**SAILO  DB**    version  1.00   1/22/14

| # | Object | | Type | Required? | Min | Max | Restrictions | Can be blank? | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **1** | **Boat** | | | | | | | | |
| | boat name | | string | | 1 | 256 | | | |
| | builder (manufacturer) | | string | | 1 | 256 | | | |
| | model | | string | | 1 | 256 | | | |
| | build year | | date | | 1850 | current year | | | |
| | engine manufacturer | | string | | 1 | 256 | | | |
| | engine hp (for each engine) | | int | | 0 | 20000 | | | |
| | engine description | | string | | 1 | 512 | | | |
| | engine year | | date | | 1850 | current year | | | |
| | top speed | | int | | 0 | 200 | mph | | |
| | length in feet | | int | | 3 | 300 | feet | | |
| | height in feet | | int | | 3 | 300 | feet | | |
| | weight in lb | | int | | 0 | 100000 | lb | | limits TBD |
| | guest capacity | | int | | 0 | 300 | | | max number of people that are allowed to sail on board |
| | number of bedrooms | | int | | 0 | 30 | | | |
| | number of bathrooms | | int | | 0 | 30 | | | |
| | color | | string | | 1 | 256 | | | |
| | type | | set | | | | list: sail, motor, other | | |
| | min_height | | int | | 1 | 250 | feet | | when the mast of cabin is lowered  usefull when going under bridges |
| | draught | | int | | | | | | limits TBD |
| | autonomy time | | int | | 0 | unlimited | hours | | limits TBD |
| | autonomy distance | | int | | 0 | unlimited | miles | | limits TBD |
| | amenities | | set | | | | of strings | | complete features list TBD |
| | | shower | set | | | | Y/N | | |
| | | toilets | set | | | | Y/N | | |
| | | drinking water | set | | | | Y/N | | |
| | | fridge | set | | | | Y/N | | |
| | | tv | set | | | | Y/N | | |
| | | internet | set | | | | Y/N | | |
| | | navigation systems | set | | | | Y/N | | |
| | | (MORE TO BE ADDED HERE) | | | | | | | |
| | registered in what state | | set | | | | US states | | might have to add international locations later |
| | location on map | | set | | | | | | |
| | | latitude | double | | | | | | limits TBD |
| | | longitude | double | | | | | | limits TBD |
| | marina location | | string | | 1 | 256 | | | |
| | pictures | | table link | | | | link to pic table | | maximum 5 |
| | owner id | | int | | | | | | foreign key |
| | description | | string | | 1 | 4096 | | | max size of text still TBD |
| | restrictions | | set | | | | list of restrictions | | |
| | | smoking | set | | | | Y/N | | |
| | | shoes type (e.g. white soles only?) | string | | 1 | 256 | | | |
| | | kids | set | | | | Y/N | | |
| | | number of guests | int | | 1 | 200 | | | TBD |
| | captains | | | | | | | | |
| | | required captain? | set | | | | set of captain ids | | TBD (probably best if it's a list of captain ids) |
| | | preferred captains? | set | | | | set of captain ids | | |
| | | blacklist captains? | set | | | | set of captain ids | | |
| | reviews | | table link | | | | list of reviews | | link to "reviews" table |
| | calendar | | table link | | | | date availability and price | | link to "calendar" table |
| | insurance_id | | table link | | 0 | inf | if id=0 => uninsured, else link to table | | link to "insurance" table |
| | response stats: | | | | | | | | |
| | | average rate (percentage) | double | | 0 | 100 | | | no need to precalculate |
| | | average time (percentage) | double | | 0 | 100 | | | |
| | | average time (value) | double | | 0 | 48 | h | | |
| **2** | **Captain** | | | | | | | | |
| | user information | | int | | | | | | same as a regular user (get from user_id) + extra info bellow |
| | description | | string | | 1 | 4096 | | | |
| | license type | | set | | | | | | (can he take people out?) |
| | license size restrictions | | string | | 1 | 4096 | | | (e.g. can drive boats up to 50ft) |
| | license other restrictions | | string | | 1 | 4096 | | | (e.g. can't drive at night) |
| | map location | | | | | | | | |
| | | latitude | double | | | | | | limits TBD |
| | | longitude | double | | | | | | limits TBD |
| | radius of availability | | double | | | | mi | | can work on all boats included in the area with center at location and this radius |
| | reviews | | | | | | | | |
| | | by user | int | | | | user id | | |
| | | average rating | double | | 0 | 5 | | | |
| | calendar | | | | | | | | |
| | | availability | datetime | | | | | | |
| | | price for each available day | double | | | | | | |
| | boat requests response stats: | | | | | | | | |
| | | total requests | int | | | | | | |
| | | total responses | int | | | | | | |
| | | total time to respond | int | | | | h | | |
| | | average rate (percentage) | double | | | | percentage | | |
| | | average time (percentage) | double | | | | percentage | | |
| | boat info response stats | | | | | | | | (info about the boat or other info) |
| | | total requests | int | | | | | | |
| | | total responses | int | | | | | | |
| | | total time to respond | int | | | | h | | |
| | | average rate (percentage) | double | | | | percentage | | |
| | | average time (percentage) | double | | | | percentage | | |
| **3** | **User** | | | | | | | | |
| | name | | | | | | | | |
| | | first | string | | 1 | 256 | | | |
| | | middle (opt) | string | | 1 | 256 | | | |
| | | last | string | | 1 | 256 | | | |
| | corporate name | | string | | 1 | 256 | | | |
| | birthdate (opt) | | date | | | | | | |
| | address | | | | | | | | |
| | | address1 (# + street) | string | | 1 | 256 | | | |
| | | address2 (apt # or other) | string | | 1 | 256 | | | |
| | | state | string | | 1 | 256 | pick from existing states | | |
| | | city | string | | 1 | 256 | | | |
| | | zip code | int | | min zip | max zip | | | we need to get the actual zip limits |
| | | country | string | | 1 | 256 | pick from existing countries | | |
| | contact info | | | | | | | | |
| | | phone numbers | | | | | | | |
| | | | mobile | int | | | | | | |

