



DAM KINDERGARTEN

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1 BUSINESS DESCRIPTION

1.1 BUSINESS BACKGROUND

Dam Kindergarten is located in the city of Kaunas, Lithuania. As we know that every society has the right to have full place of child entertainment such a nursery and kindergarten, Dam is doing its best to cover all the needs of Dam's child and all the different parts of Dam society, what makes Dam different from the other kindergartens is, it has a powerful management team that takes place the management of the kindergarten. It has also a well-organized environment such as Playground, Masjid, and Classes for education, and Full Equipment for playing.

Presently, Dam uses everything in manually. Dam use the following equipment's a normal book that has a closely 500 hundred pages for registration of the new intakes, pens, rulers, and also a dry stamp for a confirmation a valid form and all letters from Dam. A printer that can only print a normal colorless paper, Dam has a normal class and they are classified into (Pre-Kg, KG1, KG2, KG3,)

And also Dam has 4 departments with in different roles except the watchman room and some others like Masjid (Department-1 office of the principal, Department-2 classrooms and learning center, Department-3 all the dramatic and playground center such as listening watching and so on, Department-4 break time and food center is a place that the children will have their break time).

1.2 PROBLEMS. CURRENT SITUATION

The one and only main problem that Dam is facing so far is manually data entry. Dam is urgently needing a full software that can handle all the complex manually data entry such as registration of the new student, fee payments, retrieving updating the reports and records of the student and all the other required information.

1.3 BENEFITS FROM IMPLEMENTING A DATABASE. PROJECT VISION

This Database project which will smooth out the application process, and will be able to enhance and make easier all the necessary work.

In order to execute on Dam's business model, the Company needs to perform several functions which is why we need a Database to augment it. Dam anticipates using the functionalities of this Database to:

Service Functions

- i) To register and manage the records and all necessary information of each and every child on the Dam kindergarten
- ii) To provide the details about meals, activities and age groups
- iii) To provide full range of reports and records that will satisfy informational requirements

2 MODEL DESCRIPTION

2.1 DEFINITIONS & ACRONYMS

Relation: In general, a relation is a table, i.e., data is arranged in rows and columns. A relation has the following properties:

Tuple: The rows of tables in a relationship are generally termed as Tuples.

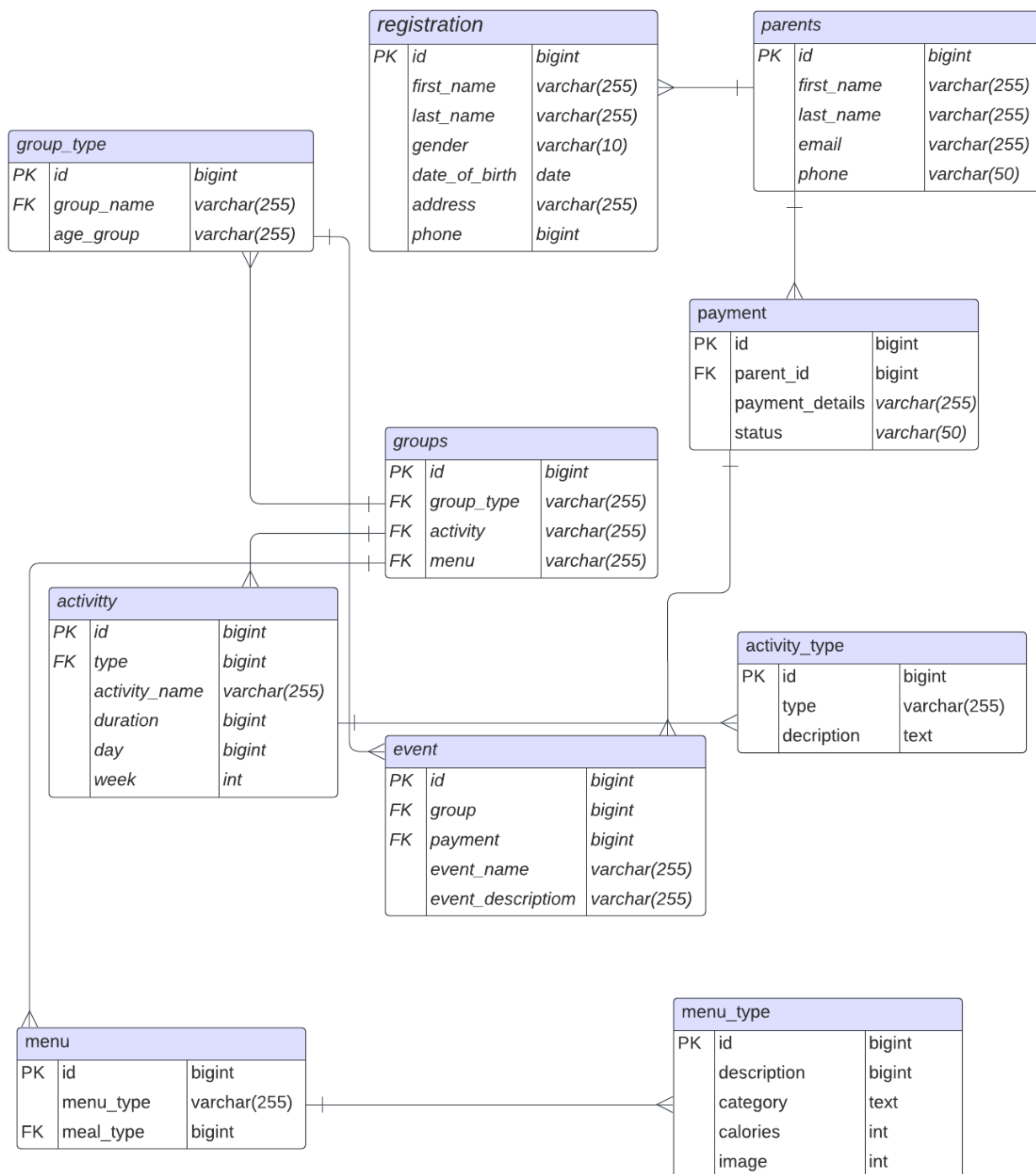
Attributes: The columns or fields of a table is termed as Attributes.

