Entities

* BOAT  
  Sea faring vessel that carries people
  + BIN – Boat Identification Number, this is generated by the government when the boat is registered with them and is very similar to a license plate number as seen on a car. (TEXT)
  + CAPACITY – The maximum number of people that can be on the boat at the same time. (NUMBER)
  + LENGTH – The length of the boat. 1 is equal to 1 foot. (NUMBER)
  + TYPE – What water depth this boat is best suited for. (TEXT)
    - inshore, offshore, freshwater
  + Relationships
    - HAS\_POLES – A combined rod and reel device to be used to catch fish. (one-to-many)
    - HAS\_WELLS – Water filled tank on the boat that can carry bait. (one-to-many)
    - POWERED\_BY – The mechanical device that allows this boat to move through the water. (one-to-many)
* CREW\_MEMBER  
  Member of the charter crew.
  + SSN – The crew member’s social security number. (TEXT)
  + NAME – The crew member’s full name. (TEXT)
  + PAY – The amount of money that is paid in one hour. 1 is equal to 1 dollar. (CURRENCY)
  + Relationships
    - FAVORITE\_LOCATIONS – The crew member’s favorite fishing spots. (many-to-many)
    - SUPERVISES – Recursive relationship where a captain supervises a skipper. (one-to-one)
* DOCK  
  Housing area for multiple boats.
  + DOCK\_NAME – Name for the dock. (TEXT)
  + MAX\_BOAT\_SIZE – Maximum single boat size that the dock can hold. 1 equals 1 foot. (NUMBER)
  + MAX\_BOAT\_CAPACITY – Maximum number of boats that the dock can house. (NUMBER)
  + Relationships
    - HOUSES\_BOAT – Many boats can be housed in the dock. (one-to-many)
* FISHING\_POLE  
  Lengthy and flexible device that can be used to catch fish.
  + SERIAL\_NUMBER – Number given to every fishing pole when manufactured. (TEXT)
  + LENGTH – The length of the fishing pole in feet. (NUMBER)
  + STRENGTH – The fish weight (in pounds) that this fishing pole can fight. (NUMBER)
  + Relationships
    - HAS\_REEL – Mechanical device with a spool of line that is used to fight the hooked fish. (one-to-one)
* GROUP  
  Group of customers that want to go on a fishing trip.
  + GROUP\_NUMBER – A number automatically assigned to the group when registering. (AUTONUMBER)
  + SIZE – The number of people that make up the group. (NUMBER)
  + Relationships
    - REQUESTED\_CAPTAIN – The captain that the group wants. (many-to-one)
    - REQUESTED\_TRIP – The fishing trip that the group wants to go on. (many-to-many)
* LOCATION  
  A fishing spot.
  + LOCATION\_NUMBER – A number automatically assigned to this location on its creation. (AUTONUMBER)
  + GPS\_LATITUDE – Coordinate that specifies north / south position. (NUMBER)
  + GPS\_LONGITUDE – Coordinate that specifies east / west position. (NUMBER)
  + DEPTH – The depth of the water at this location. 1 is equal to 1 foot. (INTEGER)
  + FISHING\_METHOD – The type of fishing best suited for this location. (TEXT)
    - inshore, offshore, trolling
  + Relationships
    - REQUIRES\_POLE\_STRENGTH – In order to fish at this location, a fishing pole of this strength is required. (many-to-many)
* MOTOR  
  The mechanical device that allows this boat to move through the water.
  + SERIAL\_NUMBER – Number given to every motor when manufactured. (TEXT)
  + TYPE – The type of motor. (TEXT)
    - inboard, outboard, trolling
  + HORSEPOWER – The horsepower of the motor. 1 is equal to 1 horsepower. (NUMBER)
  + MILES\_PER\_GALLON – The number of gallons that the motor uses to travel one mile. 1 is equal to 1 mile per gallon. (NUMBER)
* REEL  
  Mechanical device with a spool of line that is used to fight the hooked fish.
  + SERIAL\_NUMBER – Number given to every reel when manufactured. (TEXT)
  + MAX\_LINE\_LENGTH – The maximum amount of line (in feet) that this reel can hold. (NUMBER)
  + NUMBER\_OF\_BALL\_BEARINGS – The number of ball bearings in the reel. (NUMBER)
  + TYPE – The type of reel. (TEXT)
    - spinning, bait casting, offshore
* TRIP  
  An excursion with customers to go fishing.
  + TRIP\_NAME – Name for the trip. (TEXT)
  + TIME\_LIMIT – Amount of time that the trip will take. 1 is equal to 1 hour. (NUMBER)
  + TRIP\_DATE – The date of the trip. (DATE/TIME)
  + COST – The total cost of the trip. 1 is equal to 1 dollar. (CURRENCY)
* WELL  
  Water filled tank that carries either live bait or live fish while maintaining the captive animal’s liveliness.
  + SERIAL\_NUMBER – Number given to every well when manufactured. (TEXT)
  + WATER\_CAPACITY – Number of gallons of water that the tank can hold. (NUMBER)
  + NUMBER\_OF\_PUMPS - Number of air bubble pumps that the well has. (NUMBER)
  + BAIT\_CAPACITY – Maximum amount of bait that the tank can hold. (NUMBER)

