Chapter 9

References

I have used many references to successfully complete my project. These references are mentioned below.

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Appendix A: Project Charter

<table>
<tr><td colspan="4" align="center">**PROJECT CHARTER**</td></tr>
<tr><td>Name of the Candidate</td><td colspan="3">*T.S.P.Weerasinghe*</td></tr>
<tr><td>Registration No.</td><td>*108583C*</td><td>Index No.</td><td>*108583C*</td></tr>
<tr><td>eMail Address</td><td colspan="3">*thisaratsp@gmail.com*</td></tr>
<tr><td>Title of Project</td><td colspan="3">*Examination Management System*</td></tr>
<tr><td>Executive Summary</td><td colspan="3">*This project is about proposing an examination management system (EMS) for National Institute of business Management (NIBM). NIBM is a higher educational institutes which conduct IT and management oriented courses from foundation level to higher diploma level. Examination Management system is proposed to reduce the time wastage on examination related activities and perform examination activities more comfortable way. Proposed solution consists of six main modules as exam scheduling, exam registration, result view, select awardees, transcript request online and exam result analyses. Web based examination system is used by three main users such as student, exam unit and lectures.*</td></tr>
<tr><td>Supervisor</td><td colspan="3">Name: *Saminda Premarathna*
Organization: *Faculty of Information Technology, University of Moratuwa.*
Designation: Senior *Lecturer*
Address: *Faculty of Information Technology, University of Moratuwa.*
Telephone: *+ 94 11 2650301* Fax: *+ 94 11 2650922*
eMail: *samindap@uom.lk*</td></tr>
</table>

01	**Introduction to the project**
	This project is about introducing an examination management system for National Institute of business management. This examination management is used to manage examination activities more effectively.
02	**Problem domain and motivation**
	NIBM examination system is not computerized. So it wastes the time of student, lecturers and examination staff on examination activities. As a student of NIBM I also faced the problem regarding examinations. Because of that reason I am motivated to start this project on finding a solution.
03	**Project goals and objectives**
	Accessing exam results online. *Saving time on exam related activities.* *Maintain accuracy of exam records.* *Authorization of records* *Fast track record access.*
04	**Similar work and relationship to the project**
	Chancellor ERP *Eduswift* *FS UMS 2010* *IDAA* *University ERP*
05	**Scope of the project**
	Exam scheduling *Exam registration* *Results view* *Awardees selection* *Transcript request* *Exam result Analysis*
06	**Deliverable**
	Exam scheduling *Exam registration* *Results view* *Awardees selection* *Transcript request* *Exam result Analysis*
07	**Parameters for the measure of success**
	System testing *User acceptance testing*