Degree: The number of attributes in a relation determines the degree of relation. A relation having three attributes is said to have a relation of degree 3.

Cardinality: The number of tuples or rows in a relation is termed as cardinality.

2.2 LOGICAL SCHEME

Kindergarten Logical Schema



2.3 OBJECTS

1. registration Table

The registration table will store all details for all the staffs and children handling the kindergarten.

Table Name	Field name	Field Description	Data Type
registration	id	PK	bigint
	First_name		Varchar(255)
	Last_name		Varchar(255)
	gender		Varchar(10)
	Date_of_birth		date
	address		Varchar(255)
	phone		bigint

Tables Relations Comments

Example with filled data

id	First_name	Last_name	gender	Date_of_birth	address	Company_id
1	John`	Doe	Male	22/02/1988	3, Laisves Al	834577222

2. parents Table

The parents dictionary contains a list of all the information for parents.

Table Name	Field name	Field Description	Data Type
parents	id	PK	bigint
	First_name		Varchar(255)
	Last_name		Varchar(255)
	email		Varchar(255)
	phone		bigint

Example with filled data

id	First_name	Last_name	email	phone
1	John`	Anoem	slass@gmail.com	862237455

3. groups Table

This subject area contains all the tables needed to store information about all the groups.

Table Name	Field name	Field Description	Data Type
groups	id	PK	bigint
	Group_type	FK	bigint
	activity	FK	bigint
	menu	FK	bigint

Example with filled data

id	Group_type	activity	menu
1	12	1	3

4. payment Table

The payment table lists all the payment transactions that were done.

Table Name	Field name	Field Description	Data Type
payment	id	PK	bigint
	Parent_id	FK	bigint
	Payment_details		Varchar(255)
	status		Varchar(50)

Example with filled data

id	Parent_id	Payment_details	status
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1	2321	Fist year tuition	Paid
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5. group_type Table

The group_type table shows the age category and group of each child.

Table Name	Field name	Field Description	Data Type
Group_type	id	PK	bigint
	Group_name		Varchar(255)
	Age_group		Varchar(255)

Example with filled data

id	Group_name	Age_group
1	Mid_term	2-3years

6. activity Table

The activity dictionary contains a list of all the activities for the children.

Table Name	Field name	Field Description	Data Type
activity	id	PK	bigint
	type	FK	bigint
	Activity_name		Varchar(255)
	duration		bigint
	day		bigint
	week		int

Example with filled data

id	type	Activity_name	duration	day	week
1	2	Board games	45	Wednesday	2

7. activity_type Table

The activity_type table list the specific type of activities the children will partake in.

Table Name	Field name	Field Description	Data Type
Activity_type	id	PK	bigint
	type		Varchar(255)
	description		text

Example with filled data

id	type	description
1	Games	Games to soften the children and make them relate

8. menu Table

The menu table contains the list of menu and food items for the children.

Table Name	Field name	Field Description	Data Type
menu	id	PK	bigint
	Menu_type		Varchar(255)
	Meal_type	FK	bigint

Example with filled data

id	Menu_type	Meal_type
1	Breakfast	22

9. menu_type Table

The menu_type table stores the information about all the calories and specific types of meal

Table Name	Field name	Field Description	Data Type
Menu_type	id	PK	bigint
	description		bigint
	category		Varchar(255)
	calories		int
	image		bytea

Example with filled data

id	description	category	calories	image
1	Potatoes and ketchup	Protein with some fat	45	Img.jpg

10. event Table

The events table lists all the events that has been scheduled for the calendar year.

Table Name	Field name	Field Description	Data Type
event	id	PK	bigint
	group	FK	bigint
	payment	FK	bigint
	Event_name		varchar
	Event_description		int

Example with filled data

id	group	payment	Event_name	Event_description
1	11	34	End of the year party	Organized by all class teachers to celebrate the end of the calendar year