

Requirement Analysis and Feasibility Study
Course Management
System



Prepared By



Name	Student ID
Ahamed Al Nahian	1005002
Abdul Kawsar Tushar	1005006
Shekh Moinul Hasan	1005015
Mostafizur Rahman	1005017
Ifta Noor Mahmood	1005027



Outline



- 1. Fishbone Diagram
- 2. Feasibility
 - 2.1 Operational
 - 2.2 Cultural
 - 2.3 Technical
 - 2.4 Schedule
 - 2.5 Economic
- 3. Data Flow Diagram
 - 3.1 Account Management System
 - 3.2 Course Content Management System
 - 3.3 Exam and class management system
 - 3.4 Notification and Warning system
 - 3.5 Interactive routine system

1.1 Account Management System Fishbone Diagram



Not accessible to teachers

Not organized

Profile

Unwillingness to use certain platforms

Members

Scattered across platforms

Account Management

Manual creation of groups

Manual joining of groups

Numerous IDs and passwords

No common platform

Method

System

CMS 1.2 Course Content Management System Fishbone Diagram Members Materials Method No auto notification Not Redundant Member method organized materials ignorant No of Getting tracking contents Course Need tracking of Contents several Very few Manual platforms dedicated No common No common **Suppliers** system supplier **Procedure System Suppliers**



1.3 Exam and Class Management System Fishbone Diagram



Offline

Scattered uploaded files

No auto deadline detection

Scheduling Exam/Class

Teacher discussing with students

Forgot what portion has been taught

Syllabus

Ignorant of time schedule

Exam and
Class
Management
System

Discuss with students

reaching to student

Problem

Marks

1.4 Notification and Warning System Fishbone Diagram



Ignorance about exam or attendance mark

No automatic notification system

Reluctance to check groups regularly

Missing a number of notifications

Not member of all groups

Having Notification

Too much groups to maintain each term

Reluctance to Join groups



1.5 Interactive Routine System Fishbone Diagram



Alternative policy
Lack of

synchronization

Lack of enforcement

Writing update in different class note

Scattered materials

Keeping different groups

Tracking future course of event

Teachers discussing in class

Time consuming

Lack of synchronized overview

Inadequate

policy

Missing topic among many sources

Forgetting to write in class note

Asking other students

Manually surfing different groups

Error prone

8



2.1 Operational Feasibility



- Automated System saving time of both teachers and students
- Only one place to find all necessary contents
- No need to search to others for course contents as it will always be saved in a specific place
- Easy and low maintenance



2.2 Cultural Feasibility



- ❖ **Definition:** A measure of how the end users <u>feel</u> about the proposed system
 - Multicultural organizations
 - Change of information structure -> change of power structure
- Official directive for teachers and students preferring Facebook/Google groups
- Mobile application / Facebook application for students who might not have time or forget to check system
- Training session for teachers who might be reluctant to use system
- Greater responsibility on CR when teacher is unavailable



2.3 Technical Feasibility



- Issue 1: Is the proposed technology or solution is practical?
 - The proposal was to build an web based information system which is practical and easily implementable.
- Issue 2: Do we currently possess the necessary technology?

Required Technology	Status
Servers	Available
Personal Computers	Available
Internet	Available
Web based programming language	There are enormous web based programming languages
Data base	Oracle or SQL database can be made.



2.3 Technical Feasibility (contd.)



- Issue 3: Do we possess the necessary technical expertise?
 - Yes, we do.



2.4 Schedule Feasibility



- The system is certainly necessary but not a crying need at the recent time. But Its necessity will increase with every passing second.
- The system may have relatively less benefit when first starts, but as time progresses the course content will increase and will become more beneficial.
- Once the system is developed, people will get benefitted for a long time.
- It also will not take much time to develop, it can be developed to perform its basic action within a very reasonable time.
- Technology will be more prevalent with time, so the scope will increase, but substantially later in the future.
- The project will never get obsolete with respect to its use, as number of users will only increase with time.
- Upon considering the above points it can be seen that the project can be completed much before the project or technology become obsolete.



2.5 Economic Feasibility: Costbenefit analysis



Cost:

- Development cost:
 - Manpower: 5/6 system developer and 1/2 personnel for data entry

Rough estimate: 500,000/-

- Server rent: 4000/-
- Operating cost:
 - Fixed costs:
 - Periodic checking and maintenance
 - server rent: 4000/year
 - Variable costs:
 - Sudden system failure



2.5 Economic Feasibility: Costbenefit analysis (contd.)



Bottom line:

- Development cost and operating cost are relatively very low compared to a university's annual budget.
- ❖ BUET spends around 91.33 crore a year.
 [Ref http://www.eduicon.com/News/Details/3011.html]



2.5 Economic Feasibility: Costbenefit analysis (contd.)



Benefits:

Tangible benefit:

- As the project is not intended for business purposes it does not recur tangible benefits.
- Some advertisement and sponsor offer can be obtained in future.

