Software Engineering

HDCBIS Group Assignment

NIBM Academic Records Management System

13.2

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13.2

## Acknowledgement

We thank the staff of NIBM all other who gave us the fullest support in guiding, advising and giving us knowledge upon which we build our future careers.

Last but not least we thank all those whose names, though not mentioned for their help and encouragement in completing this project.

OUR SINCERE THANKS TO ALL.

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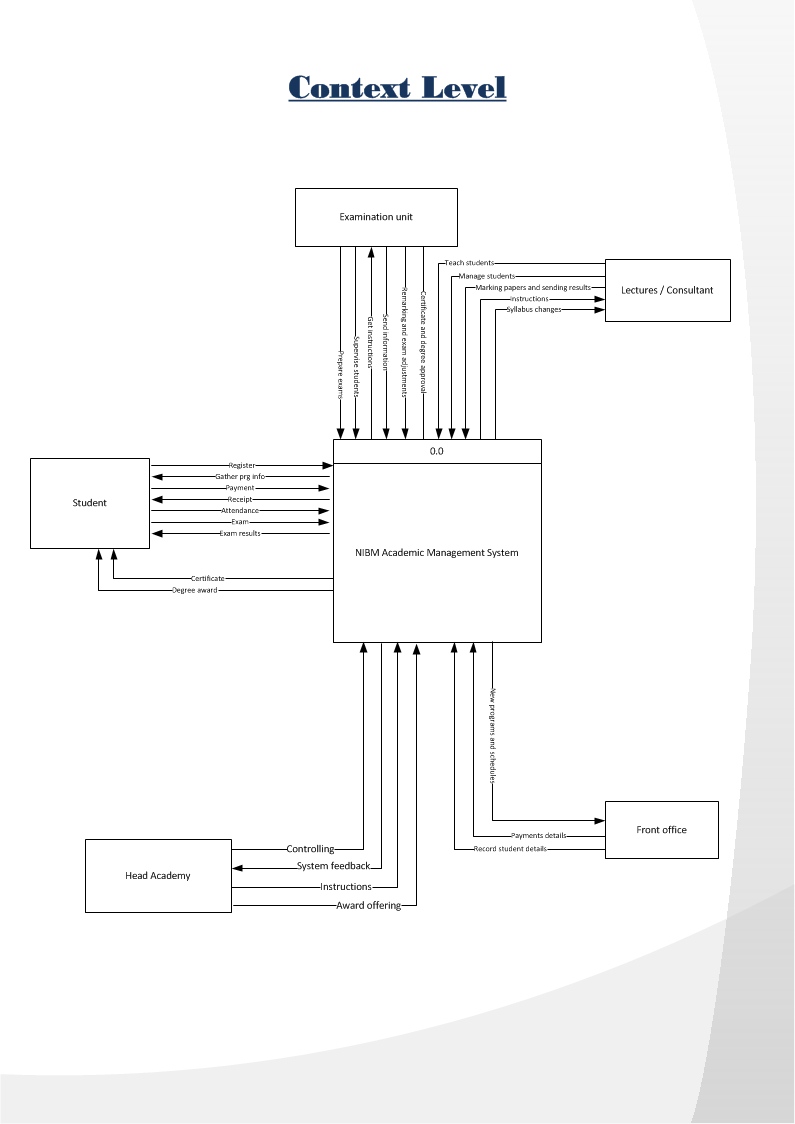
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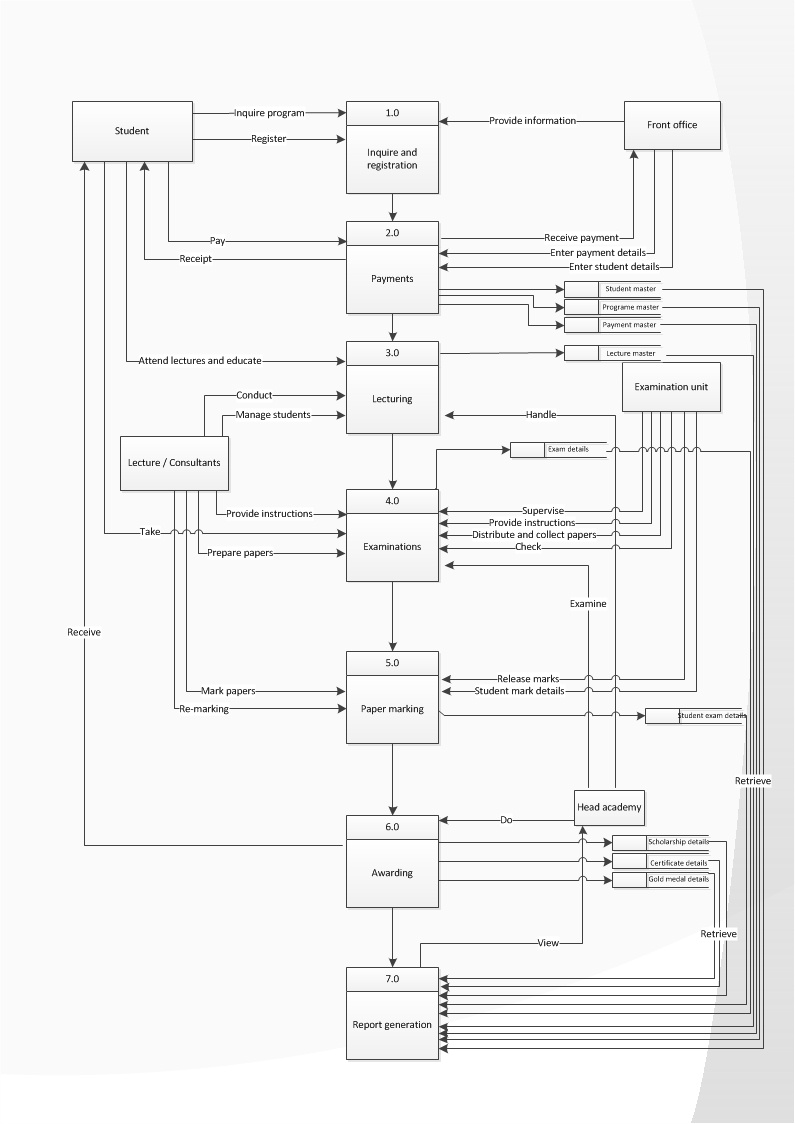
# Benefits of propose system

