The Residence Halls Database

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The Residence Halls database contains information about the offices that manage the accommodation, the owners of the accommodation, the residents, and the services (such as cleaning and maintenance) offered for the properties.

The Residence Halls database contains information that relates the two main company offices managing these properties, the owners, the different services to the service request, and to the resident renting a property.

Residence Halls has decided that the best way to increase efficiency and move toward an e-commerce-based business model is to store all the data about the properties, owners, tenants, and services in databases.

Residence Halls Student Accommodation needs to maintain the services for and information of residents. There are six tables in the database: office, owner, property, service_category, service_request, and residents.

- The **SERVICE_CATEGORY** table includes details of maintenance services. Residence Halls is split into two offices to better manage the properties. This management includes communicating with owners about the status of the service.
- The **CATEGORY_NUM** provides a unique number for the service, and category_description shows what the service is.
- The company rents out and helps to maintain 1 to 5 bedroom properties located in two main areas in the city, Columbia City and Georgetown. Each property at each location is identified by a property ID.
- Each owner is identified by a unique owner number that consists of two uppercase letters followed by a three-digit number.
- The **SERVICE_REQUEST** table shows requests that residents have put into the offices for maintenance.
- Residence Halls stores information about the owners of each property in the owner table. although some apartments may be owned by a couple or a family, only the primary contact is given. The resident column includes the first name and last name of each resident, along with a resident ID. The **PROPERTY_ID** is the unique identification number of the property in which they are staying. The **property** table provides details about the property associated with the **PROPERTY_ID**.

SCHEMA

OWNERS (owner_num, last_name, first_name, address, city, state, zip_code)

PROPERTY (property_id, office_num, address, sqr_ft, bdrms, floors, monthly_rent, owner_num)

OFFICE (office_num, office_name, address, area, city, state, zip_code)

SERVICE_CATEGORY (category_num, category_description)

SERVICE_REQUEST (service_id, property_id, category_number, office_id , description, status, est_hours, spent_hours, next_service_date)

RESIDENTS (resident_id, first_name, surname, property_id)

1. Tables for the Residence Halls Database

Table Name	OWNERS		
Key Type	**Column Name**	**Data Type**	**Size**
pk	owner_num	CHAR	5
	last_name	VARCHAR	20
	first_name	VARCHAR	20
	address	VARCHAR	100
	city	VARCHAR	20
	state	CHAR	2
	zip_code	CHAR	5

Table Name	OFFICE		
Key Type	**Column Name**	**Data Type**	**Size**
pk	office_num	INT	
uk	office_name	VARCHAR	50
	address	VARCHAR	100
	area	VARCHAR	50
	city	VARCHAR	20
	state	CHAR	2
	zip_code	CHAR	5

Table Name	PROPERTY		
Key Type	**Column Name**	**Data Type**	**Size**
pk	property_id	INT	
fk(office)	office_num	INT	
	address	VARCHAR	100
	sqr_ft	INT	
	bdrms	INT	
	floors	INT	