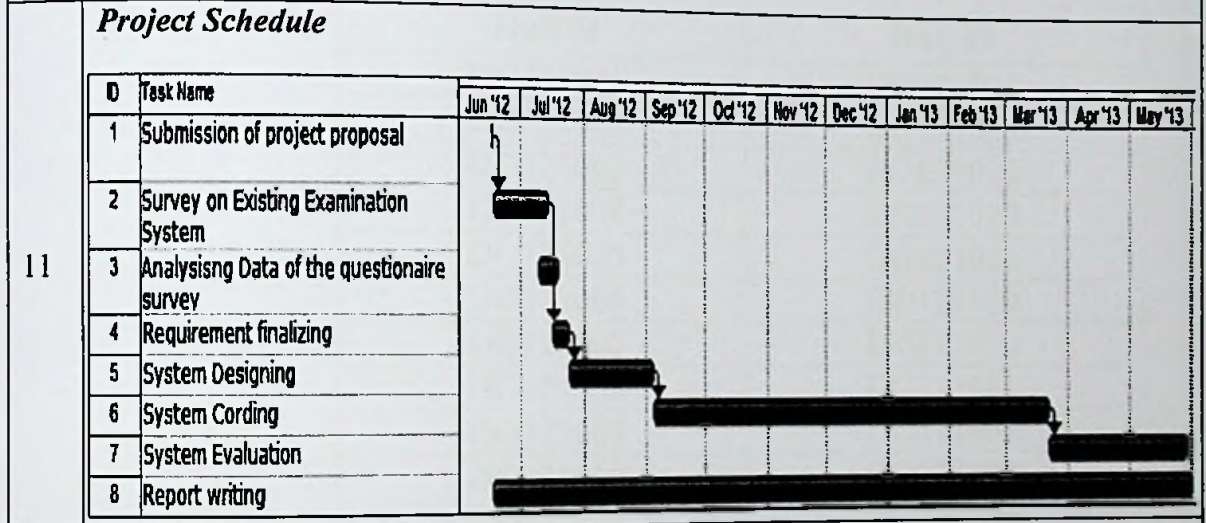|	

08	**Resource requirement**
	
	   • *Sample records*
	   • *Software*
	   • *Computer*

09	**Risk and risk mitigation plan**
	
	   • *Viral attack- Maintain daily Backup*
	   • *Requirement Changes- Periodic Reviews with the users*

10	**The client** • *National Institute of Business Management, Sri Lanka*
11	**Project Schedule**

ID	Task Name	Jun '12	Jul '12	Aug '12	Sep '12	Oct '12	Nov '12	Dec '12	Jan '13	Feb '13	Mar '13	Apr '13	May '13
1	Submission of project proposal												
2	Survey on Existing Examination System												
3	Analysisng Data of the questionaire survey												
4	Requirement finalizing												
5	System Designing												
6	System Cording												
7	System Evaluation												
8	Report writing												

Student's Signature: Date:	Supervisor's Signature: Date:

EXAMINATION SHEDULE
DIPLOMA IN COMPUTER SYSTEM DESIGN
QTC

2012-05-20

9.00A.M.-12.00 noon

Hall 01	Hall 02
DO121001	DO121024
DO121002	DO121025
DO121003	DO121026
DO121004	DO121027
DO121005	DO121028
DO121006	DO121029
DO121007	DO121030
DO121008	DO121031
DO121009	DO121032
DO121010	DO121033
DO121011	DO121034
DO121012	DO121035
DO121013	DO121036
DO121014	DO121037
DO121015	DO121038
DO121016	DO121039
DO121017	DO121040
DO121018	DO121041
DO121019	DO121042
DO121020	DO121043
DO121021	DO121044
DO121022	DO121045
DO121023	
DO121024	
DO121025	

Appendix C: Questioner 01

<u>QUESTINARE SURVEY</u>

<u>INTRODUCING ONLINE EXAM MANAGEMENT SYSTEM</u>

<u>STUDENTS</u>

1. What is the course type you follow at NIBM?

    I.   IT
    II.   Management

2. What is the course level you follow?

    I.   Foundation
    II.   Certificate
    III. Advance Certificate
    IV. Diploma
    V.   Higher Diploma

3. How do you aware about exam schedule?

    I.   Calling to NIBM
    II.   From colleagues
    III. By a notice published on NIBM Notice board
    IV. Through web site

4. Have you faced any difficulty of getting exam schedule on time?

    I.   Yes
    II.   No

5. When do you receive your exam schedule?

    I.   On exam day
    II.   On day before the exam day
    III. Three days before the exam
    IV. One month before the exam

6a. Have you faced any clashes of exam schedule?

    I.   Yes
    II.   No

6b.if yes what kind of clashes you faced?

....

7. How do you receive your exam result?

    I.   Through SMS
    II.   By a result sheet published on the notice board of NIBM
    III.   Through WEB SITE

8. Have you seen your exam results as soon as it released?

    I.   Yes
    II.   No

9. Do you prefer to receive your examination result as early as it released?

    I.   Yes
    II.   No

10a. Are you repeated any exams?

    I.   Yes
    II.   No

10b.if yes, how do you register to it?

