Misr university for science and technology
Faculty of information technology
IS321:System Analysis And Design

IS321 Project

G13:E-Learning System Website

Section C (63210)

participants

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Introduction:-

E-Learning system is a collection of some entity, data store data flow and process, working together to make Learning in collage easier for student and teacher who works in university. Nowadays students are developing in a technological world. Technology creates a big role for students to deal with their studies as well as the teachers for their teaching. With the use of technology, it is now easy for the teachers to disseminate their learning materials and the students can access to get their learning materials easily. Through technology, education develops to a great level and has now become a need for transforming education for better. This system will help the students in getting the reliable information. It will also help the teachers to monitor the students.

Objectives:-

- Lessen the effort of distributing the learning materials.

- Help the student in getting the right information provided by the teacher.

- Lessen the expenses of students in terms of photocopy and printing of learning materials.

- Notify the students when they received Topics, Quiz, Announcement and files uploaded by their class teachers.

- Allows the teachers to upload files and students to downloadfiles.

- Allows the teachers and students to communicate through a message.

- Online web-based system that can be accessed anywhere that has internet access

Problem Statements:-

How to make the learning process more easy, efficient and can be accessed everywhere and anytime?

The clue to what an LMS(Learning Management System) should do is in its very descriptive name: Learning Management System. In this case, "system" refers to a software program designed to deliver your educational/training material, track its use, and then give you reports about how it all is going…or not. "Management" describes the administrative component of this system. In other words, once it is set up, there is an automaticity about it. You don't have to be on hand for every little step. Lastly, "learning" is the whole purpose of this system, no matter what that type of learning is.

Business activity:-

1. When student sign up a course, the teacher and the student file are both updated.

2. If there is a sign up from a new student, a new record is created.

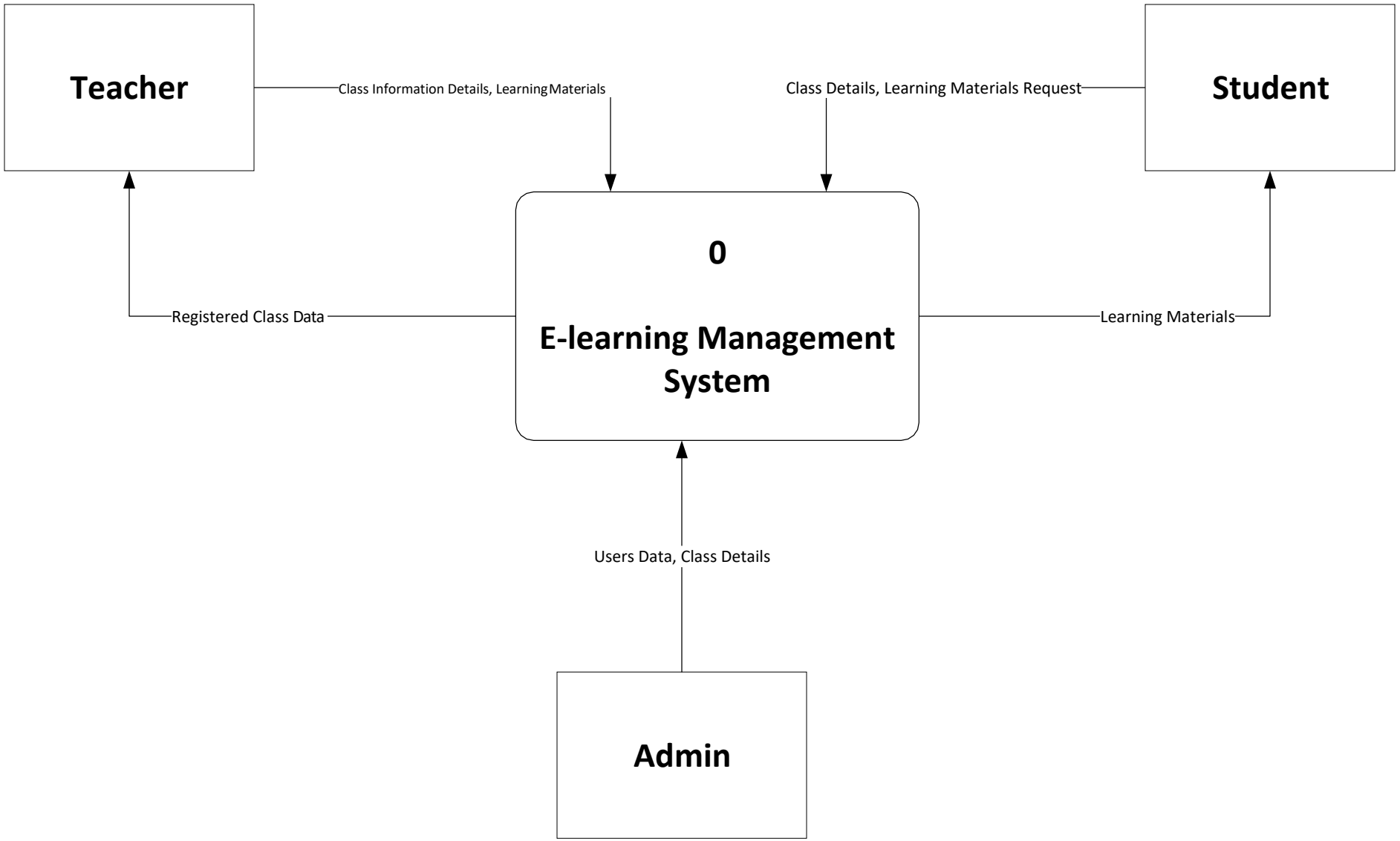
3. The Student courses are being registered.

