classe:
server con socket

Class Diagram

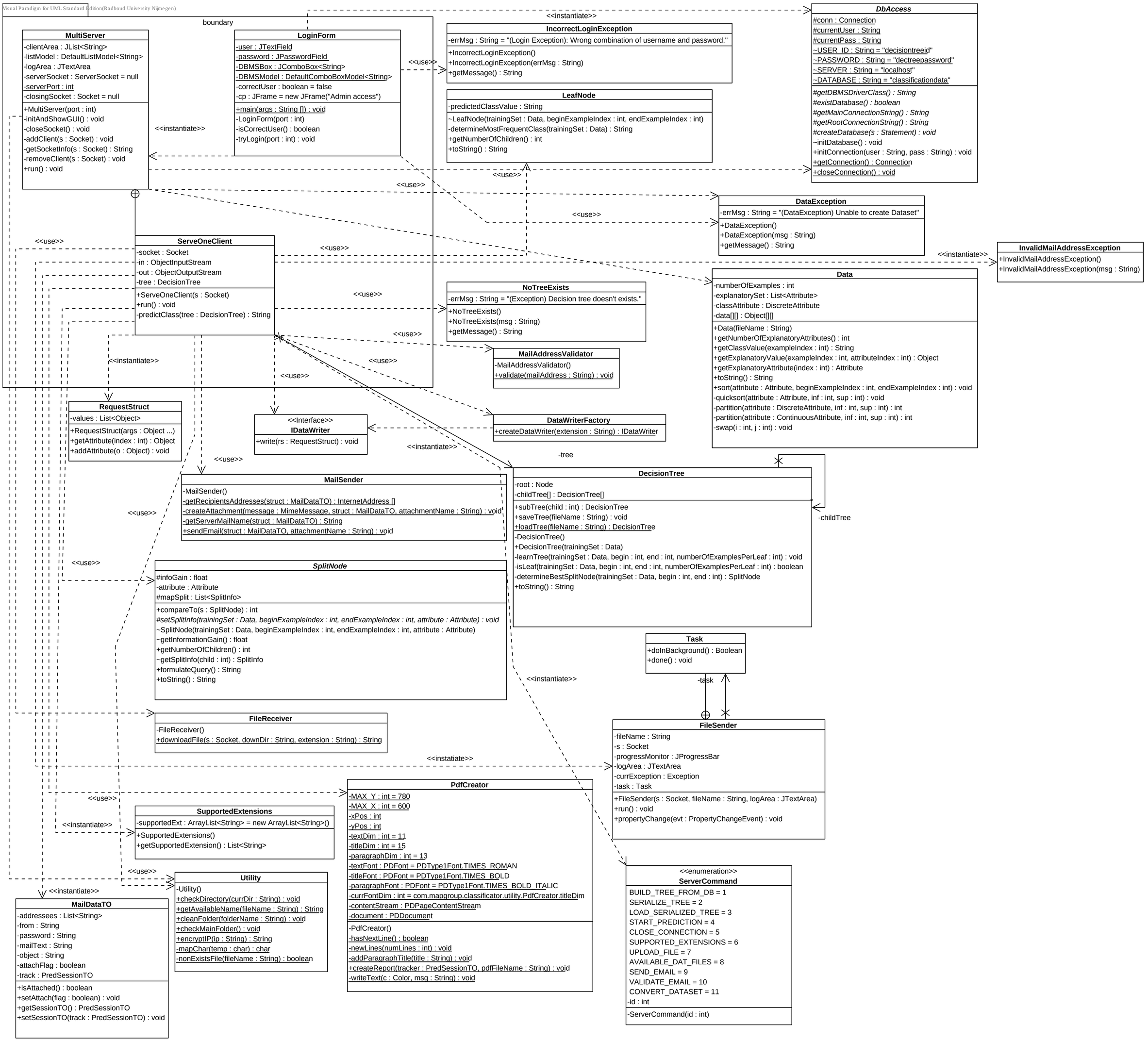
Data Diagram



Diagrammi di classe:
server con socket

Class Diagram

Main Diagram



Diagrammi di classe:
server con socket

Class Diagram

Database Diagram

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database

dao

DbAccess
#conn : Connection
#currentUser : String
#currentPass : String
~USER_ID : String = "decisiontreeid"
~PASSWORD : String = "dectreepassword"
~SERVER : String = "localhost"
~DATABASE : String = "classificationdata"
#getDBMSDriverClass() : String
#existDatabase() : boolean
#getMainConnectionString() : String
#getRootConnectionString() : String
#createDatabase(s : Statement) : void
~initDatabase() : void
+initConnection(user : String, pass : String) : void
+getConnection() : Connection
+closeConnection() : void

<<use>>
<<use>>
<<use>>

DbAccessFactory
+createDbAccess(dbmsName : String) : DbAccess

<<use>>

<<enumeration>>
<<Enum>>
SupportedDBMS
MYSQL
POSTGRE
+getSupportedDBMSName() : String []

<<instantiate>>

DataException
-errMsg : String = "(DataException) Unable to create Dataset"
+DataException()
+DataException(msg : String)
+getMessage() : String

DbAccessWithUser
#existUser() : boolean
#createUser(s : Statement) : void
#initDatabase() : void

<<instantiate>>

IncorrectLoginException
-errMsg : String = "(Login Exception): Wrong combination of username and password."
+IncorrectLoginException()
+IncorrectLoginException(errMsg : String)
+getMessage() : String

PostgreSQLAccess
-DRIVER_CLASS_NAME : String = "org.postgresql.Driver"
