



RACELOG: A RACE ORGANIZATION DATABASE

By: Jerry Peng, Noah Glusenkamp, and Ryan Barr

CURRENT SITUATION

- Currently Noah Participates in an Outrigger Canoeing club and various canoeing competitions which host race events for other clubs in the region.
- Each competition has many clubs and individual participants, filed into many divisions, classes and even different courses depending on the race.
- Participation is linked between the individual, the club they belong to and which canoe(s) they will be using for which events.
- Canoes can hold between 1 and 6 paddlers and a given canoe can be used by multiple different paddlers/groups of paddlers for a variety of different race division, class, and course combinations.



Men's, Women's, & Mixed Iron Races

JULY 27, 2019
ALKI BEACH, SEATTLE, WA

www.seattleoutrigger.com/the-seattle-grind/

(Registration and Letter of Intent available soon!)

12 mile Men's, Women's, and Mixed OC-6 Course &
4 mile OC-1, OC-2, Surfski, SUP, Juniors, and Novice Course





PROBLEMS WITH STATUS QUO

- Tedious manual entry spanned across multiple excel sheets and files.
- Data is duplicated many times and is often in non standard formats as it was manually entered.
- Requires many people just to maintain the records on the day of the race to associate the correct time to the correct event and participants.
- After the race, results are not immediately available as data must be collected and combined from several sheets to give final results

RegistrationFormData.xlsx [Read-Only] - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER

Barr, Ryan C

C4 : X ✓ fx Kikaha

	A	B	C	D	E	F	G
1	Timestamp	Canoe Number	Club Name	Team Name	Category	Division	Course
2	7/27/2019 8:11:45	61	Kailaika	Kai Ikaika	Mixed	Unlimited	OC-6 Long C
3	7/27/2019 8:14:00	65	Socc	Aloha wahine	Women	Junior Novice	OC-6 Short C
4	7/27/2019 8:15:40	37a	Kikaha	Red masters	Men	Unlimited	OC-6 Long C
5	7/27/2019 8:17:42	36	Kikaha	Red blasters	Men	Unlimited	OC-6 Long C
6	7/27/2019 8:19:08	36	Kikaha o ke ke	Kikaha	Mixed	Open (40-50)	OC-6 Long C
7	7/27/2019 8:20:39	40	Kikaha	Waioli	Women	Sr. Masters	OC-6 Long C
8	7/27/2019 8:23:29	97	Tricities	Mixed plate	Mixed	Masters (50-55)	OC-6 Long C
9	7/27/2019 8:26:00	59	Rccc	Rccc men	Men	Unlimited	OC-6 Long C
10	7/27/2019 8:27:58	60	Rccc	Rccc ladies dr	Women	Unlimited	OC-6 Long C
11	7/27/2019 8:29:46	60	Rccc	Raven chief	Men	Unlimited	OC-6 Long C
12	7/27/2019 8:30:53	31	Kikaha	Kikaha pink	Mixed	Junior Novice	OC-6 Short C
13	7/27/2019 8:32:47	941	Hood river	occ Team Doug	Mixed	Unlimited	OC-6 Long C
14	7/27/2019 8:33:51	88	Dragon sports	Dragon sport w	Women	Open (40-50)	OC-6 Long C
15	7/27/2019 8:34:37	88	Dragon sports	Dragon sports	Men	Open (40-50)	OC-6 Long C
16	7/27/2019 8:36:07	971	Kai pana	Kane 2	Men	Unlimited	OC-6 Long C
17	7/27/2019 8:37:10	98	Kai pana	Kane 1	Men	Junior Novice	OC-6 Long C
18	7/27/2019 8:38:30	981	Kai pana	Wahine	Women	Unlimited	OC-6 Long C
19	7/27/2019 8:40:29	21	Hui hei waa	Hui heihei waa	Mixed	Unlimited	OC-6 Long C
20	7/27/2019 8:42:27	21	Hui hei hei waa	Hui hei hei waa	Men	Masters (50-55)	OC-6 Long C
21	7/27/2019 8:43:45	34	Wakinikona	Wakinikona	Women	Open (40-50)	OC-6 Short C
22	7/27/2019 8:44:48	34	Wakinikona	Wakinikona O	Women	Open (40-50)	OC-6 Long C
23	7/27/2019 8:45:53	34	Wakinikona	Wakinikona	Men	Open (40-50)	OC-6 Long C
24	7/27/2019 8:46:52	33	Wakinikona	Wakinikona m	Mixed	Junior Novice	OC-6 Short C
25	7/27/2019 8:47:51	30	Team freelance	Freelance	Mixed	Masters (50-55)	OC-6 Long C
26	7/27/2019 8:48:56	84	Bridge city	Bridge city Kor	Mixed	Open (40-50)	OC-6 Long C
27	7/27/2019 8:49:56	88	Bridge city	Bridge city ma	Mixed	Masters (50-55)	OC-6 Long C
28	7/27/2019 8:50:54	86	Bridge city	Bridge city ope	Mixed	Unlimited	OC-6 Long C
29	7/27/2019 8:53:10	84	Sand point	Sand point whi	Men	Open (40-50)	OC-6 Long C
30	7/27/2019 8:54:16	85	Sand point	Sand point	Women	Unlimited	OC-6 Long C
31	7/27/2019 8:55:30	40	Kikaha	Kikaha kapuna	Men	Gold Masters	OC-6 Long C
32	7/27/2019 8:56:29	31	Jericho paddlin	Jericho mixed	Mixed	Open (40-50)	OC-6 Long C
33	7/27/2019 8:58:52	83	Sand point	Uhane oka wal	Women	Open (40-50)	OC-6 Long C
34	7/27/2019 8:59:37	16	Crocc	Crocc	Mixed	Open (40-50)	OC-6 Long C
35	7/27/2019 9:00:53	59	Rccc	Mowti ocean c	Women	Unlimited	OC-6 Long C
36	7/27/2019 9:02:04	29	Hui waa o pugi	Hwops Kane	Men	Open (40-50)	OC-6 Long C
37	7/27/2019 9:03:40	29	Hui waa o pugi	Hwops women	Women	Masters (50-55)	OC-6 Long C
38	7/27/2019 9:04:30	11	Bbop	Firefighter crew	Mixed	Open (40-50)	OC-6 Long C
39	7/27/2019 9:04:50	11	Bbop	Firefighter crew	Mixed	Open (40-50)	OC-6 Long C