| Field | Type | Min | Max | Values/Notes | Description |
|---|---|---|---|---|---|
| home | int | | | | |
| email addresses | string | | | | |
| fax | int | | | | |
| occupation (opt) | string | | | | |
| income (opt) | int | 1 | 1000000 | pick from a list of income ranges | |
| sailing experience | int | 0 | 100 | years | |
| description | string | 1 | 4096 | | |
| pictures | table link | | | link to pictures table | |
| reviews | set | | | list of reviews | link to reviews by this user; TBD if we need this (could get from a SELECT) |
| messages | set | | | list of messages | link to reviews by this user; TBD if we need this (could get from a SELECT) |

**4 Messages**

| Field | Type | Min | Max | Values/Notes | Description |
|---|---|---|---|---|---|
| id | int | | | | |
| date | datetime | | | | |
| from | int | | | user id | |
| to | int | | | user id | |
| reference boat | int | | | id | |
| reference captain | int | | | id | |
| reference transaction | int | | | id | |
| content | string | | | | text of the message |
| status | string | | | list: delivered, pending, error | |

**5 Transaction**

| Field | Type | Min | Max | Values/Notes | Description |
|---|---|---|---|---|---|
| boat id | int | | | | |
| owner approval status: | | | | | |
| requested | set | | | Y/N | |
| date/time | datetime | | | | |
| max resonse time | double | | | h | |
| approved | set | | | Y/N | |
| date/time | datetime | | | | |
| no response | set | | | Y/N | (max reponse time expired) |
| rejected | set | | | Y/N | |
| date/time | datetime | | | | |
| reason | string | 1 | 4096 | | |
| changes requested | set | | | Y/N | |
| issues to be solved | set | | | Y/N | |
| captain id | int | | | | |
| captain approval status: | | | | | |
| requested | set | | | Y/N | |
| date/time | datetime | | | | |
| max resonse time | double | | | h | |
| approved | set | | | Y/N | |
| date/time | datetime | | | | |
| no response (max reponse time expired) | set | | | Y/N | |
| rejected | set | | | Y/N | |
| date/time | datetime | | | | |
| reason | string | 1 | 4096 | | |
| changes requested | set | | | Y/N | |
| issues to be solved | set | | | Y/N | |
| price | | | | | |
| boat | double | | | | |
| captain | double | | | | |
| insurance | double | | | | |
| sailo comission | double | | | | |
| dates | | | | | |
| start date | datetime | | | | |
| end date | datetime | | | | |
| details | | | | | |
| instructions | string | 1 | 4096 | | |
| restrictions | string | 1 | 4096 | | |
| other info | string | 1 | 4096 | | |
| status: | | | | | |
| initiated | set | | | Y/N | |
| cancelled | set | | | Y/N | |
| missing info (from user?) | set | | | Y/N | |
| awaiting approval | set | | | Y/N | |
| approved | set | | | Y/N | |
| rejected | set | | | Y/N | |
| money on hold | set | | | Y/N | |
| money cashed | set | | | Y/N | |
| pending issues | set | | | Y/N | |
| finalized | set | | | Y/N | |
| customer service status: | | | | | |
| none | set | | | Y/N | |
| issues with boat owner | set | | | Y/N | e.g. no insurance, not there, condition, other |
| issues with captain | set | | | Y/N | e.g. insurance, time there, attitude, other |
| issues with renter | set | | | Y/N | e.g. info needed, verification needed, late there, smoking on boat |