Assumptions

# Context Level



# Level 0



# File Design

|  |  |
| --- | --- |
| File no | File name |
| F01 | Student Master |
| F02 | Lecturer Master |
| F03 | Programme Master |
| F04 | Examination Board Master |
| F05 | Unit Head Details |
| F06 | Module Details |
| F07 | Student Batch Details |
| F08 | Exam Details |
| F09 | Batch Details |
| F10 | Student Exam Details |
| F11 | Payment Master |
| F12 | Payment Details |
| F13 | Student suspension Details |
| F14 | Certificate Receiver Details |
| F15 | Gold Medal details |
| F16 | Scholarship Details |
| F17 | Student Attendance Details |
| F18 | Lecture Attendance Details |

**File No : - F01**

**File Name : - Student\_Master**

**File Description : - Students’ Details**

**Record Size : - 200**

**Primary Key : -Std\_ID**

**File Organization : - Index**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Std\_ID | Student Number | Number | 12 |
| 02 | Std\_Name | Student Name | Text | 30 |
| 03 | NIC | NIC Number | Text | 10 |
| 04 | Gender | Gender | Text | 6 |
| 05 | DOB | Date Of Birth | Date | 10 |
| 06 | Address | Address | Text | 60 |
| 07 | Contact\_No | Contact Number | Number | 10 |
| 08 | Email | E-mail | Text | 25 |
| 09 | Regi\_Date | Registration Date | Date | 20 |
| 10 | Regi\_Time | Registration Time | Text | 8 |

**File No : - F02**

**File Name : - Lecturer\_Master**

**File Description : - Lecturer Details**

**Record Size : - 80**

**Primary Key : - Lect\_ID**

**File Organization : - Index**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Lect\_ID | Lecturer ID | Text | 10 |
| 02 | Name | Lecturer’s Name | Text | 20 |
| 03 | Division | Division | Text | 40 |
| 04 | Center | Lecturer’s Center | Text | 10 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Pgrm\_ID | Programme Code | Text | 4 |
| 02 | Division | Division | Text | 40 |
| 03 | Type | Programme Type | Text | 25 |
| 04 | Prg\_Name | Programme Name | Text | 45 |
| 05 | Prg\_Director | Programme Director’s Name | Text | 20 |

**File No : - F03**

**File Description : - Programme\_Master**

**Record Size : - 135**

**Primary Key : - prgm\_ID**

**File Organization : - Index**

**File No : - F04**

**File Name : - Examination Board\_Master**

**File Description : - Examination Board Details**

**Record Size : - 35**

**Primary Key : - Exam\_Off\_ID**

**File Organization : - Index**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | ExamOff\_ID | Exam Officer ID | Text | 5 |
| 02 | ExamOff\_Name | Exam Officer Name | Text | 20 |
| 03 | Contact\_No | Contact Number | Number | 10 |

