Requirement Analysis and Feasibility Study

Course Management System

Prepared By

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2. Feasibility
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   - 3.3 Exam and class management system
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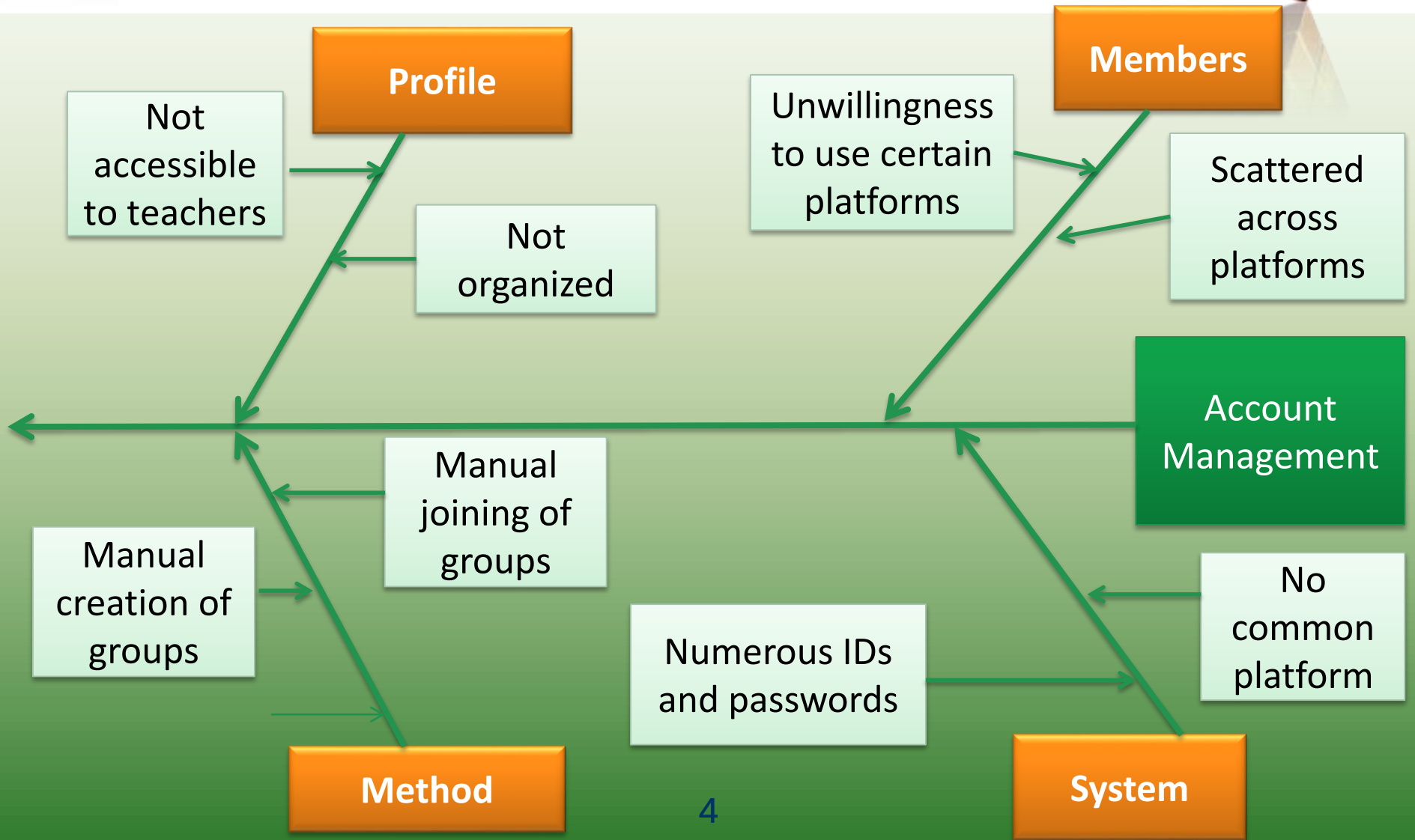
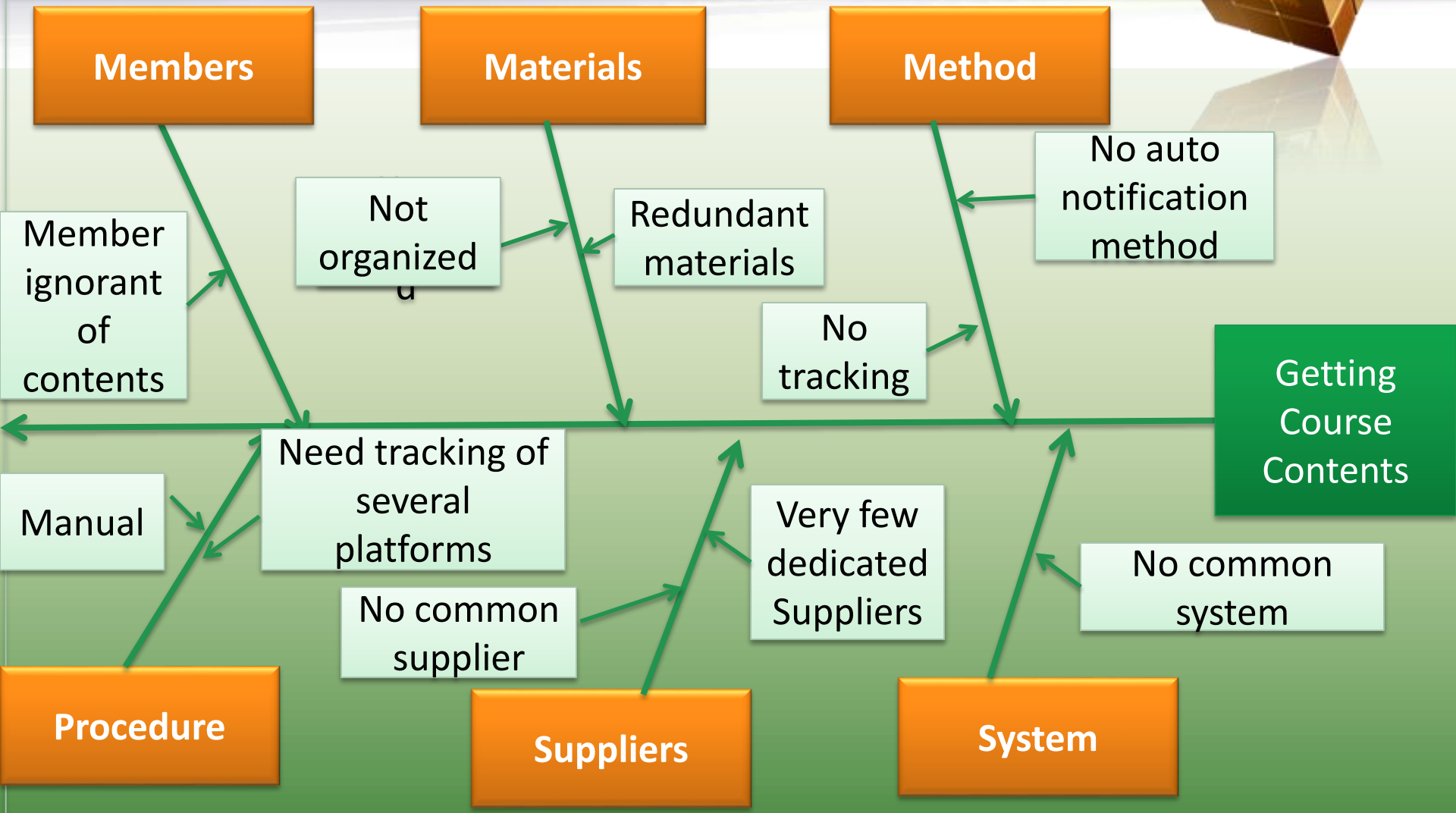
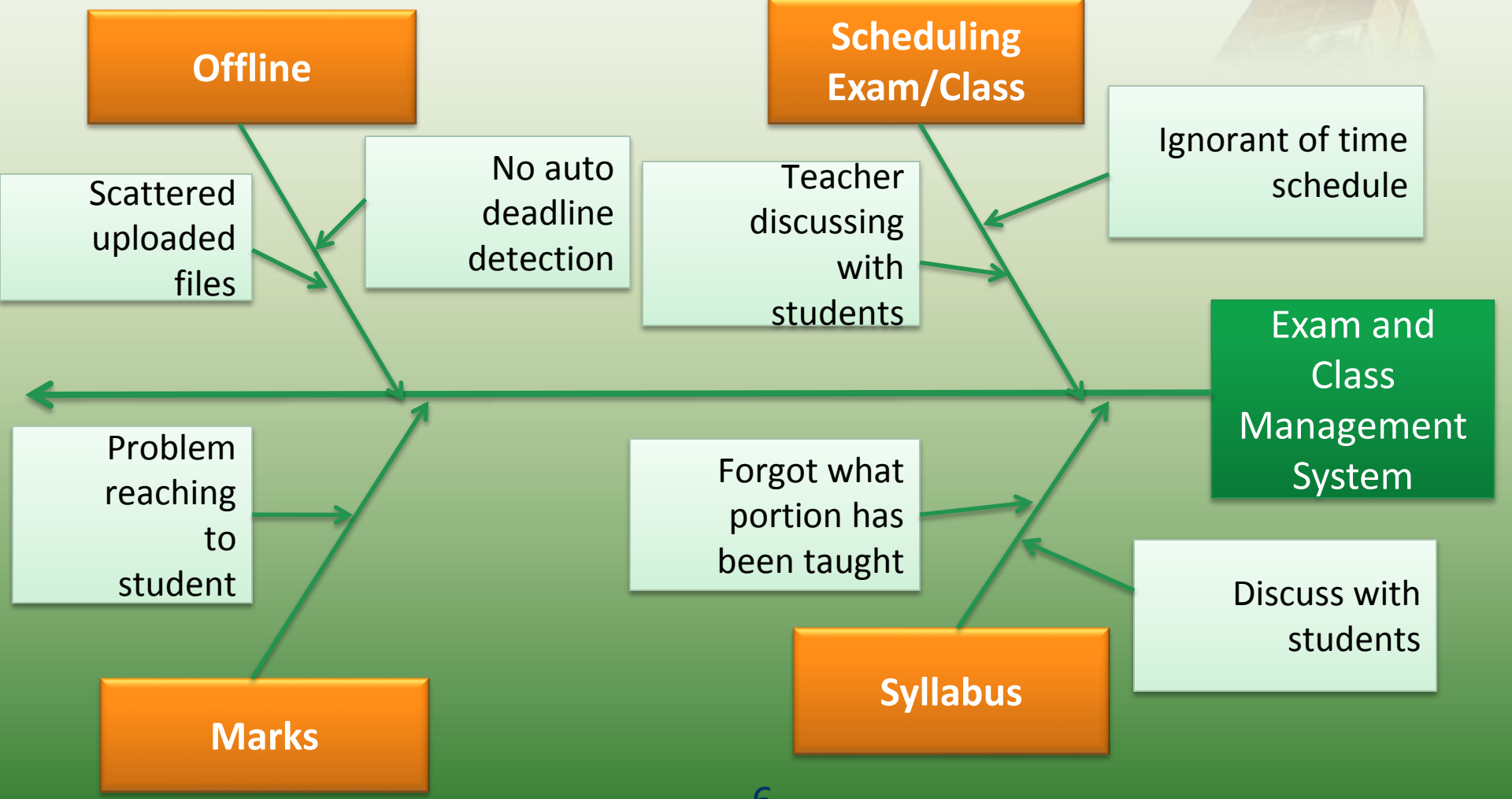
1.1 Account Management System Fishbone Diagram