Sheet1

Da Grind Results 2019 - Final.xlsx [Read-Only] - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER

Barr, Ryan C

B3 : X ✓ fx

	C	D	E	F	G
1	Canoe Number	Club Name	Team Name	Category	Division
2	29	Hui Waa o Puget Sound	Hwops women	Women	Masters (50-55)
3					
4	None **	BBCOP	Wahine bbop	Women	Open (40-50)
5	64	SOCC	Honeybuckets	Women	Open (40-50)
6	34	Wakinikona	Wakinikona Open women	Women	Open (40-50)
7	83	Sand Point	Uhane oka wahine	Women	Open (40-50)
8	87	Dragon Sports	Dragon sport women	Women	Open (40-50)
9	33	Zamboanga Paddling Club	Coco express	Women	Open (40-50)
10					
11	15	BBOP	Sr masters	Women	Sr. Masters Unlimited
12					
13	40	Kikaha	Waioli	Women	Sr. Masters
14					
15	85	Sand Point	Sand point	Women	Unlimited
16	1087	RCCC	Rccc ladies dragon fly	Women	Unlimited
17	1049	Merisa Mae Canoe Club	Merisa Mae cc	Women	Unlimited
18	981	Kai Pana	Wahine	Women	Unlimited
19	65	SOCC	Crewsocc wahine	Women	Unlimited
20	37a	Kikaha	Master musubi wahine	Women	Unlimited
21	59	RCCC	Mowti ocean cree	Women	Unlimited
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