    I.   By visiting NIBM
    II.   Through WEB SITE

11a. Are you faced any difficulty in registration for the exams?

    I.   Yes
    II.   No
    III.   Not applicable

11b.what type of difficulties you faced?

    I.   Travelling difficulties
    II.   Unsupported staff
    III.   CCC

12. Do you need to receive exam transcript?

    I.   Yes

    II.   No

13. When do you like to receive transcript after releasing the result

    I.   Within one day

    II.   Within three days

    III. Within one week

    IV. Within one month

14. What is the way you used to request for a transcript?

    I.   By submitting a form to NIBM

    II.   By online submission

    III. By post

15. Do you have any facility to request for a transcript by online?

    I.   Yes

    II.   No

Appendix C : Questioner 02

1. How do you receive exam supervision notification?

    I.   Paper sheet
    II.   Calling
    III.   E-mail alert

2. When do you receive exam supervision notice?

    I.   Few hours before the exam
    II.   One day before the exam
    III.   More than one day before the exam

3. How do you access particular exam result of students?

    I.   Paper sheets
    II.   Through a computerized system
    III.   Both

4. How much time you spend on extracting particular result?

    I.   Few minutes
    II.   Half an hour
    III.   More than half an hour

5. Are you satisfied with the time spend on exam result searching?

    I.   Yes
    II.   No

Appendix C : Questionnaire 03

QUESTIONNAIRE SURVEY

INTRODUCING ONLINE EXAM MANAGEMENT SYSTEM

EXAM UNIT

1. How do you prepare exam schedule?

    I.   Manually
    II.   Automatically

2. How much time you spend on exam schedule preparation?

    I.   three days
    II.   More than three days
    III.   More than a week

3. Have you received any complaints regarding schedule clashes?

    I.   Yes
    II.   No.

4. What are the constraints you see in the current schedule preparation?

    …………………………………………………………………………..

5. How do you inform exam duty to the staff?

    I.   By a telephone call
    II.   By a written notice
    III.   By a email alert

6a. Do you have miscommunications regarding exam duties?

    I.   Yes
    II.   No

6b. if yes, what are the difficulties you faced during exam duty allocation?

    I.   Unable to contact supervision staff
    II.   Some staff allocated for another duties.
    III.   Did not receive duty schedule properly.

- How do you publish exam schedule for student?
  - I.   Notice board
  - II.   E-mail
  - III. SMS

7. How do you release exam results?

    I.   Publish on the web site
    II.   Put on the notice board
    III.   both

8. How do students come to know results are released?

    I.   By an E-mail alert
    II.   By an SMS alert
    III.   Verbally

9. Which of the following method used to access pass exam records?

    I.   Go through hard documents
    II.   Go through computerized system
    III.   Both

10. What is the current method used to prepare transcripts?

    I.   Manually
    II.   Automatically

11. How many days you required to prepare a transcript after receiving a request of a student?

    I.   Within one day
    II.   Within three days
    III.   Within one week
    IV.   Within one month

12. Do you think that automatically preparation of transcripts is practical?

     I.   Yes
    II.   No

13. Have you faced any difficulty of preparing transcripts when there are many requests?

     I.   Yes
    II.   No

14. Do you have any special consideration on repeat exam schedule preparation to minimize the clashes?

     I.   Yes
    II.   No

15a. Do you have any complaints regarding repeat exam clashes?

     I.   Yes
    II.   No

15b.If yes, what are they?

