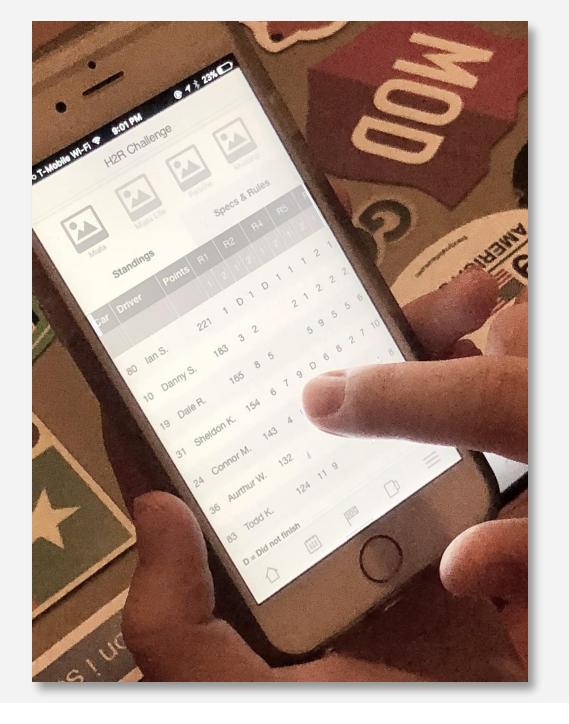
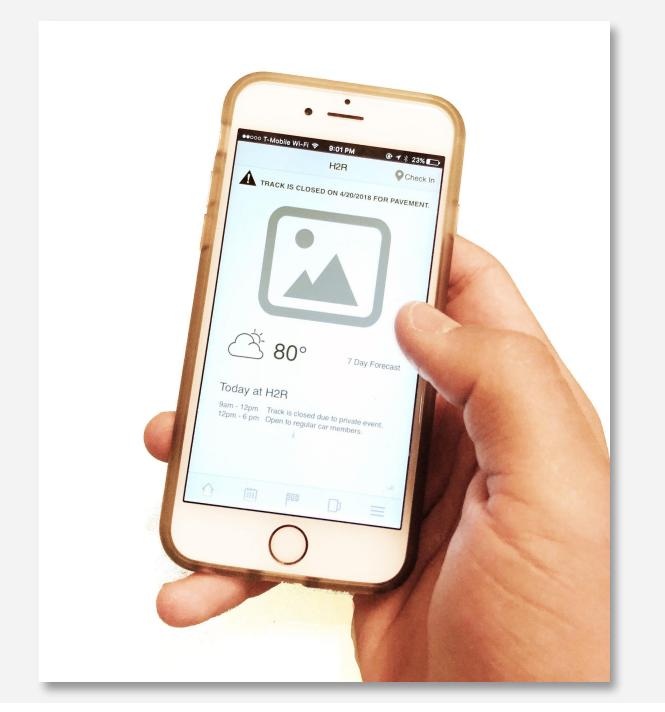
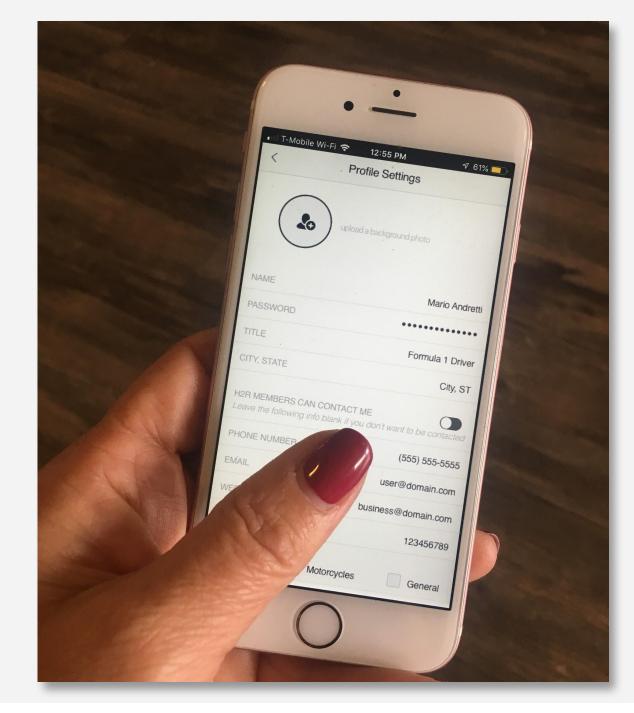