| insurance event | set | | | Y/N | e.g. boat damage |
| money status | | | | | |
| no money | set | | | Y/N | |
| on hold | set | | | Y/N | |
| received | set | | | Y/N | |
| disbursed: to owner, captain, sailo | set | | | Y/N | |
| deposit: returned, used | set | | | Y/N | |
| type: credit card, paypal? | set | | | Y/N | |
| all done | set | | | Y/N | |

**6 Insurance request**

| Field | Type | Min | Max | Values/Notes | Description |
|---|---|---|---|---|---|
| | | | | | avoid duplication |
| boat_id | int | | | | |
| date | datetime | | | | |
| referred by | string | | | | |
| boat name | string | | | | |
| client info | | | | | |
| name | string | | | | |
| corporate name | string | | | | |
| address | string | | | | |
| date of birth | datetime | | | | |
| city | string | | | | |
| state | string | | | | |
| zip | int | | | | |
| fax | int | | | | |
| phone | int | | | | |
| email | string | | | | |
| vessel description | | | | | |
| year | int | | | | |
| length | int | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | manufacturer | string | | | | | |
| | | model | string | | | | | |
| | | engine | | | | | | |
| | | | year | int | | | | |
| | | | hp (each) | int | | | | |
| | | | manufacturer | string | | | | |
| | | | top speed | int | | | | |
| | | material | set | | | list: fg, wood, aluminum, steel, other | | |
| | | engines | string | | | list: single, twin, triple | | |
| | | fuel | string | | | list: gas, diesel | | |
| | | built in systems | set | | | list: co2, halon, none | | |
| | | navigation systems | set | | | list: vhf, radar, auto pilot, depth finder, gps, ssb, weather fax, plotter | | |
| | coverage requested | | | | | | | |
| | | navigation limits | | | | | TBD | |
| | | mooring location | string | | | | | |
| | | intended use | set | | | list: personal, charter | | |
| | | charter description: | | | | | | |
| | | | number of guests | int | | | | |
| | | | crew | int | | | | |
| | | | number of charters | int | | | | |
| | | | other details | string | | | | |
| | | hull id or doc# | string | | | | | |
| | | registered | set | | | Y/N | | |
| | | purchase price | int | | | | | |
| | | date of purchase | date | | | | | |
| | | insurance value | int | | | | | |
| | | liability limit | int | | | | | |
| | | dinghy/tender | | | | | TBD | |
| | | paid crew (f/t & p/t) | | | | | TBD | |
| | | date last survey | date | | | | | |
| | | surveyor | string | | | | | |
| | | market value | int | | | | | |
| | | replacement value | int | | | | | |
| | operator information | | | | | | | |
| | | occupation | string | | | | | |
| | | previous boats owned/operated | int | | | number of boats? | | |
| | | boating courses | set | | | list: uscg, usps, asa, usgs license, other | | |
| | | any losses ever??? | int | | | Y/N | | |
| | | | year, value, description | string | | | | |
| | | client age | int | | | | | |
| | | years ownership experience | int | | | | | |
| | | previous insurance co. | string | | | | | |
| | | expiration date | datetime | | | | | |
| | | expiraiton premium | int | | | | | |
| | | loss payee | int | | | | | |
| | | additional insured | int | | | | | |
| | | comments | string | | | | | |

