



AMERICAN INTERNATIONAL UNIVERSITY- BANGLADESH

Assignment Title : Online Student Portal System Management

Course Teacher : Manzur H. Khan

Course : Object Oriented Analysis And Design

Section : D

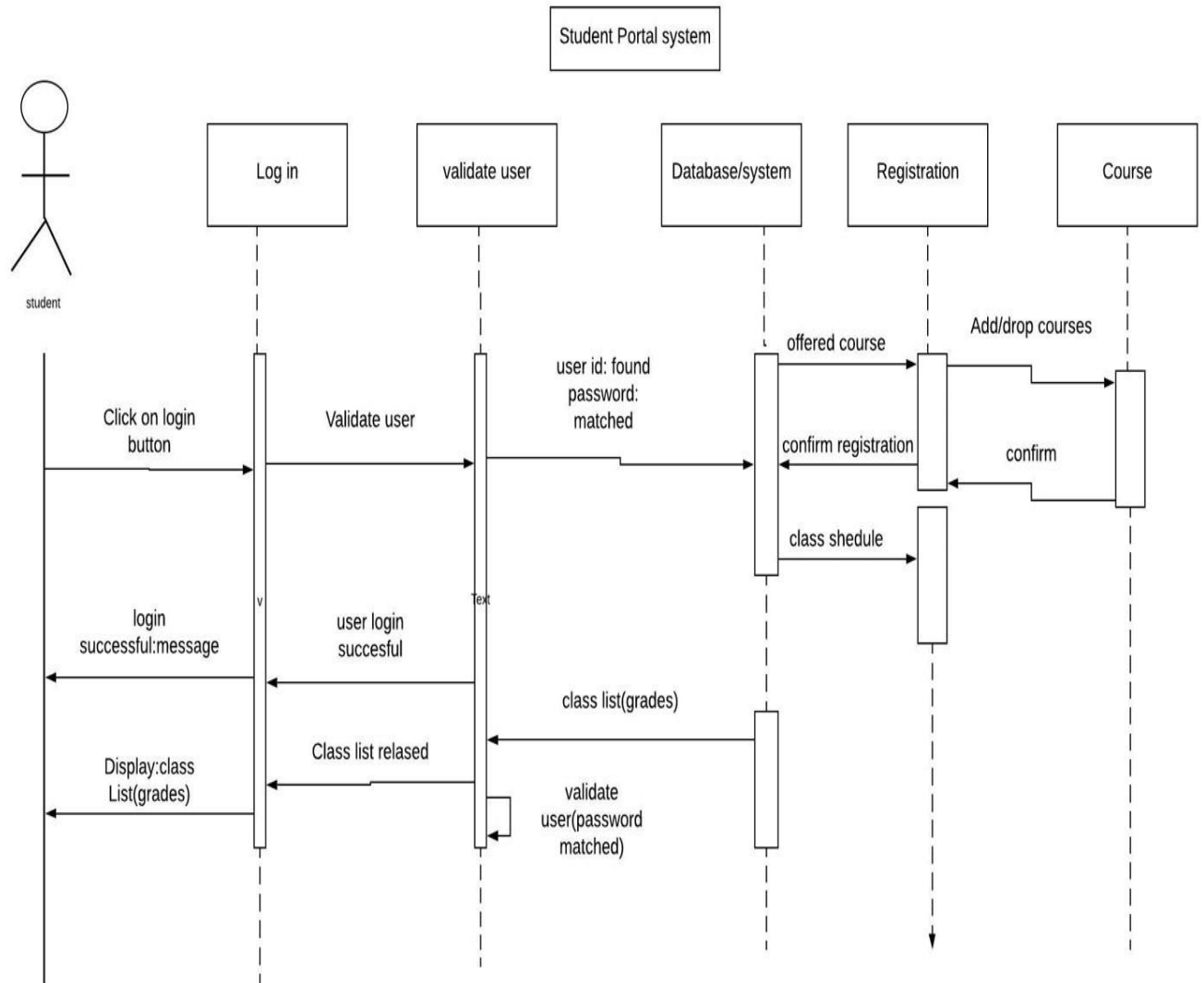
| ID | NAME |
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| 19-41749-3 | Md Abu Sufian |