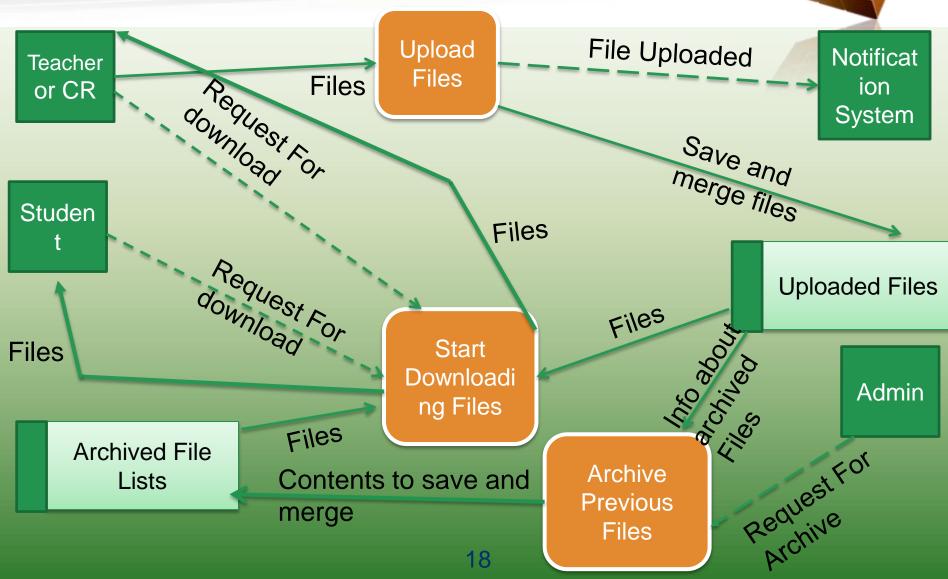
Intangible benefit:

- Saving time of thousands of student. If the system saves 1 hour per day of each student then it will amount to a tremendous amount for all students over years of study.
- No headache of getting used to with new platforms for each course each semester.
- Saving labor for collecting different materials like previous years course materials etc.

3.1 Account Management System **DFD** Create Generat Account Account and Info Info **Approve Notifica** account tion Approval / Denial Notification Account Info **Show Profile** Admin Request **Show Updated Info Updated** and Teacher Info Update Account **Show Profile** and profile Information Login and Logout Student Request Info Login Log in Info and out

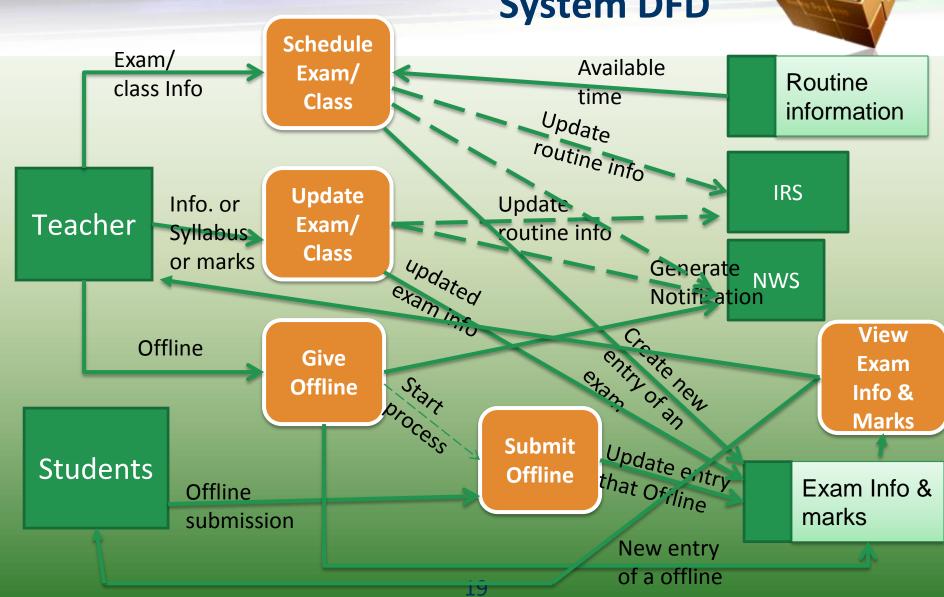
3.2 Course Content Management System DFD





3.3 Exam and Class Management

System DFD

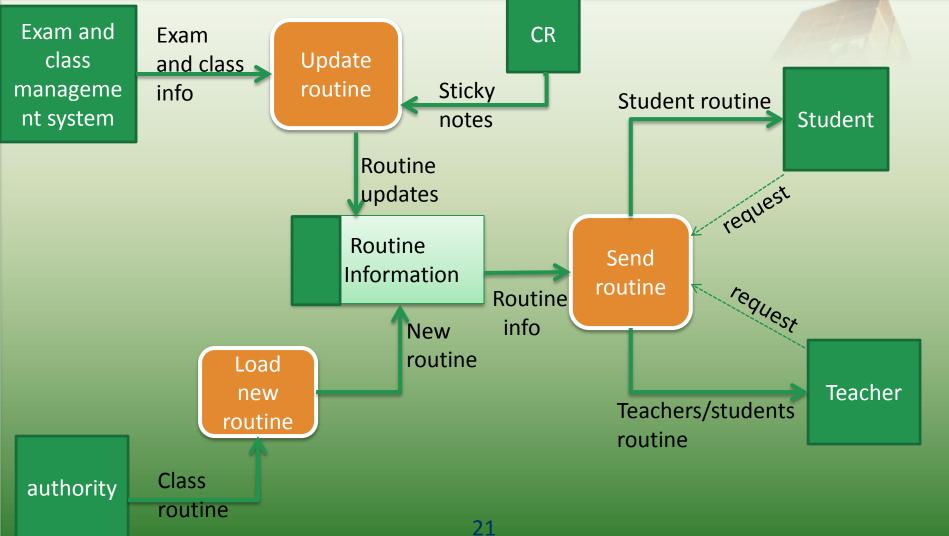


3.4 Notification and Warning System **DFD** Change of course content Course New uploaded file Generate Uploaded files content info **Notificati** management on system New exam Eligible batch info and file info info & Mark Send New Notification < **Notificati** Student Scheduled on exam Eligible Eligible student student Exam & class info and marks list management **View** Account system Generat **Notice** Information Warning Exam marks Exam info & Teacher Marks New Give New notice **Notice** notice **Notices All Notice** 20



3.5 Interactive Routine System DFD







Thank You