    ………………………………………………………

16. How do you select awardees of a particular course?

     I.   Manually
    II.   Automatically
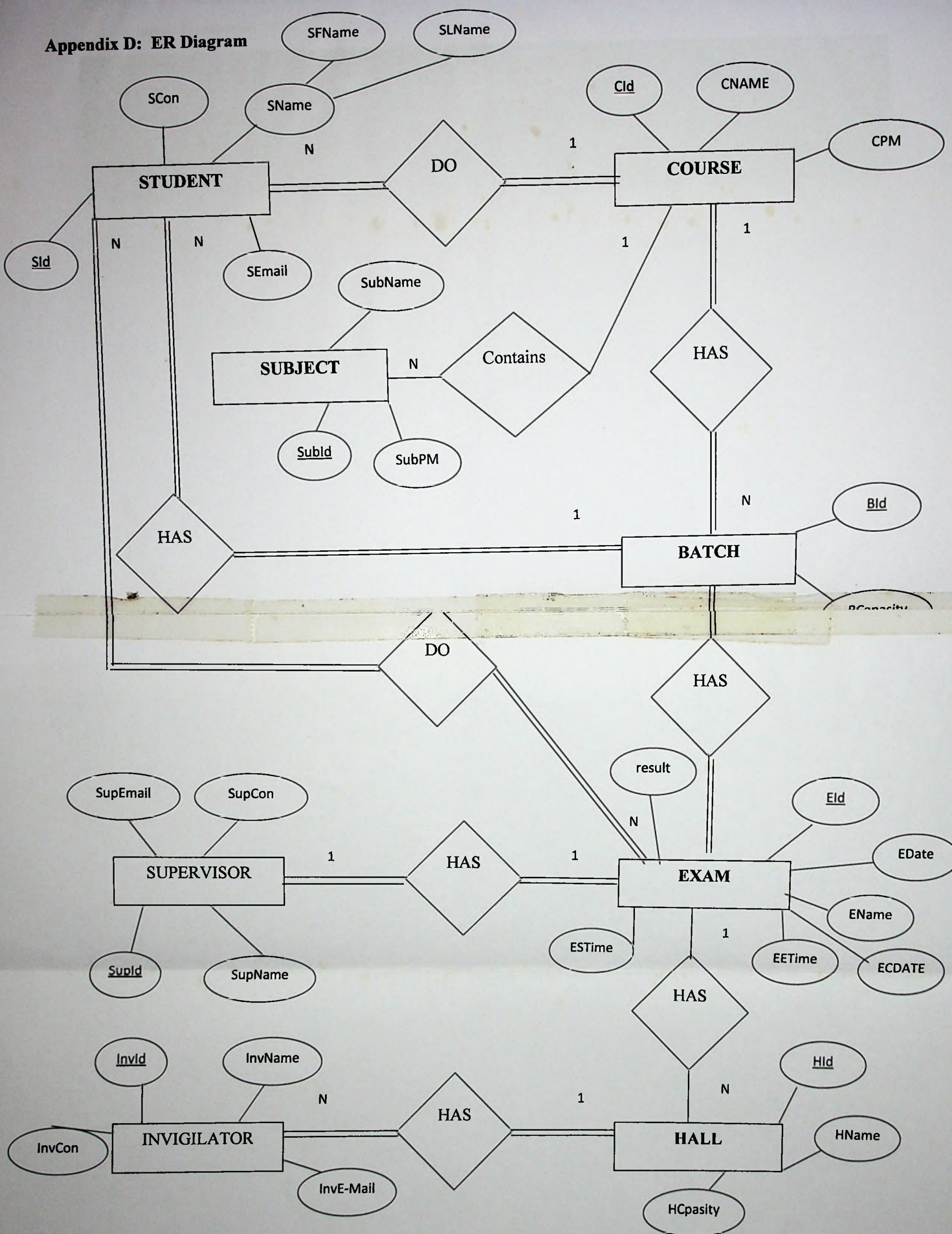
17. Have you made errors on awardees selection?