ONLINE STUDENT PORTAL SYSTEM

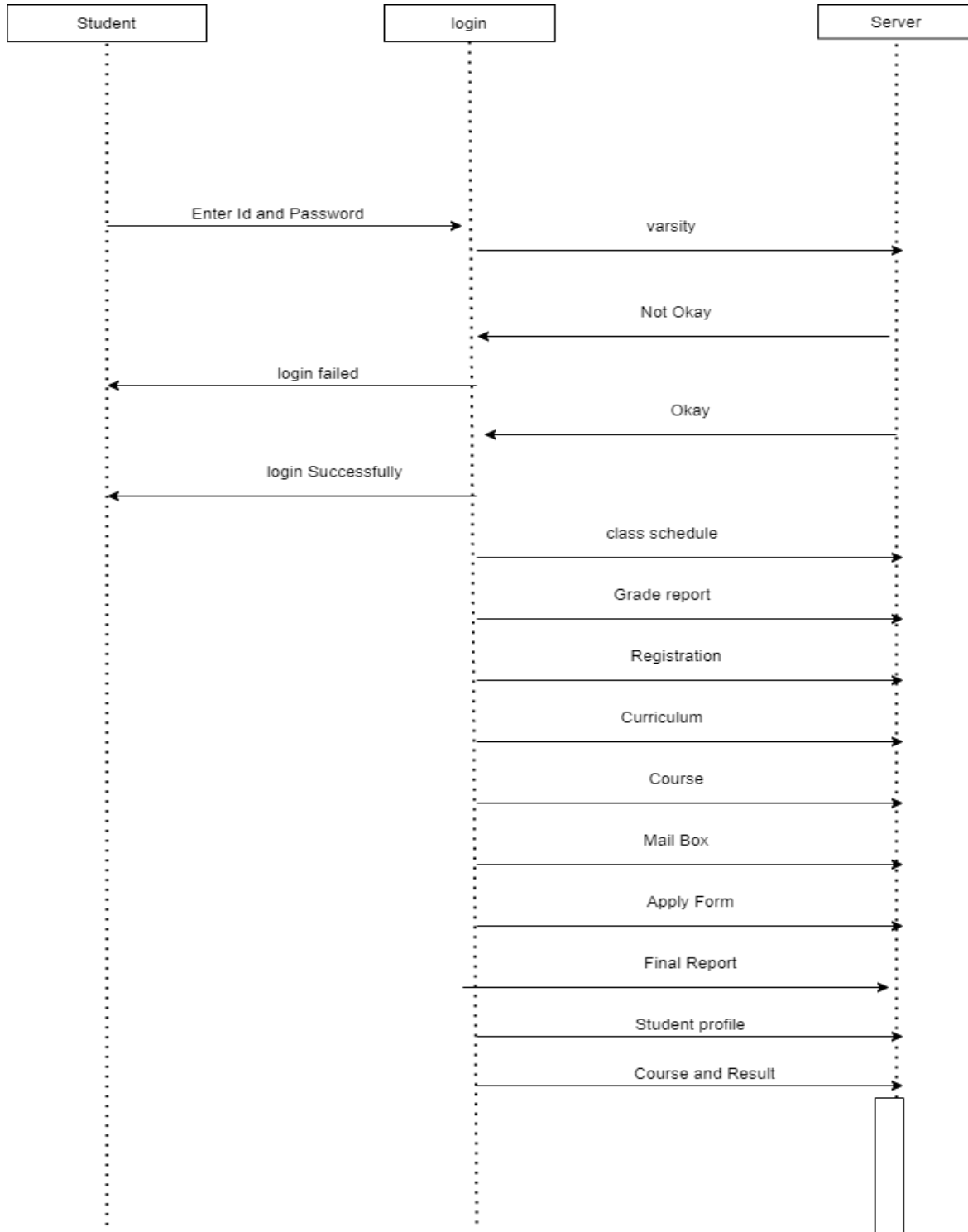
MANAGEMENT

A student portal system that acts as an online portal between students and the admin. The system is designed for a particular branch such as BSc. It contains an admin who can enter details of students. Teacher can also see the student information and he can upload and add note, result, notice and their information. Students can then login using provided user id password and edit their profile details and image. Student can see their class schedule, grade report. Now admin can add details of Students marks. There are also provide every semester information, semester wise result, upcoming semester information, upcoming semester registration. When student login they can see their own marks details.