4. Submit The timeline of the student courses.

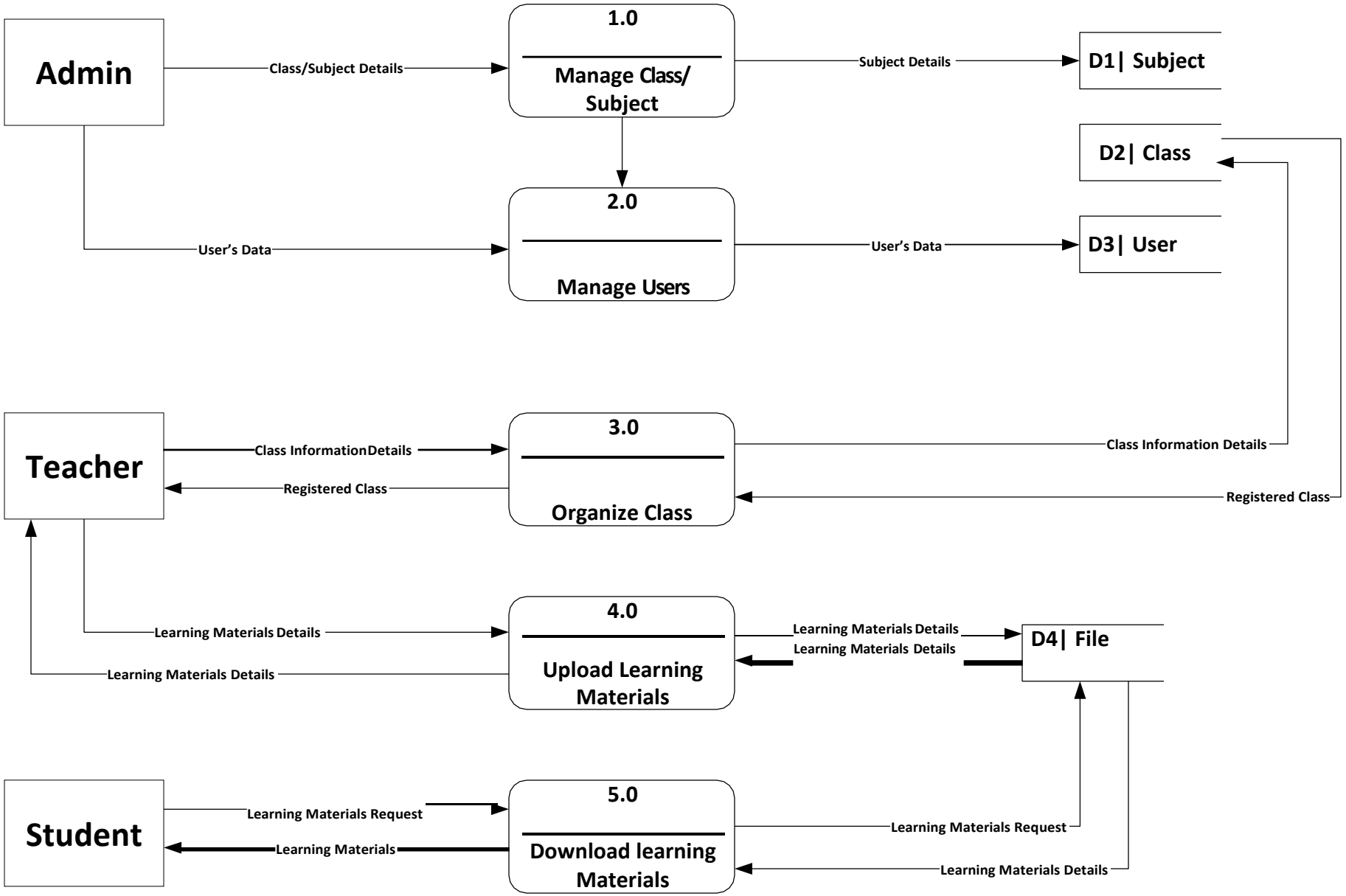
5. The process of register involves for the website to register the right semester subjects for the student, and then send it to theteachers notifying them who is registered in their class.