HARRIS HILL RACEWAY

A Usability Testing Case Study by Dina Soufi







H 2 R

CASE STUDY OVERVIEW

As a club member, I wanted to improve the experience of fellow members by making information easily accessible and quickly available.

CLIENT

Harris Hill Raceway (H2R)

BRIEF

Harris Hill Raceway is a technical race track and a social club designed to be fun, safe and educational.

MY ROLE

Sole Designer

Usability Testing

USABILITY TESTING

The test is to validate if the features are meeting user needs and for any risks of developing the wrong product.

Test in InVision

USABILITY TEST PLAN DASHBOARD

AUTHOR

Dina Soufi

PRODUCT UNDER TEST

What's being tested? What are the business and experience goals of the product?

H2R app prototype.
To confirm that
members would
benefit from the Club
App and serves their
needs/desires.

BUSINESS CASE

Why are we doing this test? What are the benefits? What are the risks of not testing?

The test is to validate if the features are meeting user needs and any risks of developing the wrong product.

TEST OBJECTIVES

What are the goals of the usability test? What specific questions will be answered? What hypotheses will be tested?

Do users utilize the H2R Mobile App to:

- Find out what is happening at the track.
- Find race results.
- Trade/sell/buy auto parts.
- Find and/or offer business expert services.

CONTACT DETAILS

dina.soufi@gmail.com

PARTICIPANTS

How many participants will be recruited? What are their key characteristics?

- 8 participants recruited.
- Participants are members of H2R.
- Must own a smartphone.

EQUIPMENT

What equipment is required? How will you record the data?

Sessions will be recorded to digital video.
I will log usability problems and measure task

completion rate & time.

TEST TASKS

What are the test tasks?

Check what is happening at the track and get notified when there are alerts related to an event or track closure.

Find race calendar and race results.

Find if any member has a specific part on hand for sale/trade. Post an item for sale.

Find if any member is an expert in a specific business area.

FINAL DATE FOR COMMENTS

April 6th

RESPONSIBILITIES

Who is involved in the test and what are their responsibilities?

Dina Soufi

LOCATION & DATES

Where and when will the test take place? When and how will the results be shared?

April 7th at H2R

Harris Hill Raceway 2840 Harris Hill Road San Marcos, TX 78666 512-667-6250

PROCEDURE

What are the main steps in the test procedure?

0-5 min Welcome & Consent 5-10 min Pre-test interview

10-40 min Carry out the test task

40-45 min Post-test questionnair e 45-50 min Post-test interview

50-55 min Debrief & Pay incentive

USABILITY TEST STUDY PLAN



USER GOALS

- Get timely information
- Easy access to events calendar and race results
- Members can network with other members



METRICS

- User Observation
- Tasks Success
- Rating Scale
- Survey utilizing System Usability Scale (SUS) to assess perceptions of usability



EQUIPMENT

Session will be recorded to voice/digital video.

METRICS BEING MEASURED



- The ability to find what members are looking for quickly
- Navigate through the product easily
- Know where members are within the overall structure
- Satisfaction:
 - Expectations How easy, efficient, and informative the product is.
 If it exceeds expectations how can we build on that.
 - Did it go below, meet, or beyond the user's expectations?
- Future Use Would members use it again?