CMS 1.2 Course Content Management System Fishbone Diagram



1.3 Exam and Class Management System Fishbone Diagram



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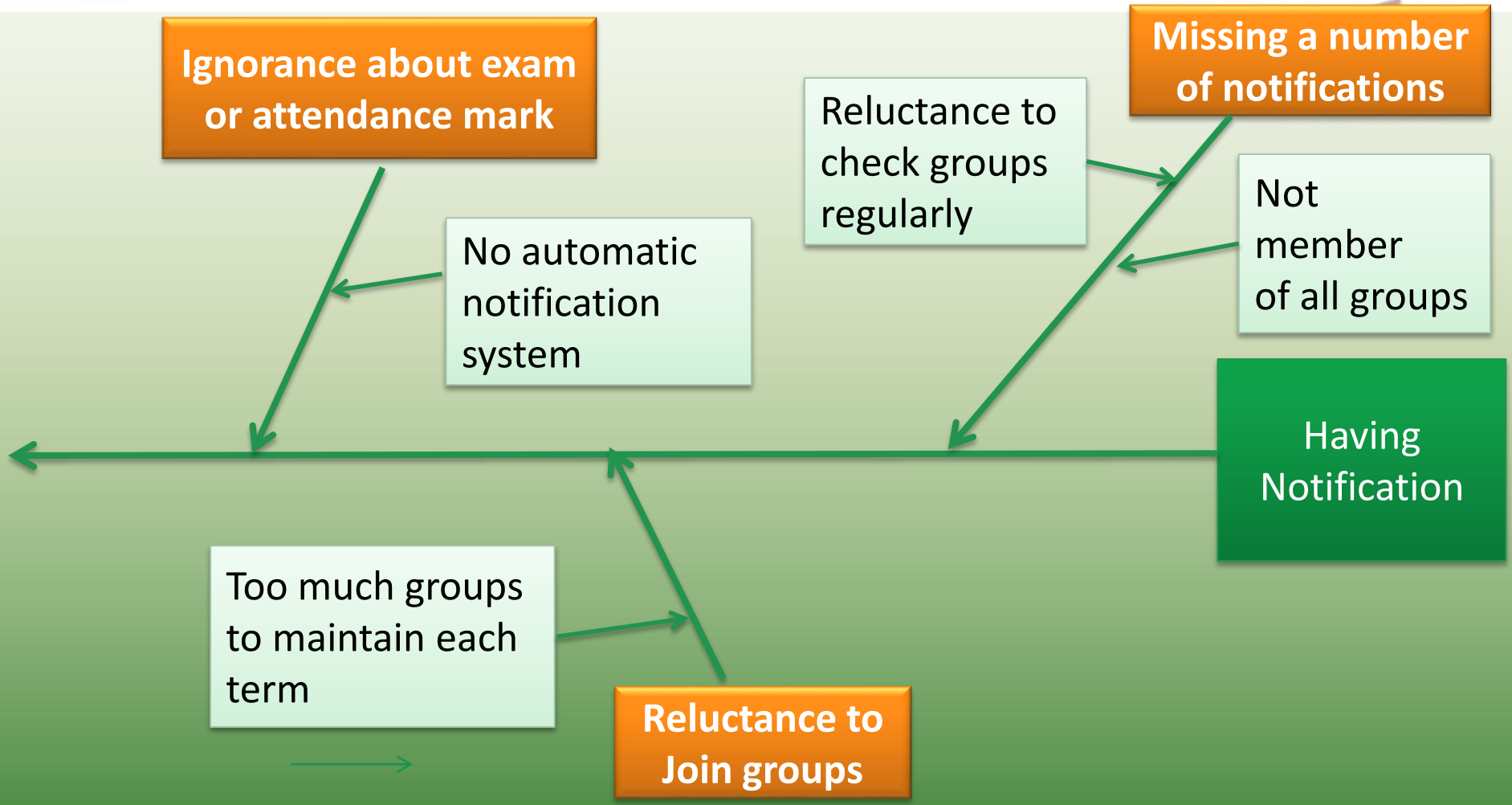
1.4 Notification and Warning System Fishbone Diagram