6. The student gets notified Whenever there are quizzes, assignments, events, etc.

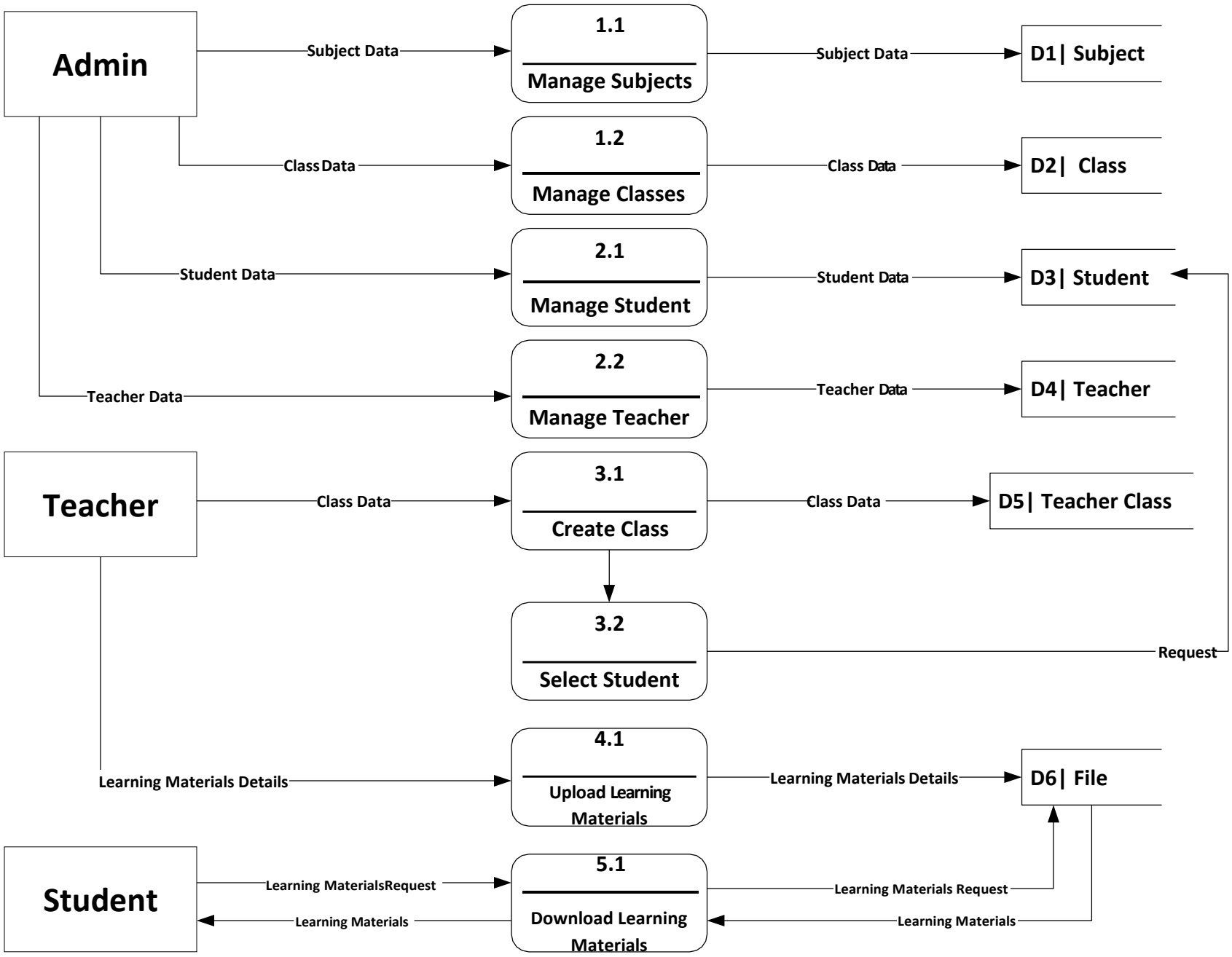
Context Diagram



Data Flow Diagram 0



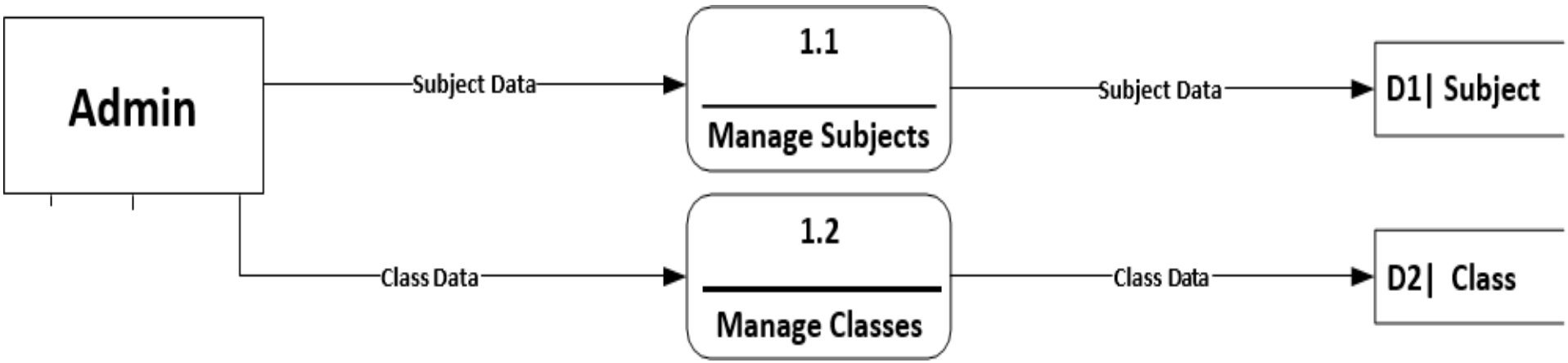
Child Diagram



Child Diagram 1

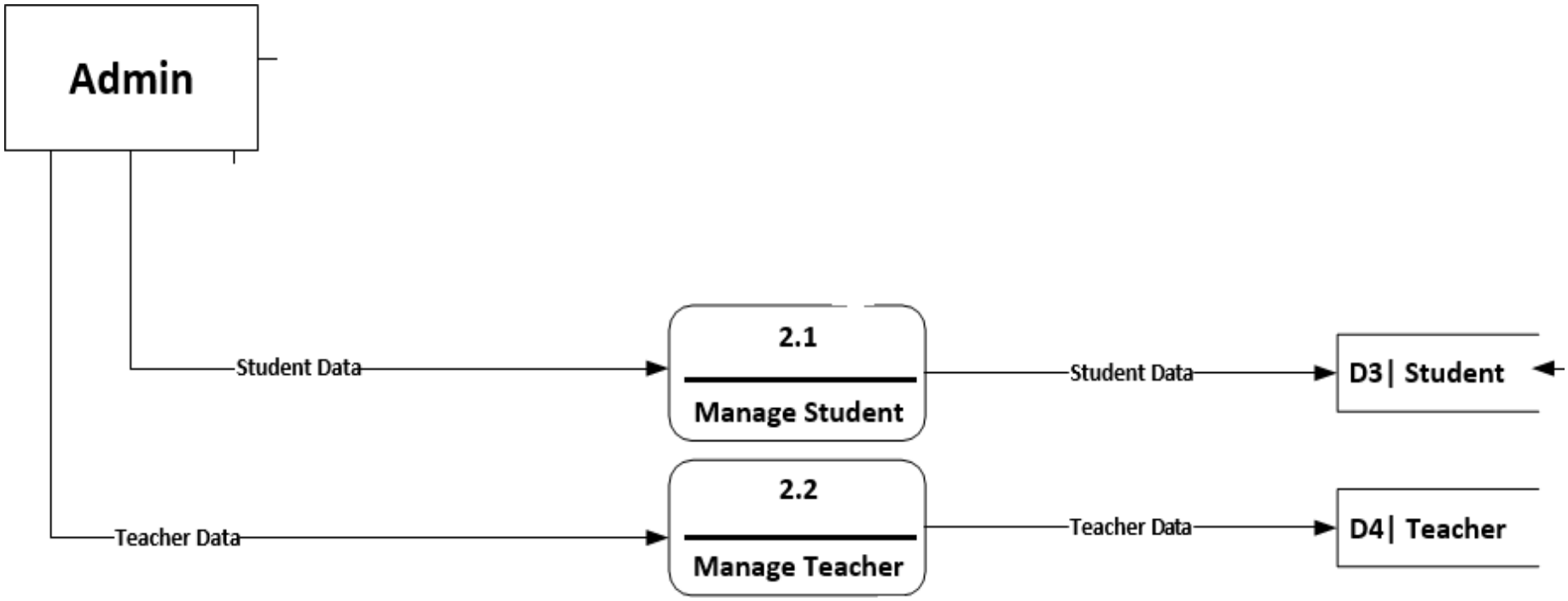
1- admin can upload/set subjects through process 1.1 [manage subjects], after that the data is saved in subjects data store D1.

2- admin can manage classes by process 1.2 [manage classes], after that the data is stored in the class data store D2.