USER TESTING SCRIPT

Link to H2R Club User Testing Script

User Testing Script

Product Area:

Harris Hill Raceway (H2R) Mobile App Prototype

User Type:

H2R members who were previously interviewed. Additional H2R members (any member, any

30- 60 minutes

- Landing page
- Calendar
- Race Results
- Members Directory

Hi _____, thank you again for taking the time to participate in this study.

We're going to evaluate H2R App to learn how the App serves the user's needs. I will be video recording to help capture the test and ensure that I don't miss anything. Are you

This session is pretty straightforward - I'll be giving you a broad task to complete and then asking questions as we go along. Before I tell you the task, I'll be giving you a little bit of context behind it, such as why you might be doing it and what you hope to achieve.

It's really important to know that we are only testing the app, not you. You can't do or say anything wrong here. Please feel free to let me know at any time if there's something you like, dislike, if you're confused, etc. I promise you won't hurt my feelings.

Also, I'd like you to "think aloud" as much as possible. By that I mean that I'd like you to speak your thoughts as often as you can. For example, you may be looking at a page, suddenly see something you didn't see before and want to click on it. In that case, saying something like "this caught my eye so I'm going to see what it is" would be very useful.

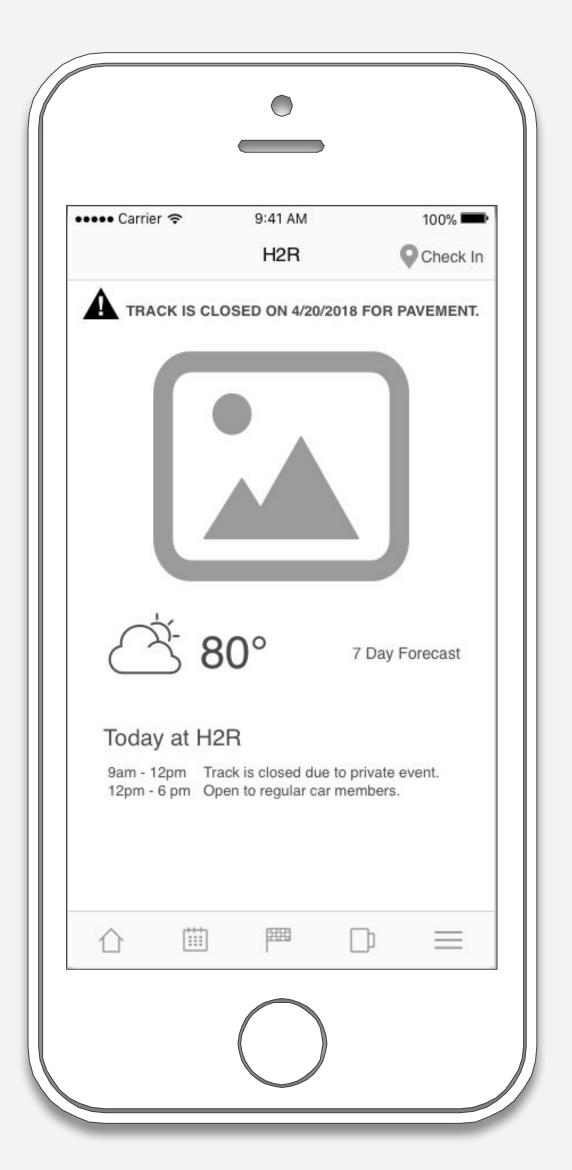
If at any point you have questions, please don't hesitate to ask. Do you have any questions so

Ok, Let's get started.

TASKS 1.1 & 1.2: HOME SCREEN

Task 1.1 - Home Screen navigation to explore what it has to offer.

Task 1.2 - Is information sufficient giving a summary of today's



TASK 1.3: CHECK IN

Now that you are here, how would you notify your friends that you arrived at the track and to motivate them to join you.