     I.   Yes
    II.   No

18. How much time you spend on selecting awardees of a particular batch?

     I.   Hour
    II.   Half a day
    III.   More than half a day.

Appendix D: ER Diagram

1. Schedule Examination

NIBM Examination Department

Schedule Exam

Exam information

Course Name Select ▼
Batch Name Select ▼
Subject Select ▼
Supervisor Select ▼

Exam Date YYYY-MM-DD   Closing Date YYYY-MM-DD   Start Time HH:MM   End Time

HH:MM   [Schedule]

NIBM Examination Department

Apply Repeat

Repeat Request

Subject | Select ▾ |

[Apply Repeat]

Applied Repeats

Subject	Date	Status

NIBM Examination Department

View My Result

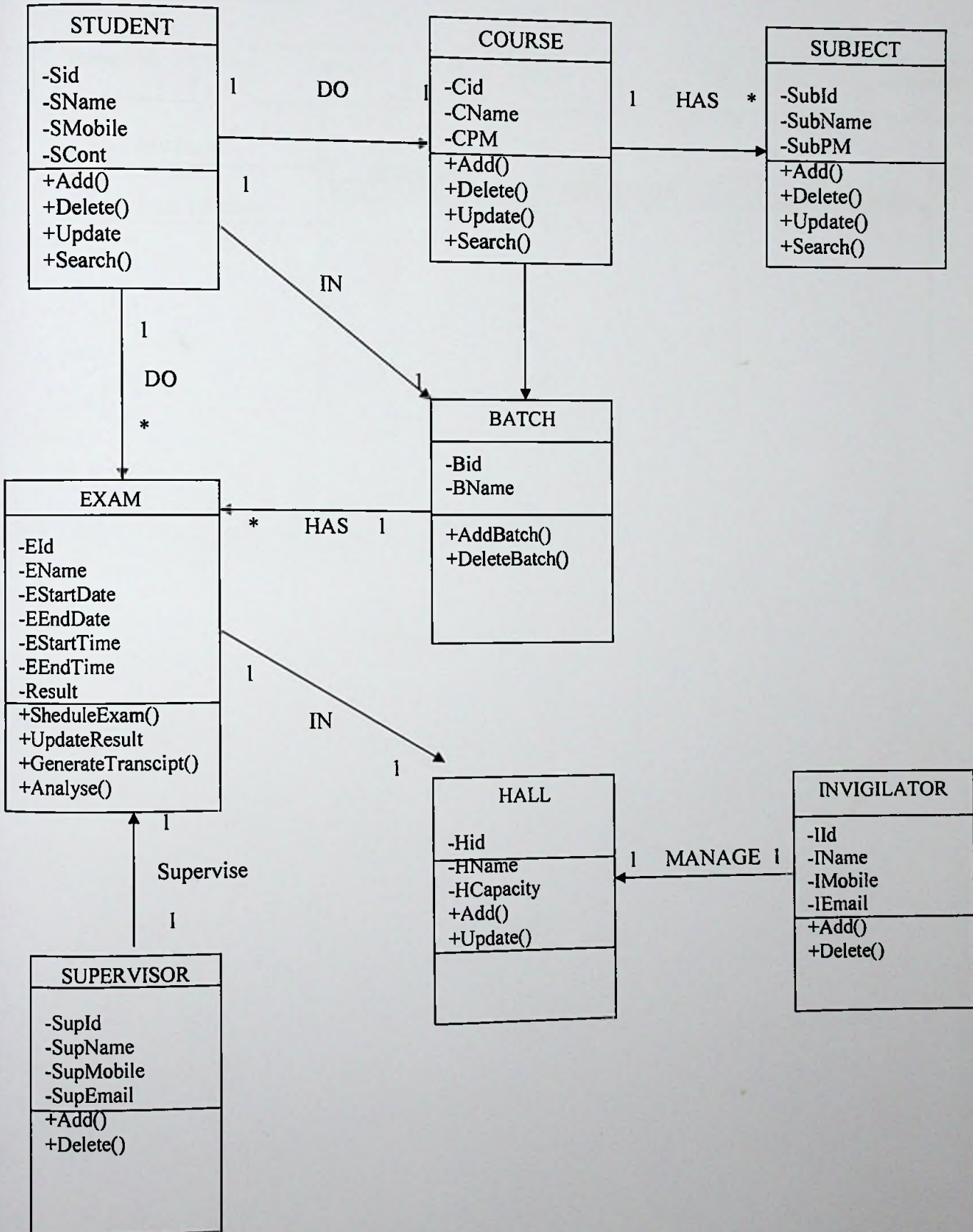| Subject	Marks	Grade	Grade Point

4. *Analyze Result*