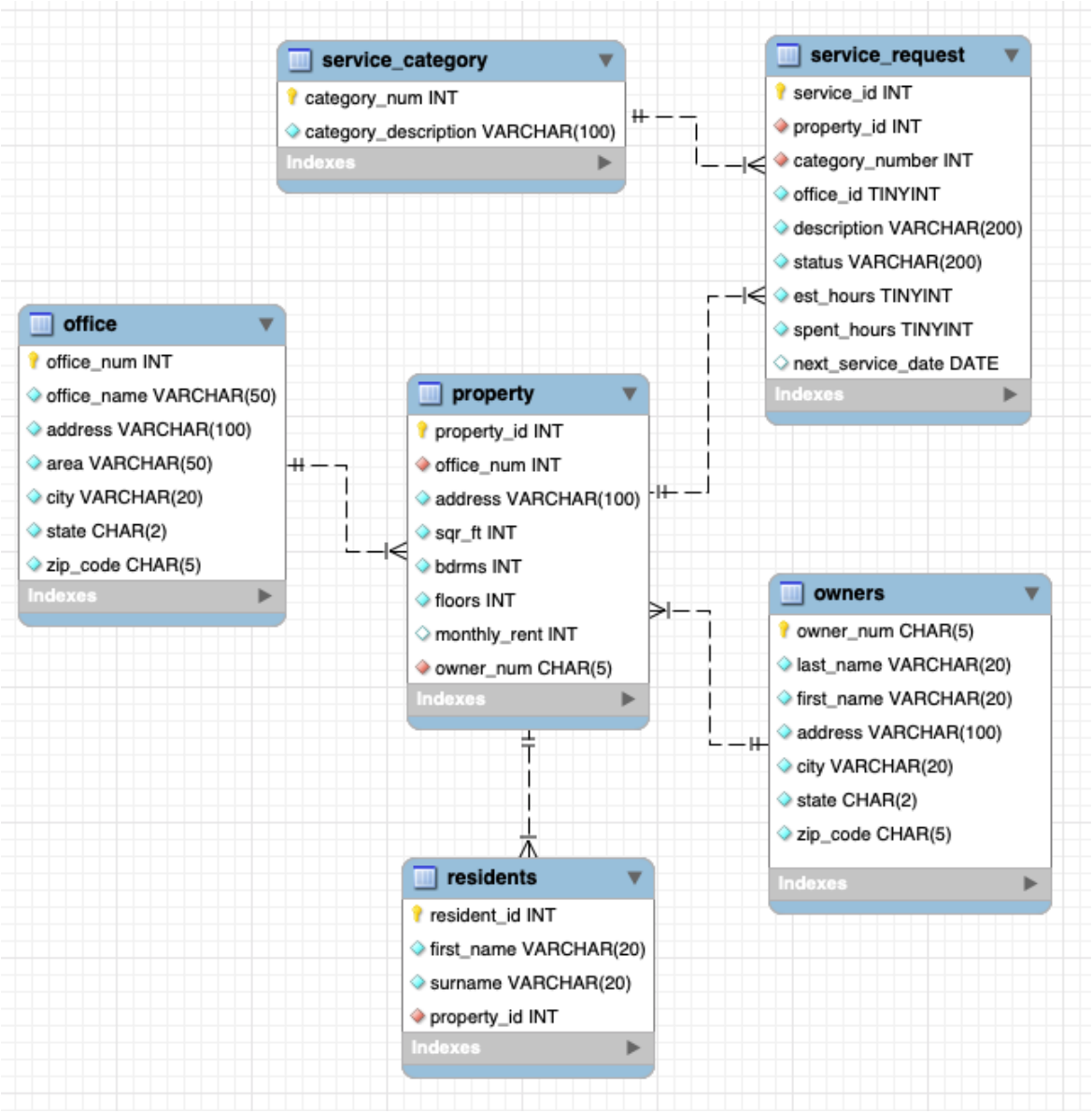
	monthly_rent	INT	
fk (OWNER)	owner_num	CHAR	5

Table Name	SERVICE_CATEGORY		
Key Type	**Column Name**	**Data Type**	**Size**
Pk	category_num	INT	
	category_description	VARCHAR	100

Table Name	SERVICE_REQUEST		
Key Type	**Column Name**	**Data Type**	**Size**
pk	service_id	INT	
fk (PROPERTY)	property_id	INT	
fk (SERVICE_CATEGORY)	category_number	INT	
	office_id	INT	
	description	VARCHAR	200
	status	VARCHAR	200
	est_hours	INT	
	spent_hours	INT	
	next_service_date	DATE	

Table Name	RESIDENTS		
Key Type	**Column Name**	**Data Type**	**Size**
pk	resident_id	INT	
	first_name	VARCHAR	20
	surname	VARCHAR	20
Fk(PROPERTY)	property_id	INT	

2. The E-R diagram



ER schema diagram for the Residence Halls database