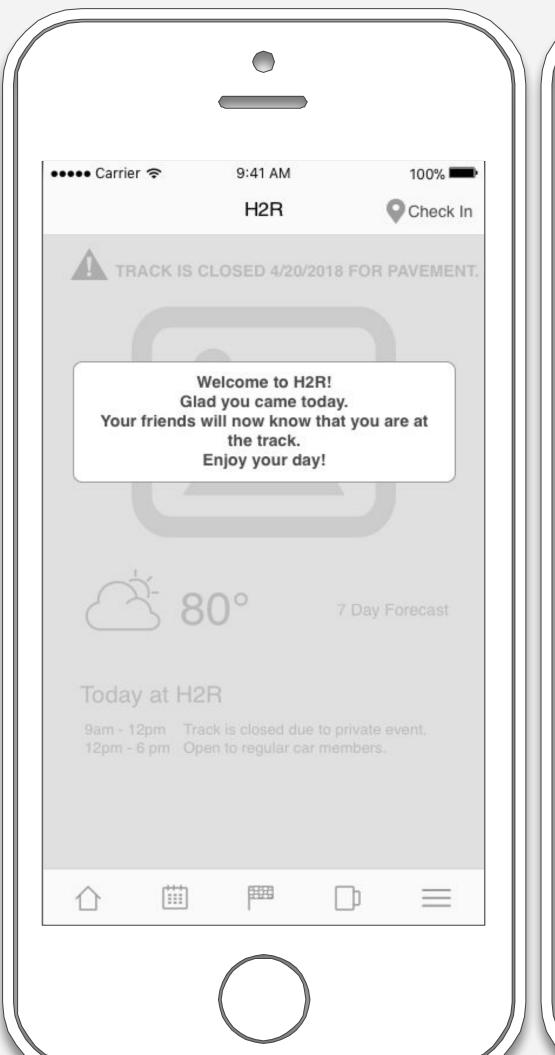
Expected Action:

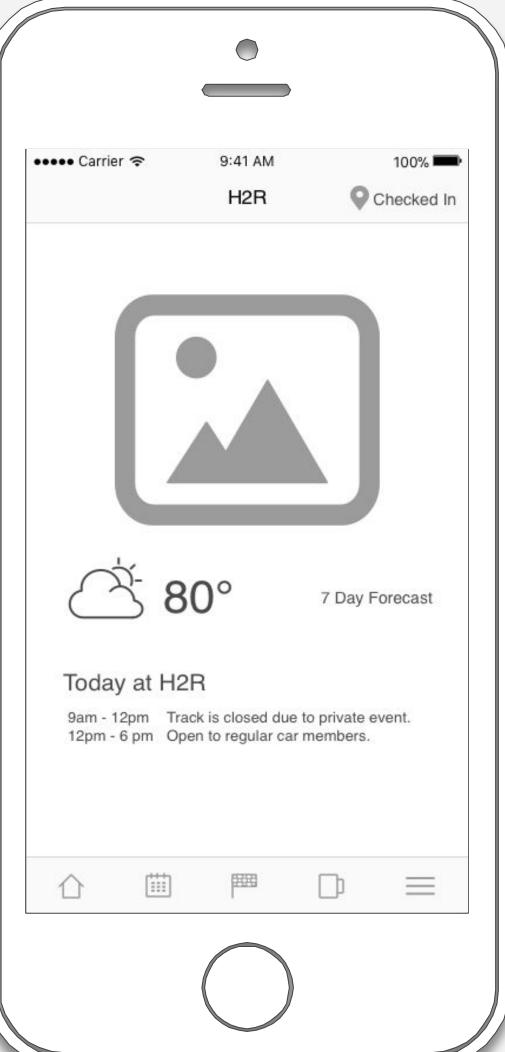
User clicks on "Check In". They will receive a pop up screen confirming their status and a message saying:

"Welcome to H2R.

Your friends now will know that you are here".

** Tester may want to mention that users don't have to check in if they don't want to share their status.







I normally go to the website, but now everything is listed here. It is a lot easier and faster to get information. I would definitely use it more than the website.

