

ERD PDF DOCUMENT – DATABASE COURSWORK

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Assumptions

General

- Max email size is 320 as that is the longest possible email address.
- Some sites may have limited staff and therefore have multiple roles

Roles

- Longest name needed for role is 30 characters as the current longest role is 20 (glass fibre specialist).
- A cleaner may be needed for bigger yards.
- A pilot will be needed for and boat manoeuvres in the yard/harbour.

Services

- Prices will be stored for the sake of receipts and invoices etc.
- Notes will be stored for any obscure information that needs to be stored but cannot be due to table constraints.
- The staff on each service will need to be picked from staff on the site as some sites may be large distances from each other which are not easily commutable by staff
- One service can only be linked to one boat.

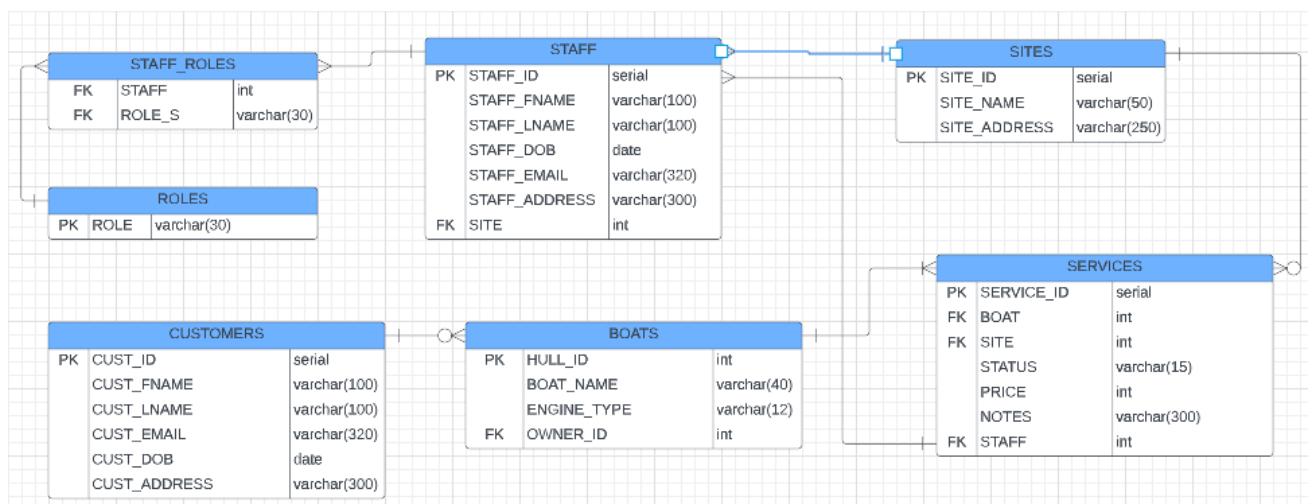
Boats

- Boats can only have one owner (aka customer id)

Customers

- Customers can have zero, one or many boats, this is assumed because customers will create their accounts and then add their boats to their account after.

ERD



Data Table

Table	Attribute	Data Type	Size	Key	FK Reference	Constraints	Description
ROLES	ROLE	Varchar	30	PK		Not null	This stores

							all possible staff roles
STAFF_ROLES	STAFF	Int		FK	STAFF.STAFF_ID	Not null	
	ROLES_S	Varchar	30	FK	ROLES.ROLE	Not null	
STAFF	STAFF_ID	serial		PK		Not null	Can also be used as username
	STAFF_FNAME	Varchar	100			Not null	
	STAFF_LNAME	Varchar	100			Not null	
	STAFF_DOB	Date				Not null	
	STAFF_EMAIL	Varchar	320			Not null	
	STAFF_ADDRESS	Varchar	300			Not null	
	SITE	Int		FK		Not null	
SITES	SITE_ID	Serial		PK		Not null	
	SITE_NAME	Varchar	50				
	SITE_ADDRESS	Varchar	250			Not null	
SERVICES	SERVICE_ID	Serial		PK		Not null	
	BOAT	Int		FK	BOATS.HULL_ID	Not null	
	SITE	Int		FK	SITES.SITE_ID	Not null	
	STATUS	Varchar	11			Not null	values: pre-Booked, on-site, in-progress, completed, handed-off
	PRICE	Int					
	NOTES	Varchar	300				For any extra information on the service or boat in service
	STAFF	Int		FK	STAFF.STAFF_ID		
BOATS	HULL_ID	Int		PK			Some old boats may not have ID (UNIQUE)
	BOAT_NAME	varchar	40				Some small boats may boat have a name, longest ever boat name was 48 characters
	ENGINE_TYPE	Varchar	12			Not null	Values: sail, petrol, diesel, sail-diesel, sail-petrol
	OWNER_ID	Int		FK	CUSTOMERS.CUST_ID	Not null	
CUSTOMERS	CUST_ID	Serial		PK		Not null	

	CUST_FNAME	Varchar	100			Not null	
	CUST_LNAME	Varchar	100			Not null	
	CUST_EMAIL	Varchar	320			Not null	
	CUST_DOB	Date				Not null	
	CUST_ADDRES S	Varchar	320			Not null	