-DBMS : String = "jdbc:postgresql"
-PORT : String = "5432"
#existUser() : boolean
#createUser(s : Statement) : void
#createDatabase(s : Statement) : void
#getDBMSDriverClass() : String
#existDatabase() : boolean
#getMainConnectionString() : String
#getRootConnectionString() : String

MySQLAccess
-DRIVER_CLASS_NAME : String = "org.gjt.mm.mysql.Driver"
-DBMS : String = "jdbc:mysql"
-PORT : String = "3306"
#existUser() : boolean
#createUser(s : Statement) : void
#getDBMSDriverClass() : String
#existDatabase() : boolean
#getMainConnectionString() : String
#getRootConnectionString() : String
#createDatabase(s : Statement) : void

dialects

TableSchema
-tableSchema : List<Column> = new ArrayList<Column>()
#createTypeMapping(mapSQL_JAVATypes : HashMap<String, String>) : void
~TableSchema(tableName : String)
+getAttributeTypes() : List<String>
+getAttributeNames() : List<String>
+getNumberOfAttributes() : int
+getColumn(index : int) : Column

Column
-name : String
-type : String
-Column(name : String, type : String)
+getColumnName() : String
+isNumber() : boolean
+toString() : String
-Column(name : String, type : String)

TableSchemaFactory
+createTableSchema(tableName : String) : TableSchema

<<instantiate>>

TableData
+TableData()
+getTransactions(table : String) : List<TupleData>

TableSchemaPG
~TableSchemaPG(tableName : String)
#createTypeMapping(mapSQL_JAVATypes : HashMap<String, String>) : void

TableSchemaMySql
+TableSchemaMySql(tableName : String)
#createTypeMapping(mapSQL_JAVATypes : HashMap<String, String>) : void