NIBM Examination Department
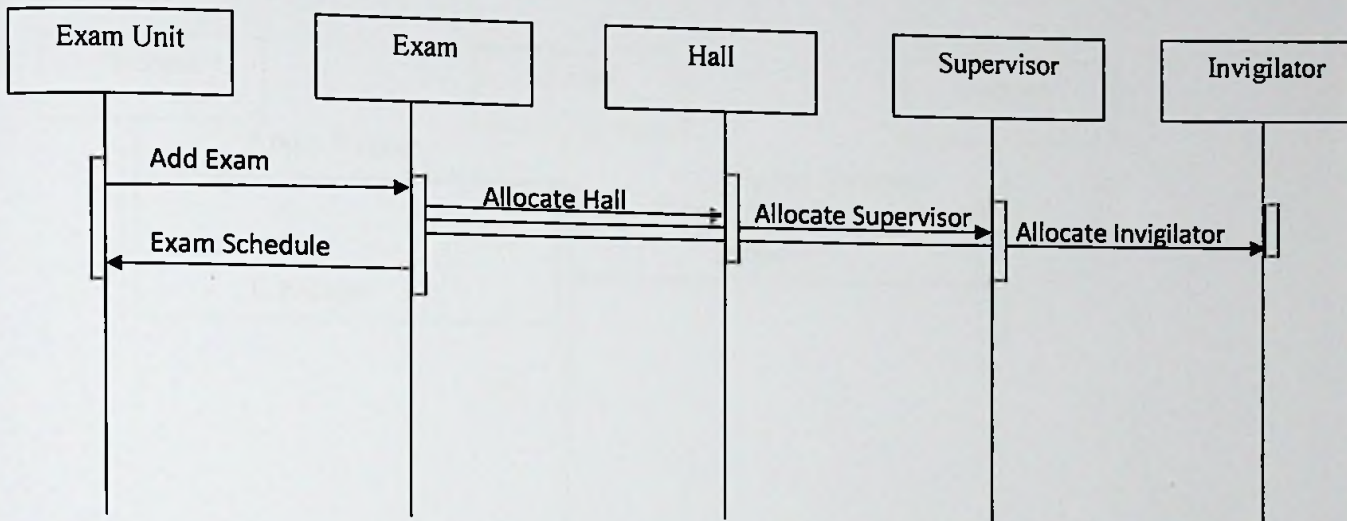
User Name : thisara

Course Name Select ▼

Batch From Select ▼

Batch To Select ▼

Genarate

Appendix F: Class diagram

STUDENT

-Sid
-SName
-SMobile
-SCont

+Add()
+Delete()
+Update
+Search()

COURSE

-Cid
-CName
-CPM

+Add()
+Delete()
+Update()
+Search()

SUBJECT

-SubId
-SubName
-SubPM

+Add()
+Delete()
+Update()
+Search()

1   DO   1   HAS   *

1   IN

1   DO   *

BATCH

-Bid
-BName

+AddBatch()
+DeleteBatch()

EXAM

-EId
-EName
-EStartDate
-EEndDate
-EStartTime
-EEndTime
-Result

+SheduleExam()
+UpdateResult
+GenerateTranscipt()
+Analyse()

*   HAS   1

1   IN   1

HALL

-Hid
-HName
-HCapacity
+Add()
+Update()

INVIGILATOR

-IId
-IName
-IMobile
-IEmail

+Add()
+Delete()