**File No : - F05**

**File Name : Unit Head\_Details**

**File Description : - Unit Head Details**

**Record Size : - 50**

**Primary Key : - UHead \_ID**

**Foreign Key : - Lect\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | UHead\_ID | Unit Head ID | Text | 5 |
| 02 | Lect\_ID | Lecturer ID | Text | 5 |
| 03 | Name | Unit Head’s Name | Text | 20 |
| 04 | Center | Center | Text | 10 |
| 05 | Contact\_No | Contact Number | Number | 10 |

**File No : - F06**

**File Name : - Module\_Deatils**

**File Description : - Module Details**

**Record Size : - 30**

**Primary Key : - Mdl\_ID**

**Foreign Key : - Lect\_ID**

**File Organization : - Sequential**

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| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Mdl\_ID | Module ID | Text | 4 |
| 02 | Module\_Name | Module Name | Text | 20 |
| 03 | Lect\_ID | Lecturer ID | Text | 5 |
| 04 | Credit\_Points | Credit Points | Number | 1 |

**File No : - F07**

**File Name : - Student Batch\_Details**

**File Description : - Student Batch Details**

**Record Size : 18**

**Foreign Key : -Std\_ID,Batch\_Code, Pgrm\_Code**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Std\_ID | Student Number | Number | 8 |
| 02 | Batch\_Code | Batch Code | Number | 6 |
| 03 | Pgrm\_Code | Programme Code | Text | 4 |

**File No : - F08**

**File Name : - Exam\_Details**

**File Description : - Examinations’ Details**

**Record Size : - 38**

**Primary Key : -Exam\_Code**

**Foreign Key : - Mdl\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Exam\_Code | Examination Code | Number | 6 |
| 02 | Module\_ID | Module ID | Text | 4 |
| 03 | Date | Date | Date | 28 |

**File No : - F09**

**File Name : - Batch\_Details**

**File Description : - Batch Details**

**Record Size : - 85**

**Primary Key : - The row itself**

**Foreign Key : - Pgrm\_Code**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Batch\_Code | Batch Code | Number | 6 |
| 02 | Pgrm\_Code | Programme Code | Text | 4 |
| 03 | Start\_Date | Start Date | Date | 20 |
| 04 | End\_Date | End Date | Date | 20 |
| 05 | Status | Status | Text | 6 |
| 06 | Center | Center of given batch | Text | 10 |
| 07 | Programme\_Director | Programme Director’s Name | Text | 20 |

**File No : - F10**

**File Name : - Student Exam\_Details**

**File Description : - Students’ Examination Details**

**Record Size : - 18**

**Foreign Key : - Std\_ID,Exam\_Code**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Std\_ID | Student Number | Number | 8 |
| 02 | Exam\_Code | Examination Code | Number | 6 |
| 03 | Status | Student’s Exam Participation | Text | 4 |

**File No : - F11**

**File Name : - Payment master**

**File Description : - Students’ payment Details**

**Record Size : - 36**

**Primary Key :- Payment\_ID**

**Foreign Key : - Std\_ID,Exam\_Code**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | SPayment\_ID | Student Payment ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Date | Payment date | Date | 20 |

**File No : - F12**

**File Name : - Payment\_Details**

**File Description : - Payment Details**

**Record Size : - 291**

**Primary Key :- Payment\_ID**

**Foreign Key : - Std\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Payment\_ID | Payment ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Date | Payment date | Date | 20 |
| 04 | Desc | Description | Text | 255 |

**File No : - F13**

**File Name : - Student\_Suspension\_Details**

**File Description : - Students’ suspension Details**

**Record Size : - 291**

**Primary Key :- S\_ID**

**Foreign Key : - Std\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | S\_ID | Student Suspension ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Date | Payment date | Date | 20 |
| 04 | Des | Suspension description | Text | 255 |

**File No : - F14**

**File Name : - certificate\_receiver\_Details**

**File Description : - certificate received details of students**

**Record Size : - 46**

**Primary Key :- C\_ID**

**Foreign Key : - Std\_ID, Prgm\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | C\_ID | Certificate ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Prgm\_ID | Course ID | Text | 10 |
| 03 | Date | Payment date | Date | 20 |

**File No : - F15**

**File Name : - Gold\_Medal\_Details**

**File Description : - gold medal awarded details**

**Record Size : - 42**

**Primary Key :- M\_ID**

**Foreign Key : - Std\_ID**

**File Organization : - Sequential**

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| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | G\_ID | Gold medal ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Batch\_code | Batch code | Number | 6 |
| 04 | Date | Award date | Date | 20 |

**File No : - F16**

**File Name : - Scholarship\_Details**

**File Description : - Students’ scholarship Details**

**Record Size : - 291**

**Primary Key :- Sco\_ID**

**Foreign Key : - Std\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Sco\_ID | Student scholarship ID number | Number | 8 |
| 02 | Std\_ID | Student Number | Number | 8 |
| 03 | Date | Payment date | Date | 20 |
| 04 | Des | Description | Text | 255 |