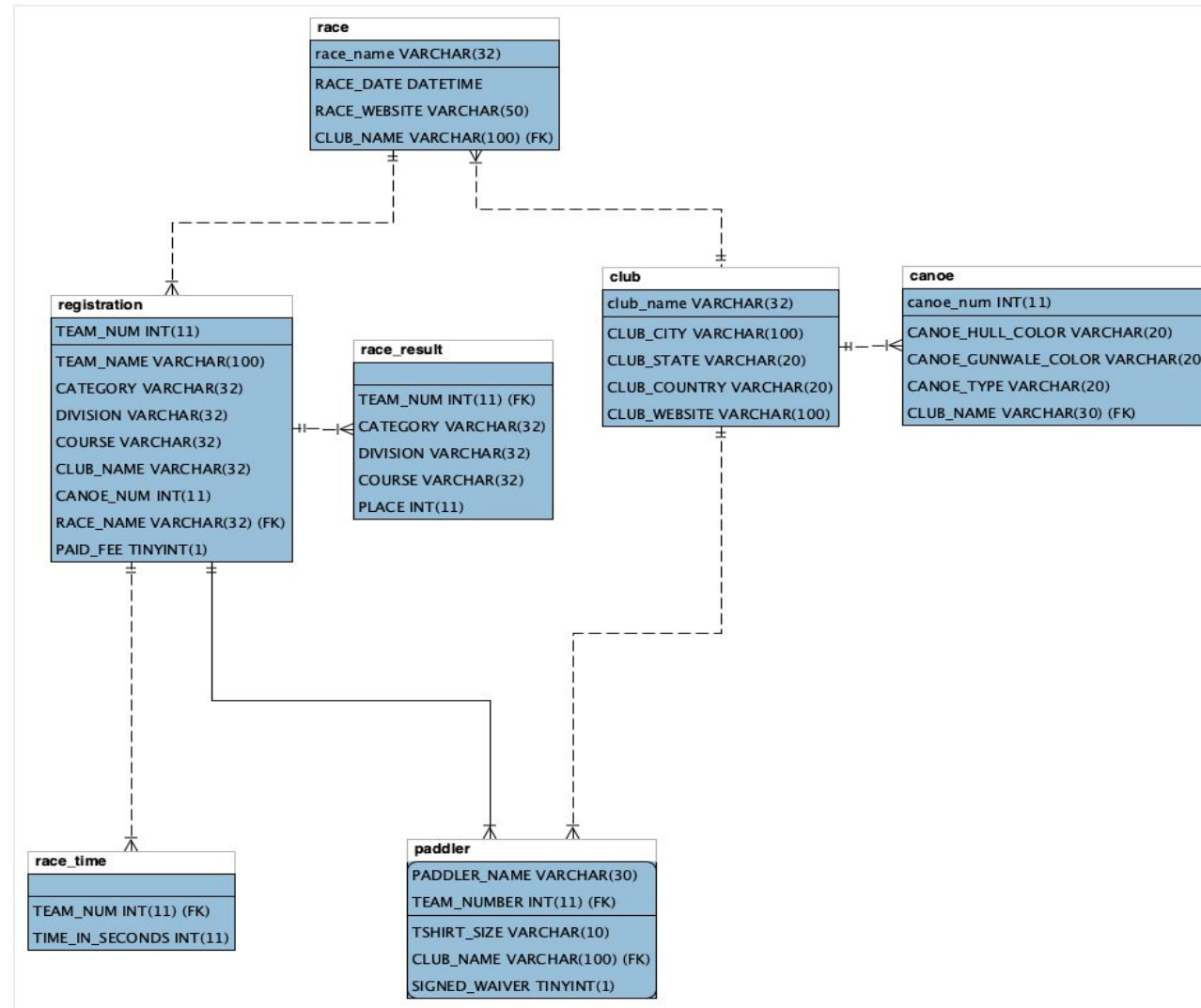
Mixed Women Men Short Course



PROJECT GOALS

- Create a Database that can handle the following tasks:
 - Participant/paddler registration and payment
 - Correctly register/associate paddlers to their club, canoe(s), and entered division/class.
 - Record race results in real time and be able to immediately produce placements.
 - Span multiple races so that every club can have one central data store.
 - Be flexible to add new events/races/divisions/paddlers at any time.
 - Minimal back-end maintenance. Events are run by volunteers who shouldn't need to mess with any of the nuts and bolts.

DATABASE STRUCTURE



IMPLEMENTATION

- GUI Option

Added queries to the query array

- Non-GUI Option (with -console argument)

Execute all queries that is both parameter query and action query sequentially, skip the non-parameter query