**7 Insurance**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | id | | int | | | | to link to an existing boat or captain | |
| | type | | string | | | boat or captain | | |
| | company | | set | | | link to existing table | | |
| | policy # | | set | | | link to existing table | | |
| | charter | | string | | | Y/N | to know if this is a charter insurance | |
| | policy type | | string | | | list: time, outings, other | to know if insurance is per number of outings | |
| | date from | | set | | | | (communication with customers) | |
| | date to | | int | | | id (link to existing table) | | |
| | outings left | | int | | | | | |
| | address | | table link | | | link to existing table | link to "address" table | |
| | damage amount | | int | | | | | |
| | liability amount | | int | | | | | |
| | uninsured other amount | | int | | | | if the other boat is uninsured | |
| | restrictions | | string | | | | e.g. capacity, night driving | |

**8 Communication:**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | owner/captain | | int | | | id (link to existing table) | | |
| | | my boats | set | | | link to existing table | | |
| | | my transactions | set | | | link to existing table | | |
| | | my insurances | set | | | link to existing table | | |
| | | my messages | set | | | | (communication with customers) | |
| | user | | int | | | id (link to existing table) | | |
| | | my transactions | set | | | link to existing table | | |
| | | my messages | set | | | link to existing table | (communication with owners/captains) | |

**9 Pictures**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | id | | int | | | | to link to an existing user, boat, or captain (could also be admin) might need a relation table | |
| | type | | string | | | list: user, boat, marina, other | | |
| | full | | string | 1 | 256 | | | |
| | full size 1 | | string | 1 | 256 | | | |
| | full size 2 | | string | 1 | 256 | | | |
| | thumbnails size 1 | | string | 1 | 256 | | | |
| | thumbnails size 2 | | string | 1 | 256 | | | |
| | thumbnails size 3 | | string | 1 | 256 | | | |
| | caption | | string | | | | | |
| | description | | string | | | | | |
| | location | | set | | | | | |
| | | latitude | double | | | | | |
| | | longitude | double | | | | | |

**10 Reviews**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | id | | int | | | | to link to an existing user, boat, or captain (could also be admin) might need a relation table | |
| | type | | string | | | list: boat, owner, captain, marina, other | | |
| | rating | | double | 0 | 5 | | | |
| | text | | string | 1 | 4096 | | text of the actual review | |
| | title | | string | 1 | 256 | | title of the review | |

**11 Calendar**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | id | | int | | | | to link to an existing user, boat, or captain (could also be admin) might need a relation table | |
| | type | | string | | | list: boat, captain, marina, admin, other | | |
| | date available to | | date | | | | | |
| | date available to | | date | | | | | |
| | price | | int | | | | | |