**File No : - F17**

**File Name : - Student\_Attendance\_Details**

**File Description : - Students’ attendance Details**

**Record Size : - 28**

**Primary Key :- Date**

**Foreign Key : - Std\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Date | Date | Date | 20 |
| 02 | Std\_ID | Student Number | Number | 8 |

**File No : - F18**

**File Name : - Lec\_Attendance\_Details**

**File Description : - Lecturers attendance Details**

**Record Size : - 28**

**Primary Key :- Date**

**Foreign Key : - Lec\_ID**

**File Organization : - Sequential**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field No** | **Field Name** | **Description** | **Field Type** | **Field Size** |
| 01 | Date | Date | Date | 20 |
| 02 | Lec\_ID | Student Number | Number | 8 |

# SQL Commands

Student Master

\*SELECT \* FROM Student Master;

Lecture Master

\*SELECT \*FROM Lecture Master;

Programme Master

\*SELECT \* FROM Programme Master;

Board Master

\*SELECT \* FROM Examination Board Master;

Unit Head Details

\*SELECT UHead\_ID, Lect\_ID and Center FROM Unit Head\_Details;

Module details

\*SELECT \* FROM Module\_Details WHERE Mdl\_ID=selected value AND Prgm\_code=selected value;

Student batch details

\*SELECT \* FROM Student\_Batch\_Details WHERE Pgrm\_Code= Selected value AND Center=Selected Value;

Student Exam details

\*SELECT \* FROM Student\_Exam\_Details WHERE Exam\_Code=Selected Value;

Batch details

\*SELECT \* FROM Batch\_Details WHERE Pgrm\_Code=Selected Value AND Center=Selected Value;

Student Exam details

\*SELECT \* FROM Student\_Exam\_Details WHERE Exam\_Code=Selected Value;

Student Payment Details

\*SELECT \* FROM Student\_Payment\_Details WHERE SPayment\_ID=selected value;

Student Suspension Details

\*SELECT \* FROM Student\_Suspension\_Details WHERE S\_ID=selected Value AND Std\_ID=Selected Value;

Certificate Receiver details

\*SELECT \* FROM Certificate\_Receiver\_Details WHERE C\_ID=selected value;

Gold Medal details

\*SELECT \* FROM Gold\_Medal\_Details WHERE Pgrm\_code=Selected Value AND Batch\_code=Selected Value;

Scholarship details

\*SELECT \* FROM Scholarship\_Details WHERE Sco\_ID=selected value;

Student Attendances

\*SELECT \* FROM Student\_Attendance-Details WHERE Std\_ID=selected value;

Lec Attendance details

\*SELECT \* FROM Lec\_Attendance\_Details WHERE Lect\_ID=selected value AND Center=Selected value;

# Report Generation

|  |  |
| --- | --- |
| Report No | Report Name |
| R01 | List of Gold Medal Winners |
| R02 | List of Scholarship Winner |
| R03 | List of Degree Certificates Receiver |
| R04 | List of Higher Diploma Certificate Receiver |
| R05 | List of Advance Diploma Certificate Receiver |
| R06 | List of Registered Participates of given |
| R07 | List of Suspended Students |
| F08 | Module Marks |
| F09 | Mark Sheet of a Batch |
| F10 | List of participation Who have with Drawn from a Batch |
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**List of Gold medal Winners**

Year ………………………….

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| **ID** | **Student Name** | **Batch** |
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**List of Scholarship winners**

Year………………………

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| **ID** | **Student Name** | **Batch** |
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**List of Degree Certificates Receivers**

Year………………………..

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| **ID** | **Student Name** | **Batch** |
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**List of Higher Diploma Certificate Receivers**

Year…………………………………

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| **ID** | **Student Name** | **Batch** |
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**List of Advance Diploma Certificate Receivers**

Year………………………..

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| **ID** | **Student Name** | **Batch** |
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**List of Registered Participates of a given**

Program and batch: ......

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| --- | --- | --- | --- |
| **ID** | **Student Name** | **Program** | **Batch** |
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**List of suspended students.**

Year……………….

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| --- | --- | --- | --- |
| **ID** | **Student Name** | **Reason** | **Batch** |
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**Module marks**

Module Name…………………………..

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| --- | --- | --- | --- |
| **ID** | **Student Name** | **Mark** | **Grade** |
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**Mark sheet of a batch**

Year………………

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID** | **Student Name** | **Grade** | | | |
| VB | OOP | C++ | .Net |
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**List of participants who have withdrawn from a batch**

|  |  |  |
| --- | --- | --- |
| **ID** | **Student Name** | **Payment** |
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