child diagram 2

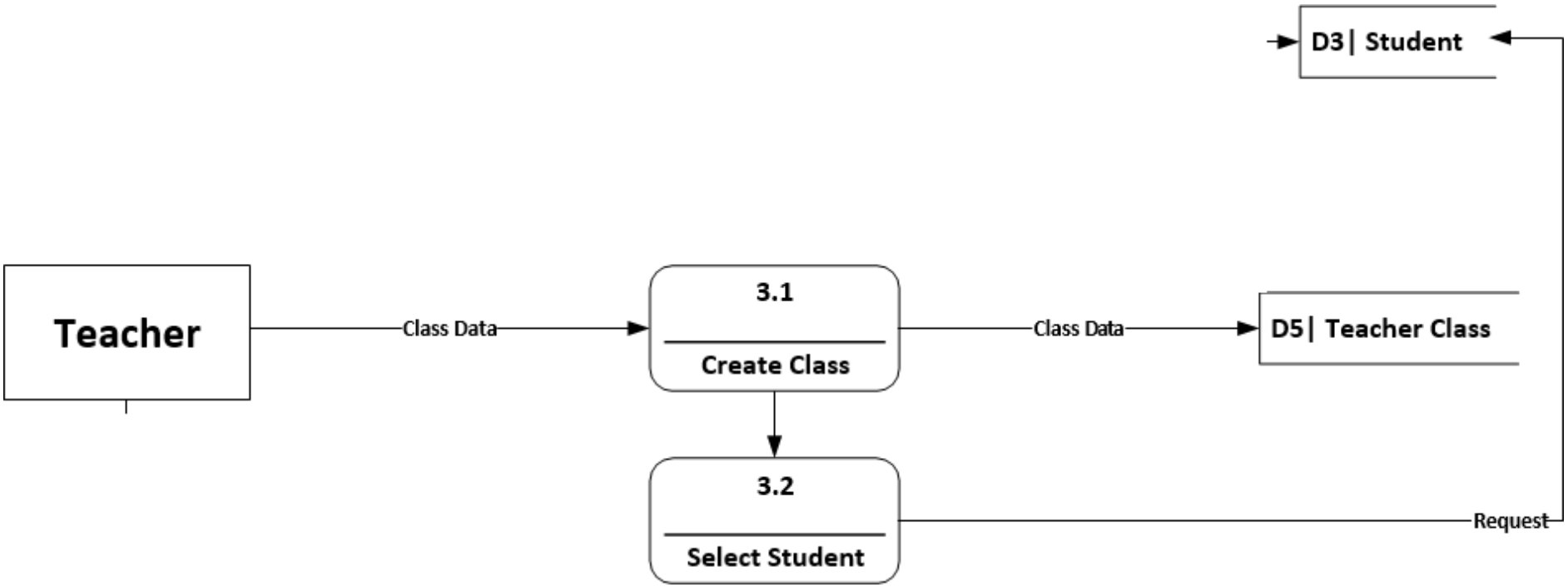
1-Admin enters student data to be managed through process2.1[Manage Student] after that the managed student data saved into Student data store D3.
2-Admin enters Teacher data do be managed through process 2.2[Manage Teacher] after that the managed teacher data is saved into teacher data store D4.



child diagram 3

1- teacher enters class data through process 3.1[create class] after that the class data is saved in teacher class data store D5.

2- teacher can select students who will attend the class through process 3.2[select student] after that the selected students stored in student data store D3.



All Process Specifications

Process ref :1.1

Process Name: Manage Subject

Description: Receive subject data from admin and processing it and send it to subject` data store

inputs	Logic summary	Outputs
Subject Data	Admin set subject data in process 1.1 Then after processing the subject data will be saved at D1 (subject)	Subject Data

Process ref :1.2

Process Name: Manage class

Description: Receive class data from admin and processing it and send it to class` data store

inputs	Logic summary	Outputs
Class Data	Admin set class data in process 1.2 Then after processing the class data will be saved at D2 (class)	Class Data

Process ref: 2.1

Process Name: Manage Student

Description: Receive student` data from admin and processing it and send it to student` data store

inputs	Logic summary	Outputs
Student Data	Admin set student data in process 2.1 Then after processing the student data will be saved at D3 (student)	Student Data

Process ref: 2.2

Process Name: Manage Teacher

Description: Receive teacher` data from admin and processing it and send it to teacher` data store

inputs	Logic summary	outputs
Teacher Data	Admin set teacher data in process 2.2 Then after processing the teacher data will be saved at D4 (teacher class)	Teacher Data

Process ref: 3.1

Process Name: Create Class

Description: Receive class` data from teacher and processing it and send it to teacher` data store

inputs	Logic summary	outputs
Class Data from Teacher	teacher set class data in process 3.1 Then after processing the class data will be saved at D5 (teacher class) and student data will be sent to process 3.2 to select students	1- Class Data to d5 teacher class 2- Student data to process 3.2

Process ref: 3.2

Process Name: Select student

Description: Receive student`s data from processes 3.1 and processing it and send it to student`s data store

Inputs	Logic summary	outputs
Student Data From process 3.1	Get student data from process 3.1 and then processing to select student then Student request will be saved in D3 student	Request to d3 student

Process ref: 4.1

Process Name: Upload learning materials

Description: Receive Learning Materials details data from teacher and processing it and send it to file`s data store

inputs	Logic summary	outputs
Learning Materials details From Teacher	teacher set Learning Materials details in process 4.1 Then after processing the subject will be saved at D6 (file)	Learning Materials details to d6 file