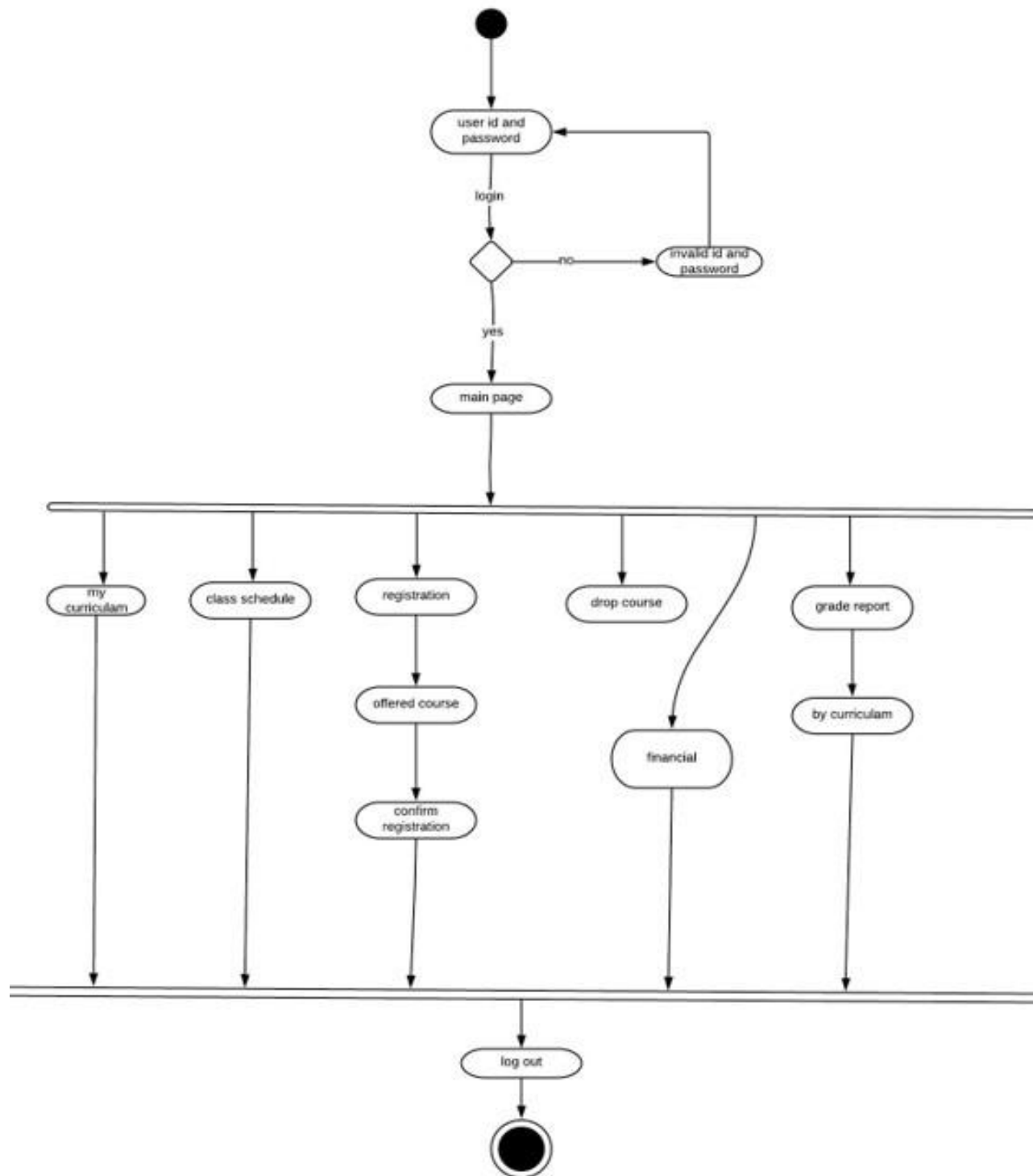
Student Portal System Sequence Diagram



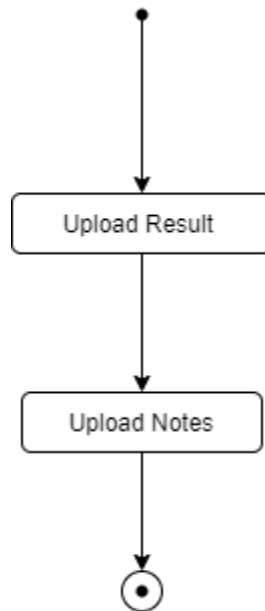
Login Sequence Diagram



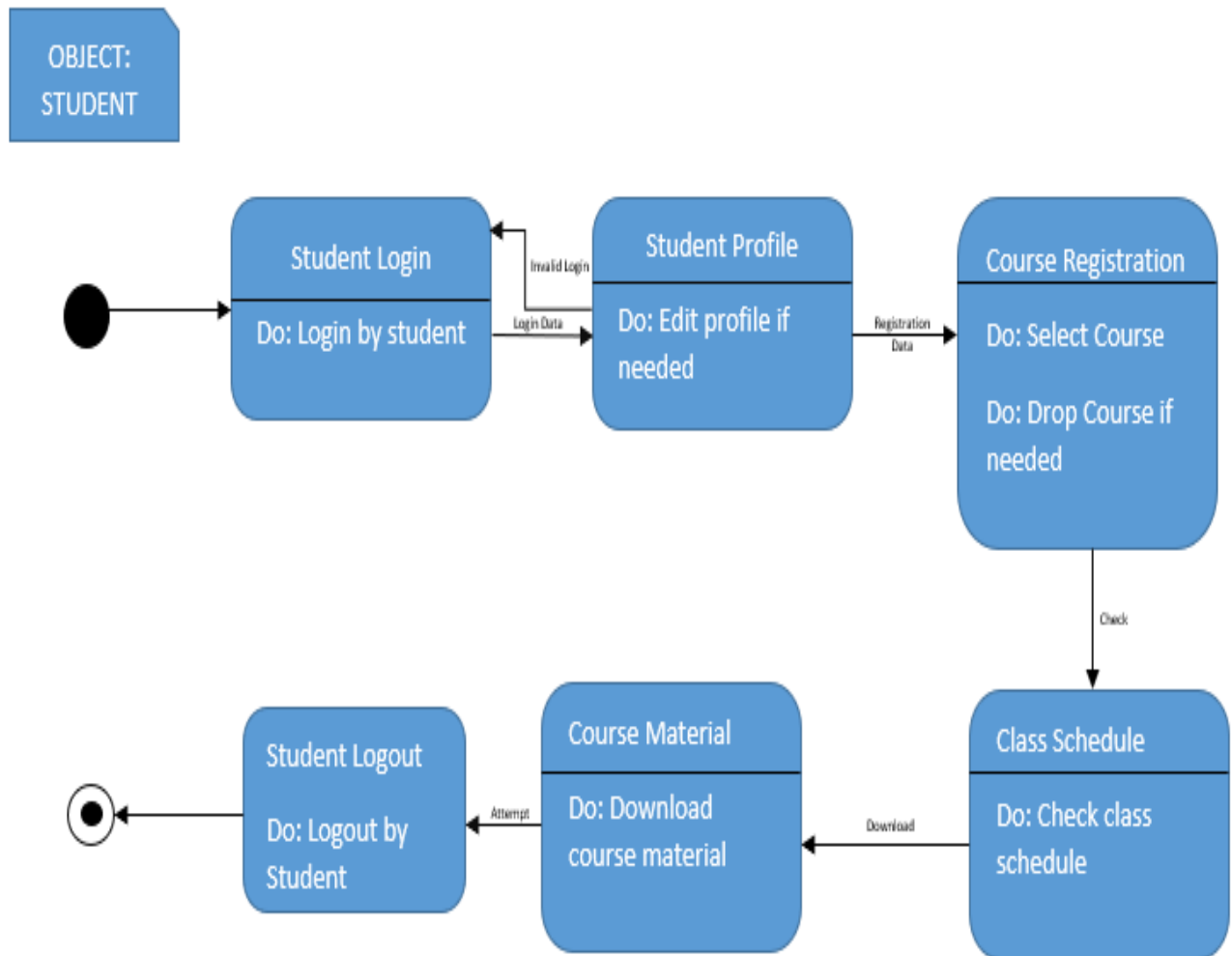
System Activity Diagram



Upload Activity Diagram

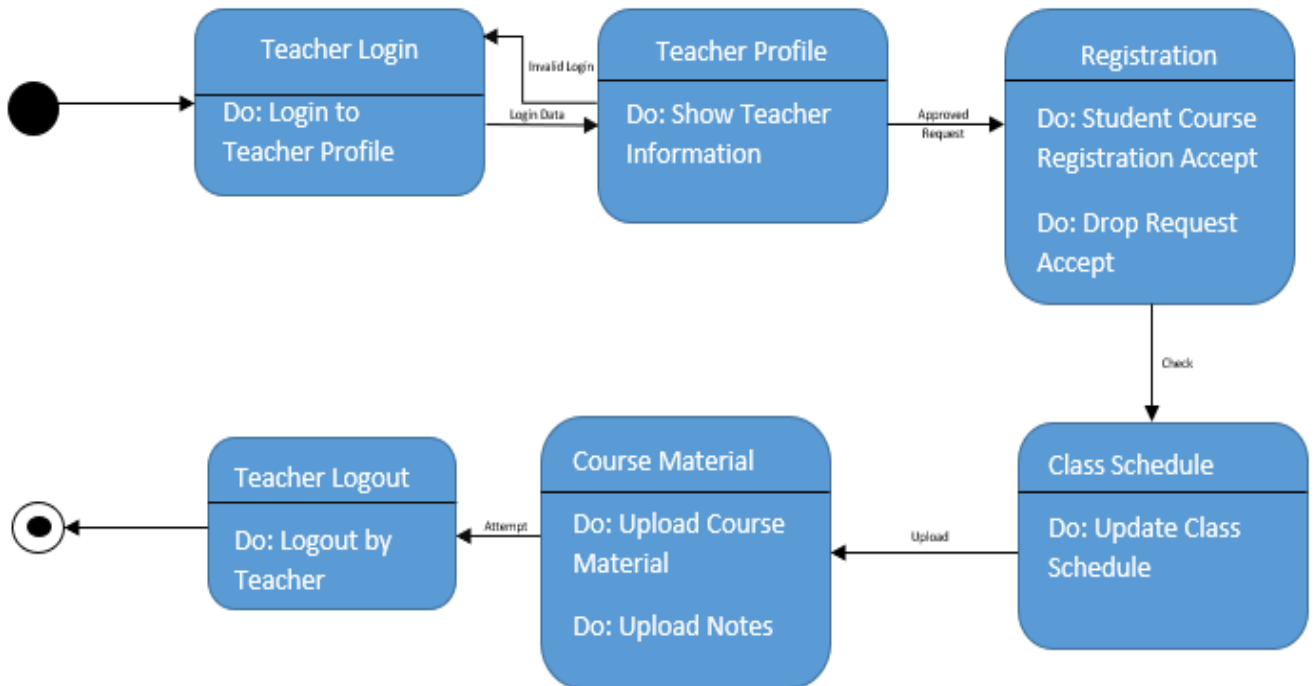


Student Statechart



Teacher Statechart

OBJECT:
TEACHER



Calculation of the LCOM value

| Teacher |
|--|
| -Name: String -MobileNumber: Integer -TeacherID: String -Password: String -TeacherEmail: String |
| +TeacherLogin (TeacherID:String, Password:String) +UploadNotes (CourseName:String) +UpdateResult (CourseName:String) +DropRequestAccept (CourseName:String) +TeacherInformation (Name:String, TeacherID:String, TeacherEmail:String, CourseName:String) |

| Student |
|---|