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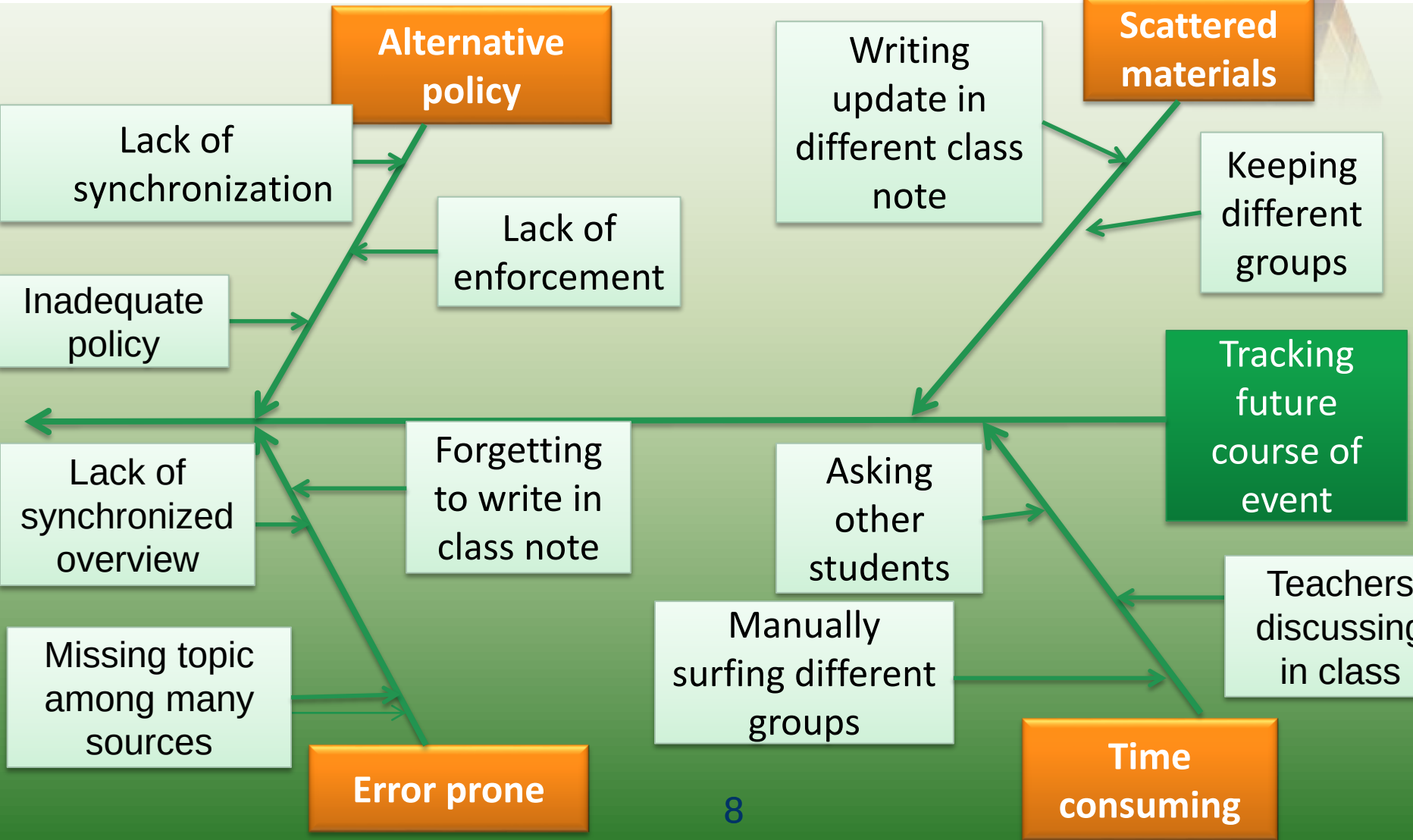
1.5 Interactive Routine System Fishbone Diagram



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 feel 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: Cost-benefit 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: Cost-benefit 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: Cost-benefit analysis (contd.)