Process ref: 5.1

Process Name: Downloading learning materials

Description: Receive Learning Materials request from student and receive learning materials from file`s data store, and send learning materials to student and send Learning Materials request to file`s data store

inputs	Logic summary	Outputs
1-Learning Material request from student 2-learning materials from d6 File	Student set learning materials request To process 5.1 to download materials Then the learning material req will be save at D6 (file) And learning materials from D6 (file) will be sent to process 5.1 to download materials then sent it to the student	1- learning Material from process 5.1To student 2-learning Material Request to d6 File

All Data Store Sheets

Name: Subject	**Data Ref: D1**
Description: A Subject data and description modifiedby the admin and stored here.	
Data Flow In: Subject Data	Data Flow Out: None
Contents: subject_id subject_code subject_title Description Unit Semester Year	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

Name: Class	**Data Ref: D2**
Description: A Class data modified by the admin and stored here.	
Data Flow In: Class Data	Data Flow Out: None
Contents: class_id class_name year_level	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

Name: Student	Data Ref: D3
Description: A Student data modified and stored here by admin	
Data Flow In: Student Data Request	Data Flow Out: None
Contents: student_id,Firstname Lastname,class_id Username,Password Location,Status school_year year_level	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

Name: Teacher	**Data Ref: D4**
Description: A Teacher data modified and stored here by admin.	
Data Flow In: Teacher Data	Data Flow Out: None
Contents: teacher_id Firstname, Lastname Username, Password Location teacher_status Status	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

Name: Teacher Class	**Data Ref: D5**
Description: A Teacher class data modified and stored here by Teacher.	
Data Flow In: Class Data	Data Flow Out: None
Contents: teacher_class_id teacher_id class_id subject_id Thumbnails school_year Semester	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

Name: File	Data Ref: D6
Description: Learning materials files are modified and stored here by teacher to be accessed by student.	
Data Flow In: Learning Materials Details Learning Materials Request	Data Flow Out: Learning Materials
Contents: file_id Floc Fdatein Fdesc teacher_id class_id Fname uploaded_by	Immediate access analysis is to found in: Functional spec
	Physical organization: Not yet specified

All Data Flow Sheets

Data Flow Description

ID: 1
Name: subject data
Description: this refers to the primary key of the table, it transfers an entity to a process

Source: entity Admin	**Destination:** process 1.1 manage subjects
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: = subject name+ Subject code + {Subject project}	**Volume/Time:** 1/hour
Comments: This information is that admin can set students data through process 1.1.	

Data Flow Description

ID: 1
Name: subject data
Description: this refers to the primary key of the table, it transfers a process to data store

Source: process 1.1 manage subject	**Destination:** data store D1 subject
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: = subject name + Subject code + {Subject project}	**Volume/Time:** 2/hours
Comments: the uploaded subjects are then stored in data store subjects D1	

Data Flow Description

ID: 2
Name: class data
Description: this refers to the primary key of the table, it transfers from entity to process

Source: entity Admin	**Destination:** Process 1.2 manage classes
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: class name + Class id + Class time	**Volume/Time:** 30/minutes
Comments: This information is that admin can manage classes through process 1.2	

Data Flow Description

ID: 2
Name: class data
Description: this refers to the primary key of the table, it transfers from entity to process

Source: process 1.2 manage classes	**Destination:** data store D2 classes
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: class name + Class id	**Volume/Time:** 2/hour
Comments: the updated classes are stored in data store D2 classes	

Data Flow Description

ID: 3
Name: student data
Description: this refers to the primary key of the table, it transfers from entity to process

Source: entity admin	**Destination:** process 1.2 manage students
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: class name + Class id + Class time	**Volume/Time:** 4/hours
Comments: admin can manage students' information.	