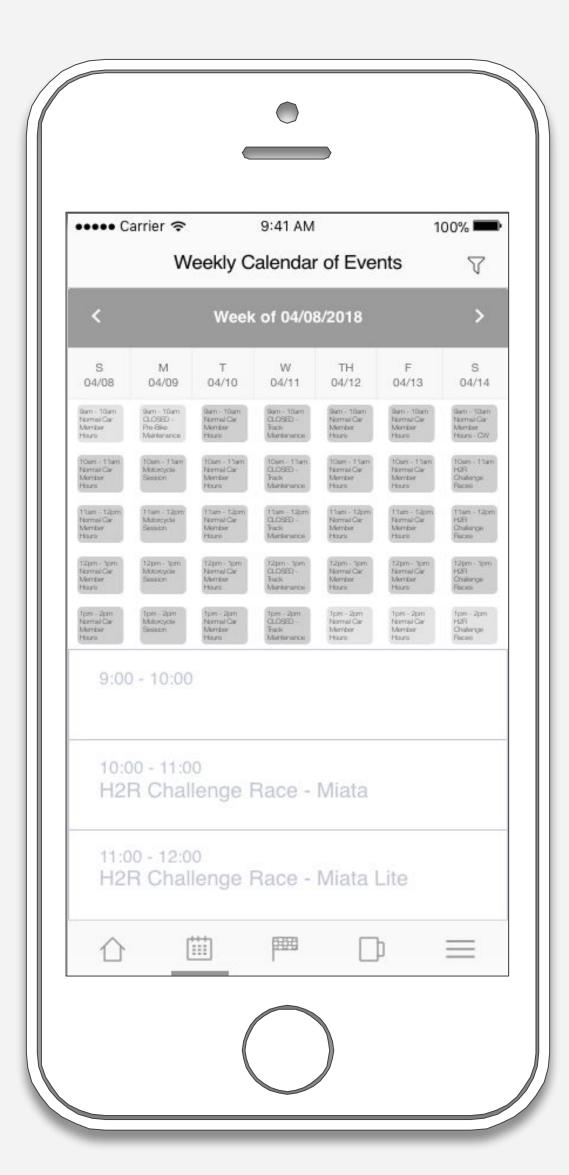
This is Fantastic.. It answers whatever question about the track instantly, That is quick and easy. What are they doing today, what is the weather like. Pretty much all of it for me...

The app is a lot easier than going to the website to check the status of the track or race results. Also I can check the weather right there instead of going to the weather channel.

HARRISON J.

BO R.

DANNY S.