TupleData
+tuple : List<Object> = new ArrayList<Object>()
+toString() : String

<<instantiate>>

Class Diagram

FileManager Diagram

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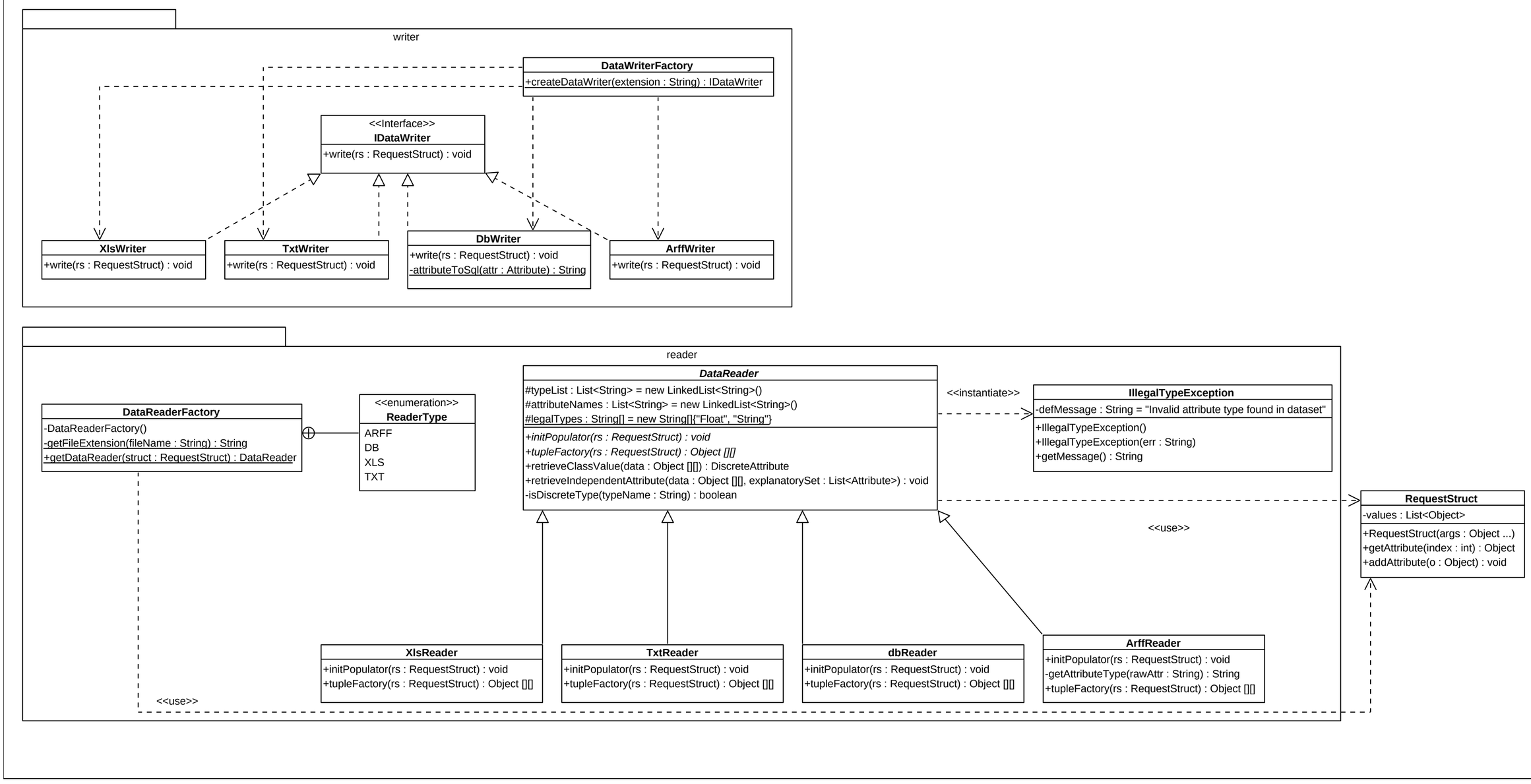
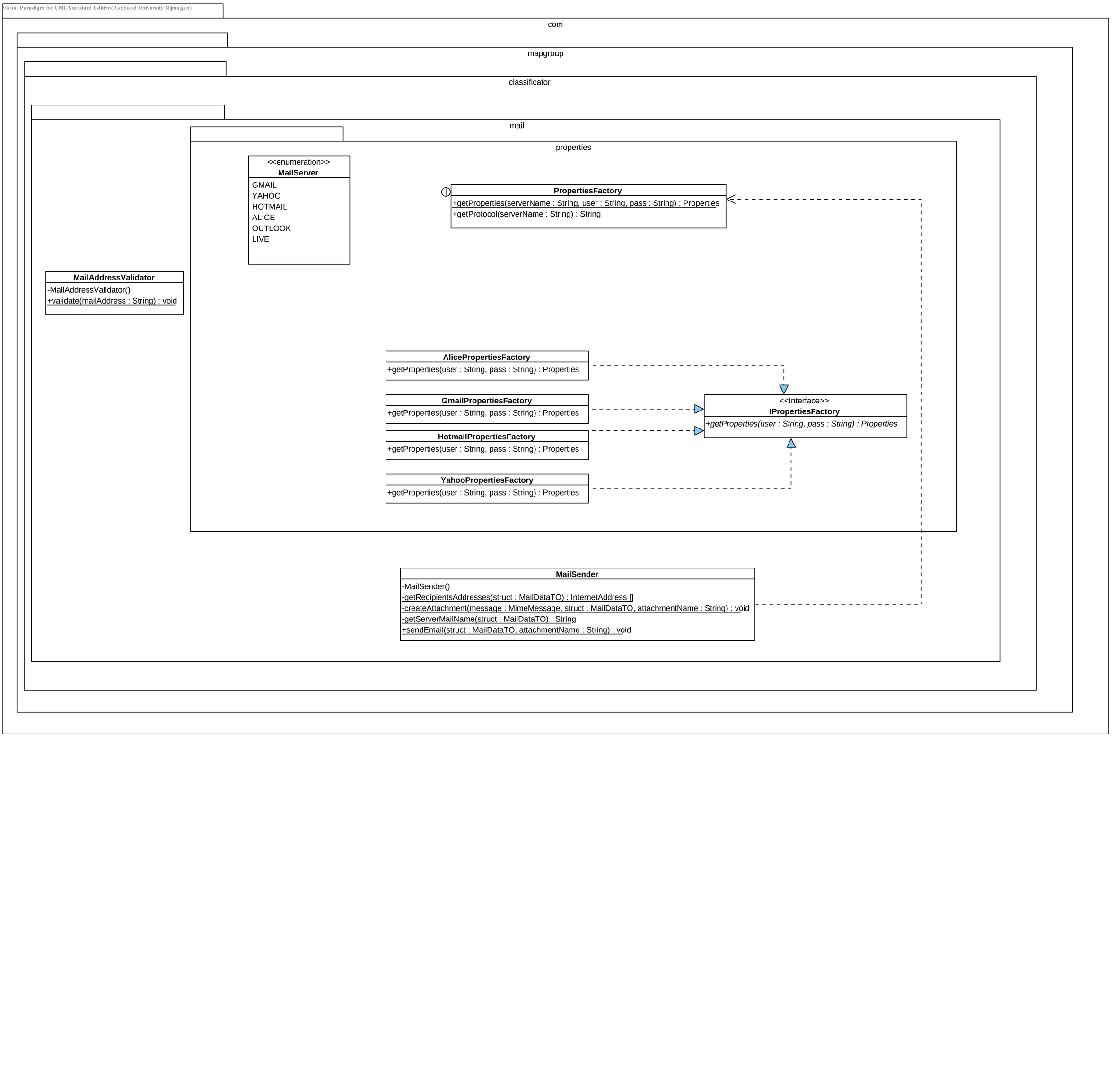
filemanager