1   MANAGE   1

1   Supervise   1

SUPERVISOR
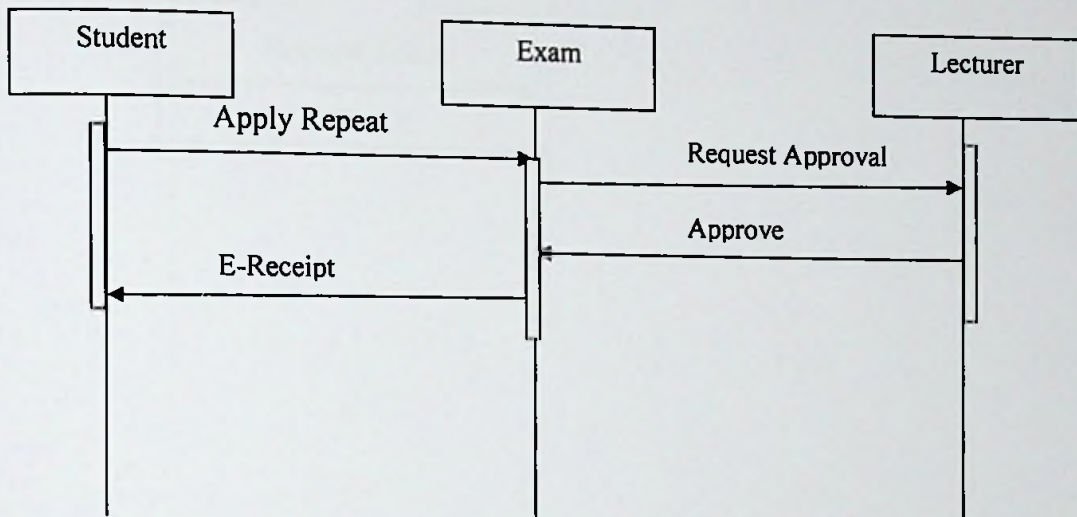
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-SupName
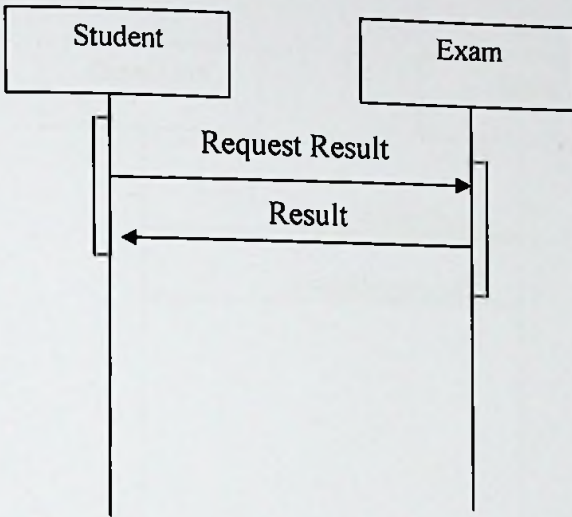-SupMobile
-SupEmail

+Add()
+Delete()