- Benefits:

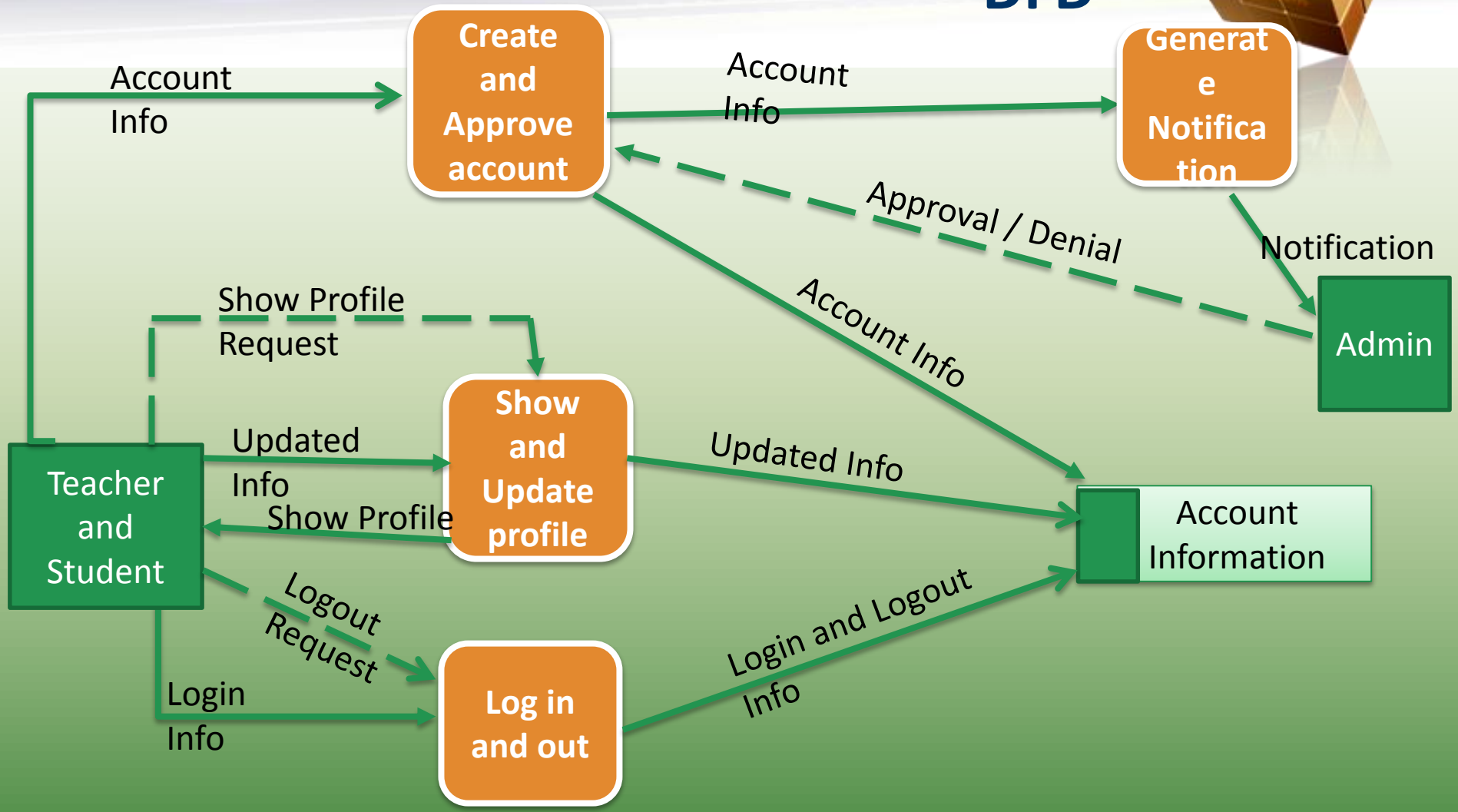
Tangible benefit:

- 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



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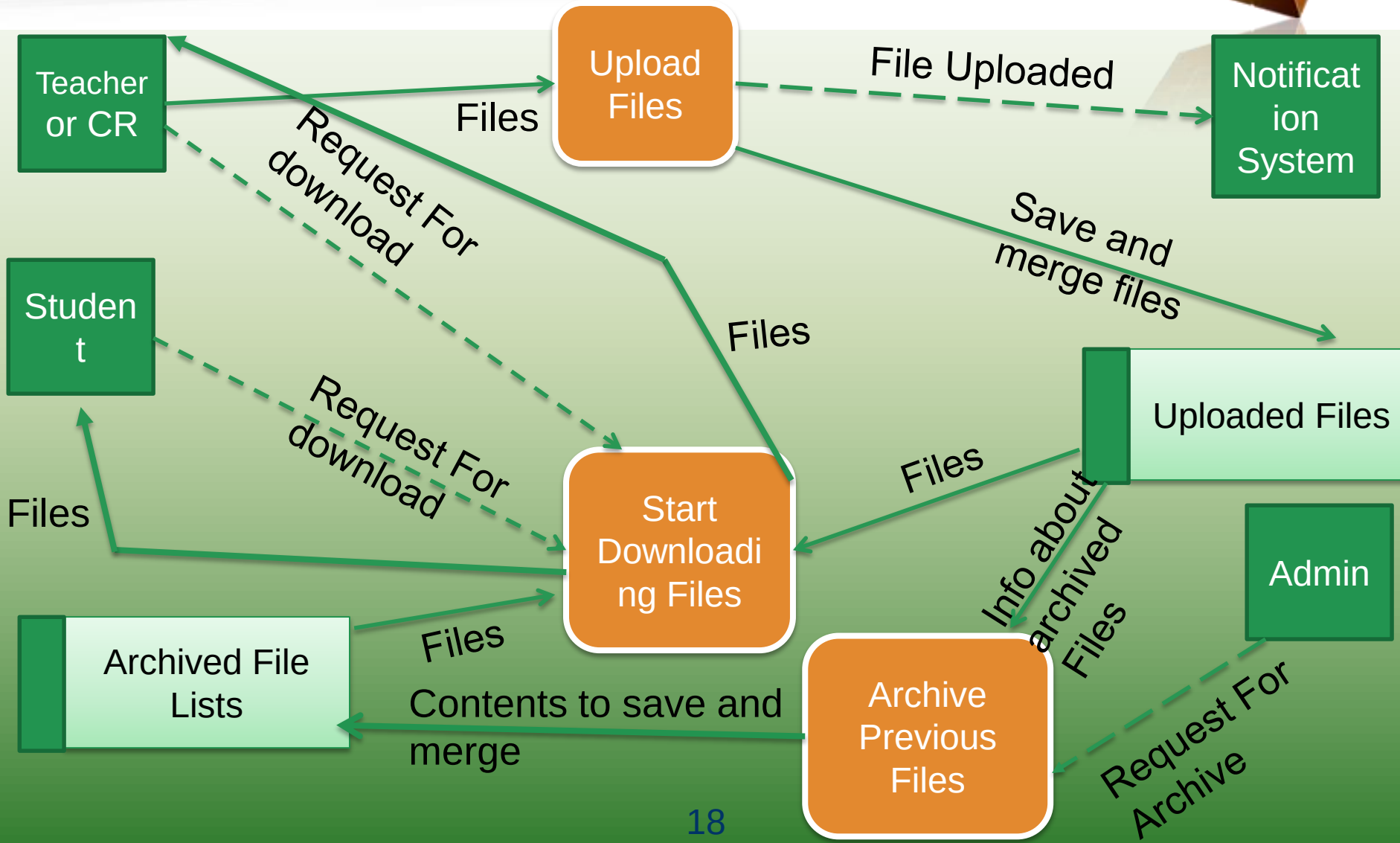
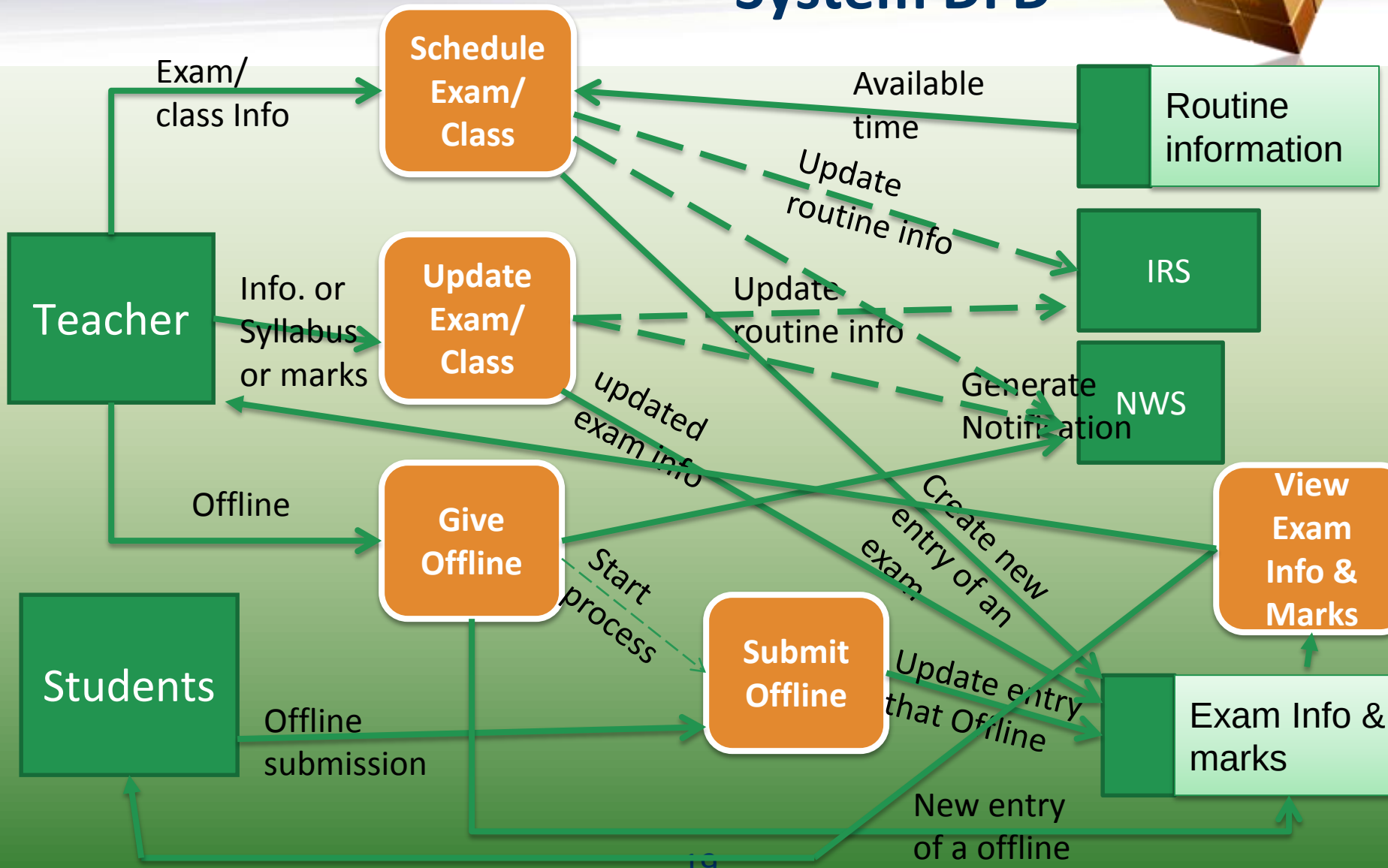
3.2 Course Content Management System DFD