Class Diagram

Mail diagram



Diagrammi di classe:
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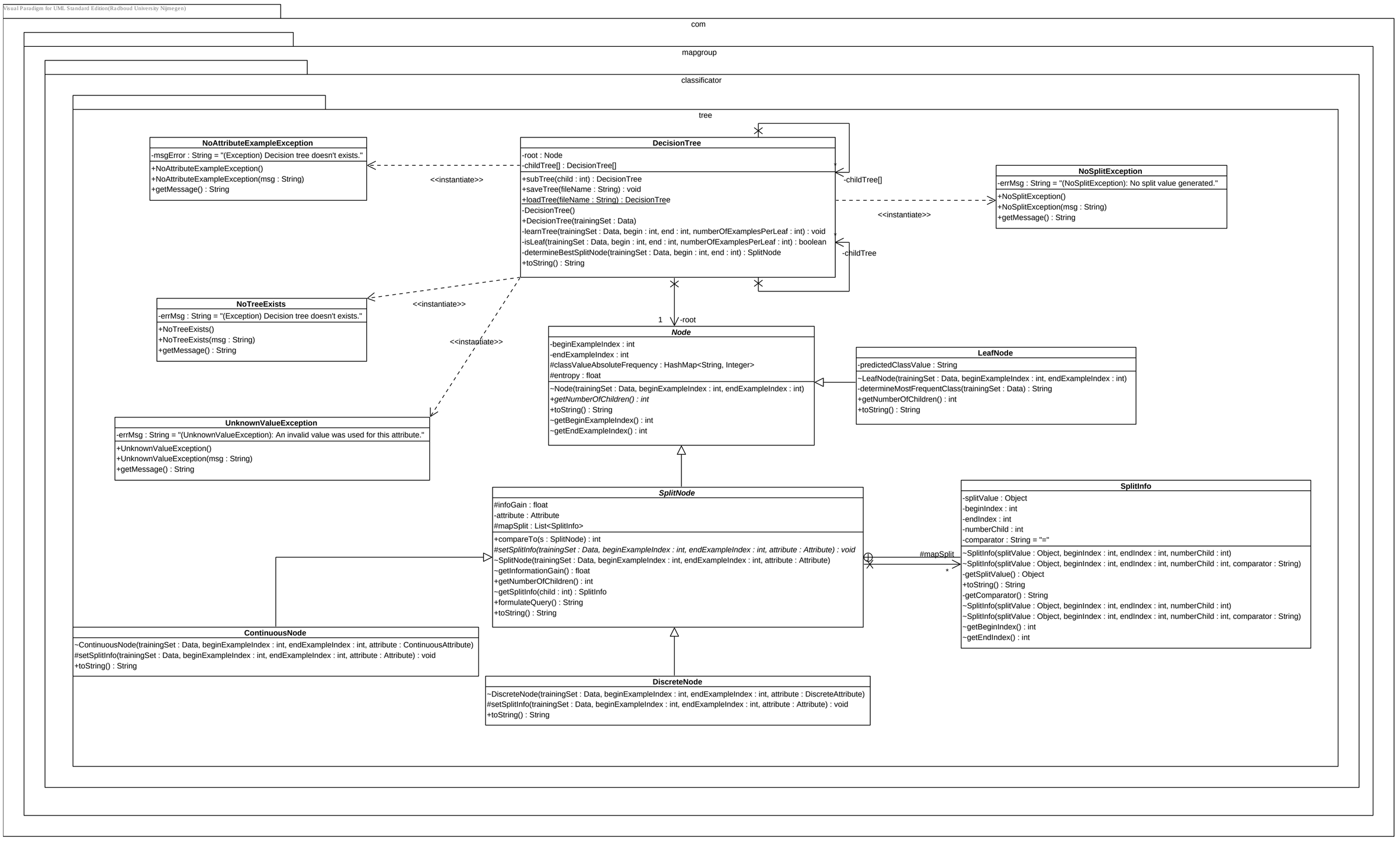