Relationships

* FAVORITE\_LOCATIONS  
  Relationship connecting CREW\_MEMBER to LOCATION.
  + SSN – The crew member’s social security number. (TEXT)
  + LOCATION\_NUMBER – The number automatically assigned to this location on its creation. (NUMBER)
* HAS\_POLES  
  Relationship connecting BOAT to FISHING\_POLE. (one-to-many)
  + BIN – The boat’s identification number. This is generated by the government when the boat is registered with them and is very similar to a license plate number as seen on a car. (TEXT)
  + SERIAL\_NUMBER – The fishing pole’s serial number. This is a number given to every pole when manufactured. (TEXT)
* HAS\_REEL  
  Relationship connecting FISHING\_POLE to REEL. (one-to-one)
  + POLE\_SERIAL\_NUMBER – The fishing pole’s serial number. This is a number given to every pole when manufactured. (TEXT)
  + REEL\_SERIAL\_NUMBER – The reel’s serial number. This is a number given to every reel when manufactured. (TEXT)
* HAS\_WELLS  
  Relationship connecting BOAT to WELL. (one-to-many)
  + BIN – The boat’s identification number. This is generated by the government when the boat is registered with them and is very similar to a license plate number as seen on a car. (TEXT)
  + SERIAL\_NUMBER – The well’s serial number. This is a number given to every well when manufactured. (TEXT)
* HOUSES\_BOAT  
  Relationship connecting DOCK to BOAT. (one-to-many)
  + DOCK\_NAME – Name for the dock. (TEXT)
  + BIN – The boat’s identification number. This is generated by the government when the boat is registered with them and is very similar to a license plate number as seen on a car. (TEXT)
* POWERED\_BY  
  Relationship connecting BOAT to MOTOR. (one-to-many)
  + BIN – The boat’s identification number. This is generated by the government when the boat is registered with them and is very similar to a license plate number as seen on a car. (TEXT)
  + SERIAL\_NUMBER – The motor’s serial number. This is a number given to every motor when manufactured. (TEXT)
* REQUESTED\_CAPTAIN  
  Relationship connecting GROUP to CREW\_MEMBER. (many-to-one)
  + GROUP\_NUMBER – The number automatically assigned to this group. (NUMBER)
  + SSN – The social security number of the crew member. (TEXT)
* REQUESTED\_TRIP  
  Relationship connecting GROUP to TRIP. (many-to-many)
  + GROUP\_NUMBER – The number automatically assigned to this group. (NUMBER)
  + TRIP\_NAME – The name of the trip that the group wants to go on. (TEXT)
* REQUIRES\_POLE\_STRENGTH  
  Relationship connecting LOCATION to FISHING\_POLE.
  + LOCATION\_NUMBER – A number automatically assigned to the location on its creation. (NUMBER)
  + SERIAL\_NUMBER – A number given to the fishing pole when it’s manufactured. (TEXT)
* SUPERVISES  
  Relationship connecting CREW\_MEMBER to itself.
  + CAPTAIN\_SSN – The captain’s social security number. (TEXT)
  + SKIPPER\_SSN – The skipper’s social security number. (TEXT)