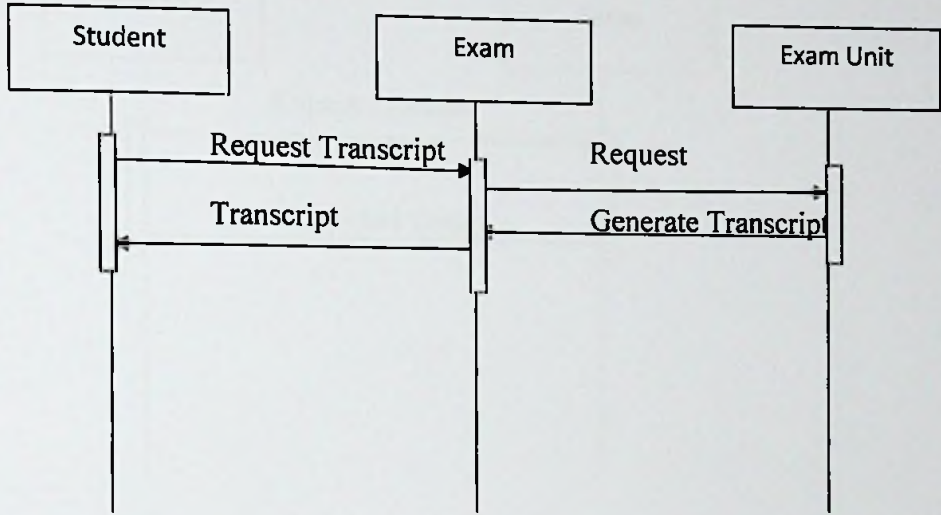# Appendix G: Sequence Diagrams
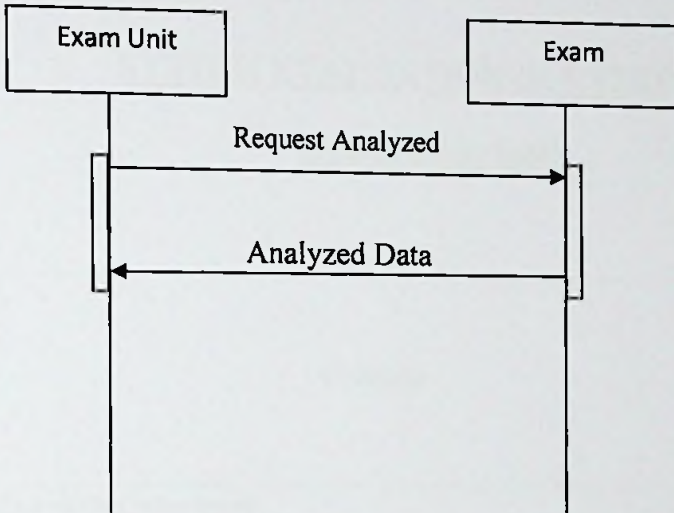
1. Schedule Examination

2. Register Exam

3. Result view

4. Select Awardees
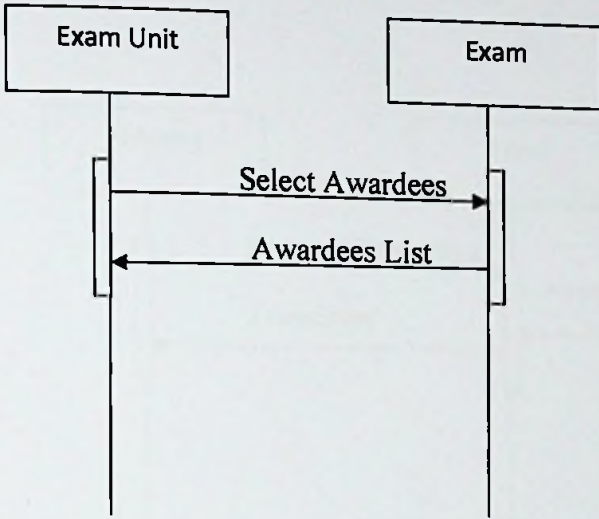
5. Transcript Generation

6. Analyze Result

Exam Unit — Exam

Request Analyzed

Analyzed Data

Appendix H: User Evaluation

SYSTEM EVALUATION QUESTIONER

Examination Staff

	Criteria	Excellent	Good	Satisfactory	Weak
1	Design of the interfaces.				
2	User friendliness of the software.				
3	Time spend on exam activities now.				
4	Accuracy of examination records generated by the software.				
5	Tasks given by the software				

SYSTEM EVALUATION QUESTIONER

Student

	Criteria	Excellent	Good	Satisfactory	Weak
1	Design of the interfaces.				
2	User friendliness of the software.				
3	Time spend on examination tasks such as View Result.				
4	Accuracy of examination records generated by the software.				
5	Expected outcomes of the software				

SYSTEM EVALUATION QUESTIONER

Lecturer

	Criteria	Excellent	Good	Satisfactory	Weak
1	Design of the interfaces.				
2	User friendliness of the software.				
3	Time spend on view exam records				
4	Accuracy of examination records generated by the software.				
5	Expected outcomes of the software				