3.3 Exam and Class Management System DFD



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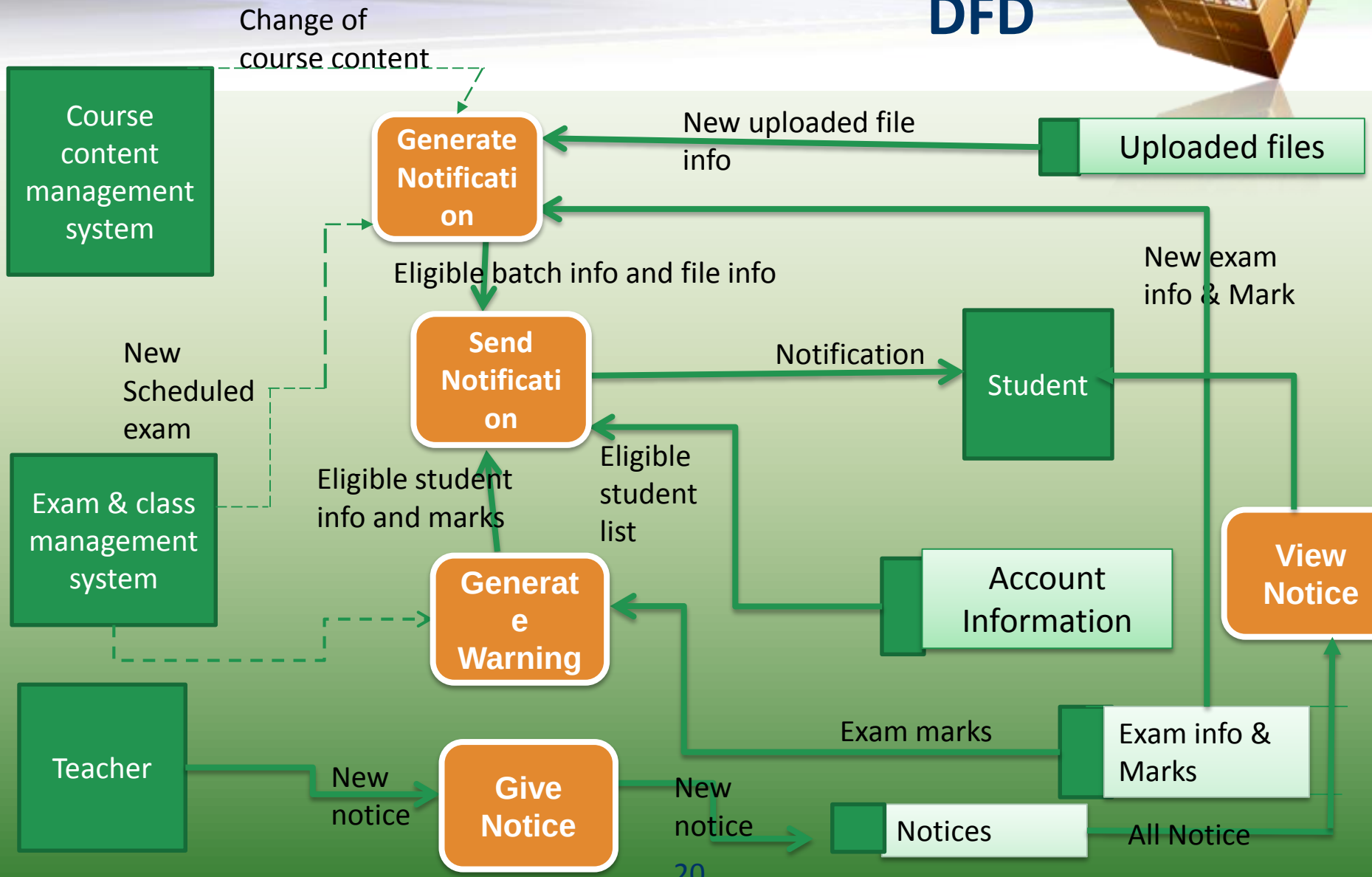