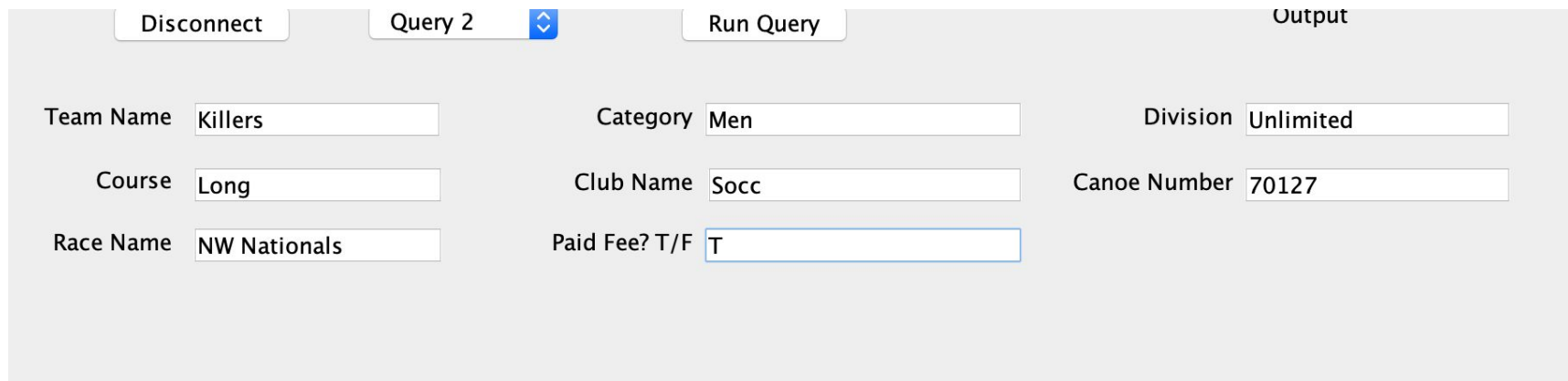
```
52         new String [] {"Team Name", "Category", "Division", "Course", "Club Name", "Canoe Number", "Race Name", "Paid Fee? 1 for yes, 0 for no"}, new boolean [] {false, false}, true, true))
53
54     // Show unpaid teams by club for a given race (supply race name)
55     m_queryArray.add(new QueryData("SELECT DISTINCT CLUB_NAME, TEAM_NAME, PAID_FEE\n" +
56         "FROM racelog.registration\n" +
57         "WHERE PAID_FEE = FALSE\n" +
58         "AND RACE_NAME LIKE ?\n" +
59         "ORDER BY CLUB_NAME, TEAM_NAME;",
60         new String [] {"RACE_NAME"}, new boolean [] {true}, false, true));
61
62     // List all team names and canoe descriptions for a given race
63     m_queryArray.add(new QueryData("SELECT reg.CLUB_NAME, TEAM_NAME, TEAM_NUM, can.CANOE_NUM, CANOE_HULL_COLOR, CANOE_GUNWALE_COLOR \n" +
64         "FROM racelog.registration reg\n" +
65         "JOIN racelog.canoe can\n" +
66         "ON reg.CANOE_NUM = can.CANOE_NUM\n" +
67         "WHERE RACE_NAME LIKE ?\n" +
68         "ORDER BY TEAM_NUM",
69         new String [] {"RACE_NAME"}, new boolean [] {true}, false, true));
```


DEMONSTRATION

Here we switch to cmd line and demonstrate queries/table insert.

Setup Steps:

- Run script and save it to a schema
- if execute it with the GUI option, double click the .jar file
- if execute it with the non GUI option, open terminal and run “java -jar <.jar file name with extension> -console



Disconnect		Query 2	Run Query	Output	
Team Name	Killers	Category	Men	Division	Unlimited
Course	Long	Club Name	Socc	Canoe Number	70127
Race Name	NW Nationals	Paid Fee? T/F	T		



DEMONSTRATION

- Query 1: List all race names
- Query 2: Add a registration
- Query 3: Show unpaid teams by club for a given race (supply race name)
- Query 4: List all team names and canoe descriptions for a given race
- Query 5: Add a race result by team number (team numbers are unique to a race)
- Query 6: Show winning 1st place teams for a given race
- Query 7: Show all results for a team (supply race and team)

FURTHER EXPANDABILITY

- Web Interface: Allow multiple clubs to use the database without lugging around a specific dedicated piece of hardware (laptop) with the database on it.
- Expand applicability: This project could be generalized to work with any racing format. With very minimal changes to the actual back end, this could be used for foot, bicycle or automotive racing. Any races with a class/division system.
- Automatic input of times: Many race timing devices support digital output of times. This functionality could be hooked into the database via additional java coding to automatically record times. Combine with a homebrew vision/QR code system to handle correctly assigning times to multiple competing participants.

QUESTIONS/COMMENTS?