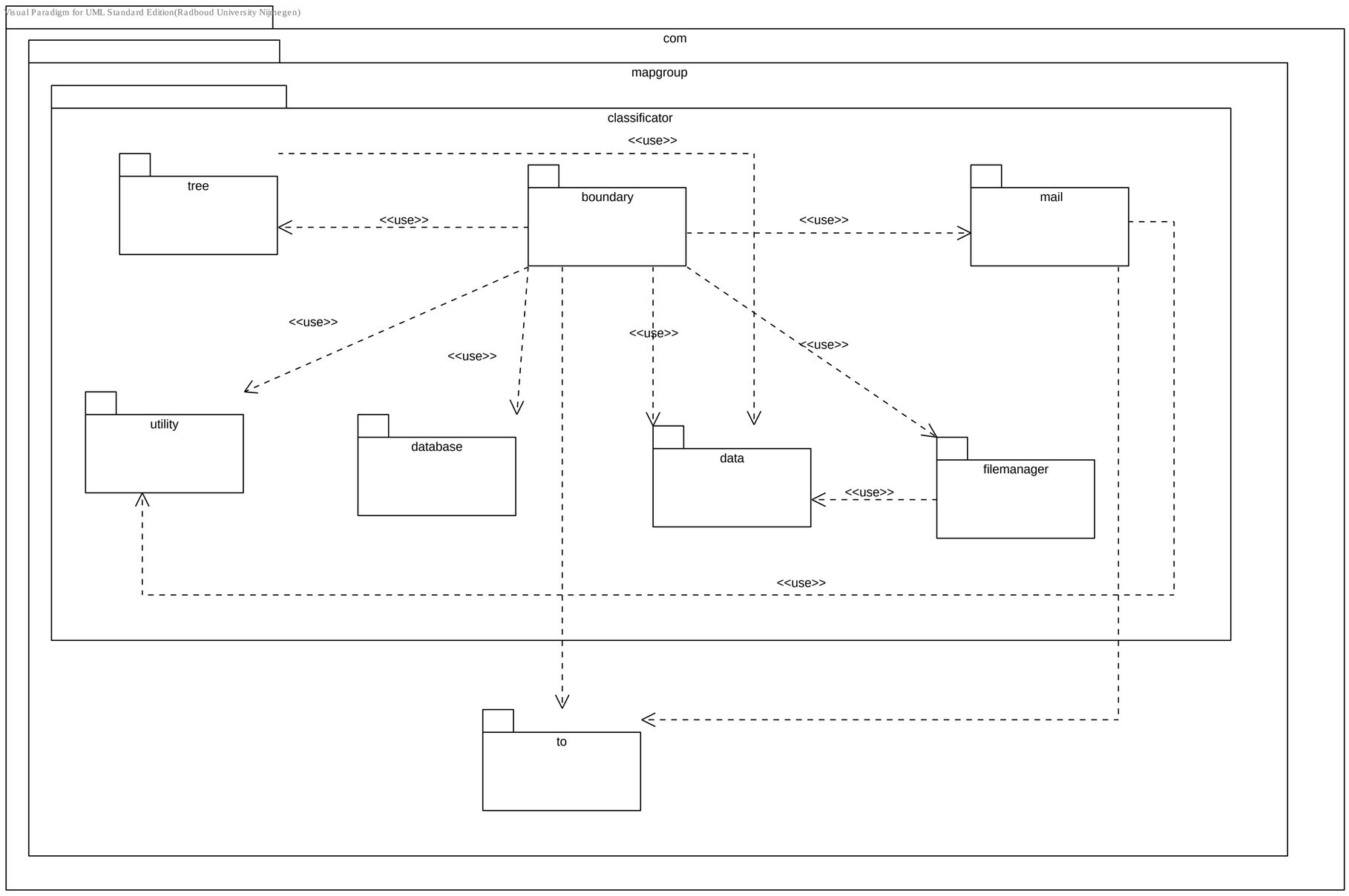
Class Diagram

Tree diagram



Class Diagram

Package diagram

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