| -Name: String -MobileNumber: Integer -ID: String -Password: String -CourseName: String -Department: String |
| +StudentLogin (ID:String, Password:String) +CourseMaterialDownload (CourseName:String) +CourseRegister (CourseName:String, Department:String) +CourseDrop (CourseName:String, Department:String) +SetProfile (Name:String, Password:String) |

LCOM = $|P| - |Q|$, if $|P| > |Q|$, otherwise 0

Pairs:

(TeacherLogin, UploadNotes), (TeacherLogin, UpdateResult), (TeacherLogin, DropRequestAccept),
(TeacherLogin, TeacherInformation), (UploadNotes, UploadResult), (UploadNotes, DropRequestAccept),
(UploadNotes, TeacherInformation), (UpdateResult, DropRequestAccept), (UpdateResult, TeacherInformation),
(DropRequestAccept, TeacherInformation)

$|P| = 3$ (Non-Cohesive Pairs)

$|Q| = 7$ (Cohesive Pairs)

$|P| < |Q|$

LCOM = 0

Here LCOM value is 0.
so, the LCOM value of the class indicates that
the methods of the class are cohesive, and it is
a desirable design.

LCOM = $|P| - |Q|$, if $|P| > |Q|$, otherwise 0

(StudentLogin, CourseMaterialDownload), (StudentLogin, CourseRegister), (StudentLogin, CourseDrop),
(StudentLogin, SetProfile), (CourseMaterialDownload, CourseRegister), (CourseMaterialDownload, CourseDrop),
(CourseMaterialDownload, SetProfile), (CourseRegister, CourseDrop), (CourseRegister, SetProfile),
(CourseDrop, SetProfile)

$|P| = 6$ (Non-Cohesive Pairs)

$|Q| = 4$ (Cohesive Pairs)

$|P| - |Q| = 2$

Here LCOM value is 2.
so, the LCOM value of the class indicates that
it is desirable to reduce it.

-----End-----