Data Flow Description

ID: 3
Name: student data
Description: this refers to the primary key of the table, it transfers from entity to process

Source: proses 2.1 manage student data	**Destination:** data store D3 student
Type of data Flow: **File** **Screen** **Report** **Form** **Internal**	
Data Structure: student name + student id +	**Volume/Time:** 4/hours
Comments: you can store student's information in data store	

ID: teacher_id
Name: teacher data
Description: this refers to the primary key of the table, it transfers from entity to process

Source: entity Admin	**Destination:** process 2.2 Manage teacher
Type of data Flow: **File • Screen • Report • Form • Internal**	
Data Structure: teacher name + Teacher timeline+	**Volume/Time:** 4/hours
Comments: you can manage teacher data by this process	

Data Flow Description

ID: teacher_id
Name: teacher data
Description: this refers to the primary key of the table, it transfers from process to data store

Source: process 2.2 Manage teacher	**Destination:** data store D4 teacher
Type of data Flow: **File • Screen • Report • Form • Internal**	
Data Structure: teacher name + Teacher timeline+	**Volume/Time:** 4/hours
Comments: you can store teacher data by this process in D4 teacher	

Data Flow Description

ID: 5
Name: class data
Description: Name of Class, Year of the Class, Teacher Id, Class Id, Subject Id, Picture of the class

Source: entity Teacher	**Destination: process Create class**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** ϒ **Internal**	
Data Structure :	**Volume/Time:**
Comments: we can create class by teacher through create class process	

Data Flow Description

ID: 5
Name: class data
Description: Name of Class, Year of the Class, Teacher Id, Class Id, Subject Id, Picture of the class

Source: Create class process	**Destination: teacher class store**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** **Internal**	
Data Structure :	**Volume/Time:**
Comments: you can store the class data in class data store	

Data Flow Description

ID: 6

Name: learning material details
Description: Where the files are stored**,** The date where the files uploaded, Teacher Id, Name of the user who uploads the files

Source: Teacher	**Destination: Upload learning material process**
Type of data Flow: **ϒ File ϒ Screen ϒ Report ϒ Form ϒ Internal**	
Data Structure :	**Volume/Time:**
Comments	

Data Flow Description

ID: 6
Name: learning material details
Description: Where the files are stored**,** The date where the files uploaded, Teacher Id, Name of the user who uploads the files

Source: Upload learning material process	**Destination: File data store**
Type of data Flow: **ϒ File ϒ Screen ϒ Report ϒ Form ϒ Internal**	
Data Structure :	**Volume/Time:**
Comments	

Data Flow Description

ID: 7
Name: Learning material request
Description: Subject Id, Student Id, Taken or inlisted the subject, Year where the student requests the subject, 1st or 2nd semester

Source: entity Student	**Destination: process download learning materials**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** ϒ **Internal**	
Data Structure : subject id + student id + Status	**Volume/Time:**
Comments student can request material data and download it	

Data Flow Description

ID: 7
Name: Learning material request
Description: Subject Id, Student Id, Taken or inlisted the subject, Year where the student requests the subject, 1st or 2nd semester

Source: process download learning materials	**Destination: File data store**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** ϒ **Internal**	
Data Structure : subject id + student id + Status	**Volume/Time:**
Comments the downloaded material is come from the file data store	

Data Flow Description

ID: 8
Name: Learning materials
Description: Where the files are stored**,** The date where the files uploaded, Teacher Id, Name of the user who can download the files

Source: File data store	**Destination: download learning materials**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** ϒ **Internal**	
Data Structure :	**Volume/Time:**
Comments the materials in file data store processed into a downloaded material for the students	

Data Flow Description

ID: 8
Name: Learning materials
Description: Where the files are stored**,** The date where the files uploaded, Teacher Id, Name of the user who can download the files

Source: download learning materials	**Destination: Student**
Type of data Flow: ϒ **File** ϒ **Screen** ϒ **Report** ϒ **Form** ϒ **Internal**	
Data Structure :	**Volume/Time:**
Comments the learning material can be requsted from the student	

All Data Structures

User's Data: = user_id
+ username
+ password
+ firstname
+ lastname

Student data = student_id
+ Firstname
+ Lastname
+ class_id
+ Username
+ Password
+ Location
+ Status
+ school_year
+ year_level

Teacher data = teacher_id
+ Firstname
+ Lastname
+ Username
+ Password
+ Location
+ teacher_status
+ Status

Subject data = subject_id
+ subject_code
+ subject_title
+ Description

+ Unit
+ Semester
+ Year

Class data = class_id
+ class_name
+ year_level
+ Class_Topic
+ teacher_class_id
+ topic_id