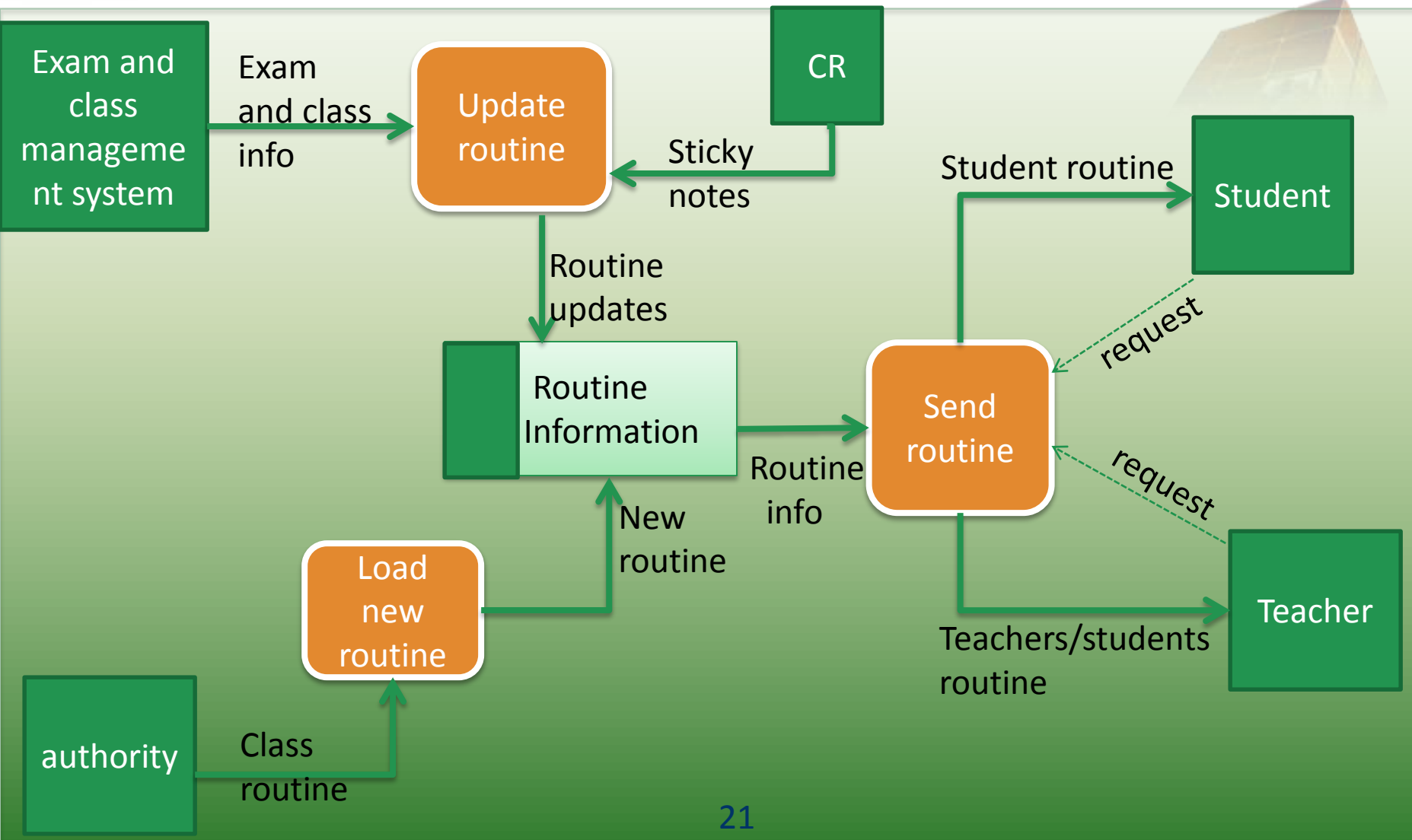
3.4 Notification and Warning System DFD



3.5 Interactive Routine System DFD



Thank You