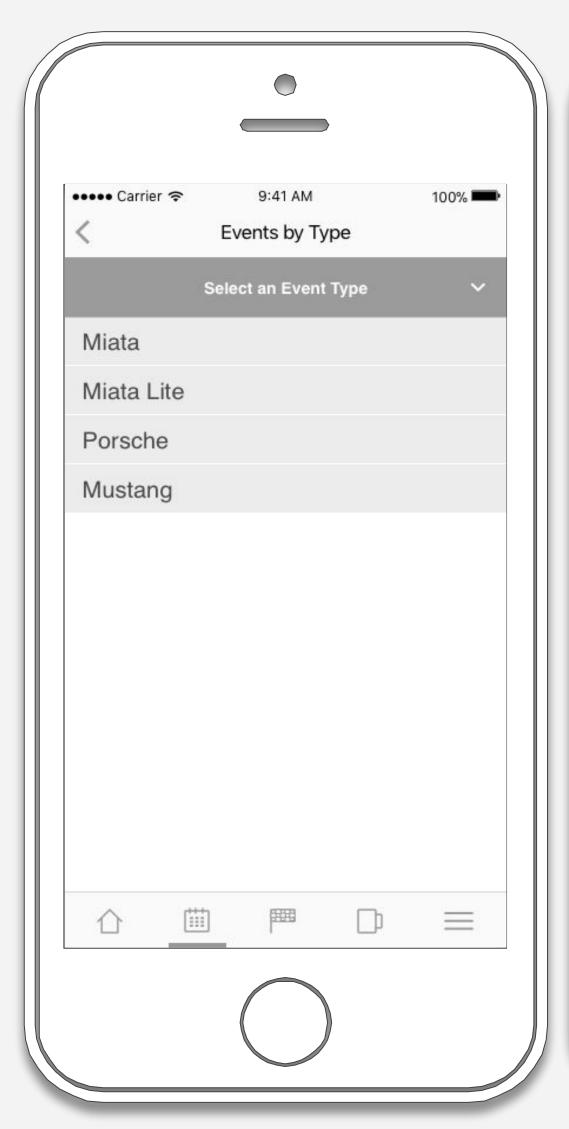
H 2 R

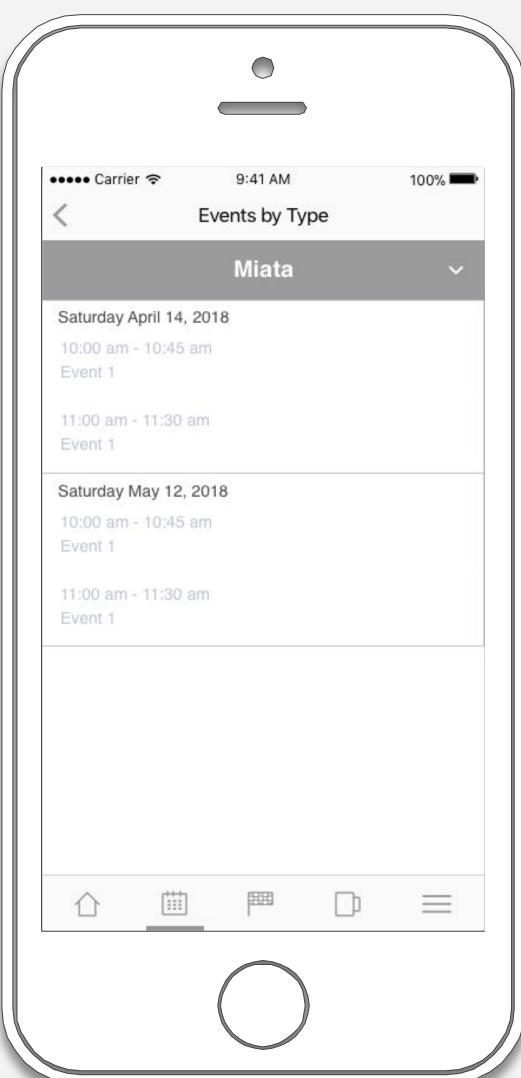
TASK 2.1: CALENDAR

Task 2.1 - Locate the calendar icon on the screen to open it.

Expected Actions:

User locates the calendar icon on the screen.





TASK 2.2 & 2.3: EVENTS CALENDAR

Task 2.2 - Search for what is happening on 4/14.

Task 2.3 - Did the user see the filter icon?

> Let's say that you are trying to see what events are happening at the track next month so you can mark your calendar accordingly.

Expected Actions:

User click on the calendar icon to open it.

- ➤ Now, let's see what is happening on 4/14. User clicks on the specific day.
- What other elements can you find on this section?
 Did the user notice the filter icon? Any subconscious reactions or curiosity about what is this icon and what it can do?

This is the most important thing for me, checking the weather today's schedule, and finding today is a motorcycle day, then I'll wait till tomorrow to go to drive my car.

BRIANNE C.

TASKS 3.1 & 3.2: RACE RESULTS

Task 3.1 - Find race results.

Task 3.2 - Can user find race Specs and Rules?

➤ Let's say that you are trying to find race results, how would you do that?

Expected Actions:

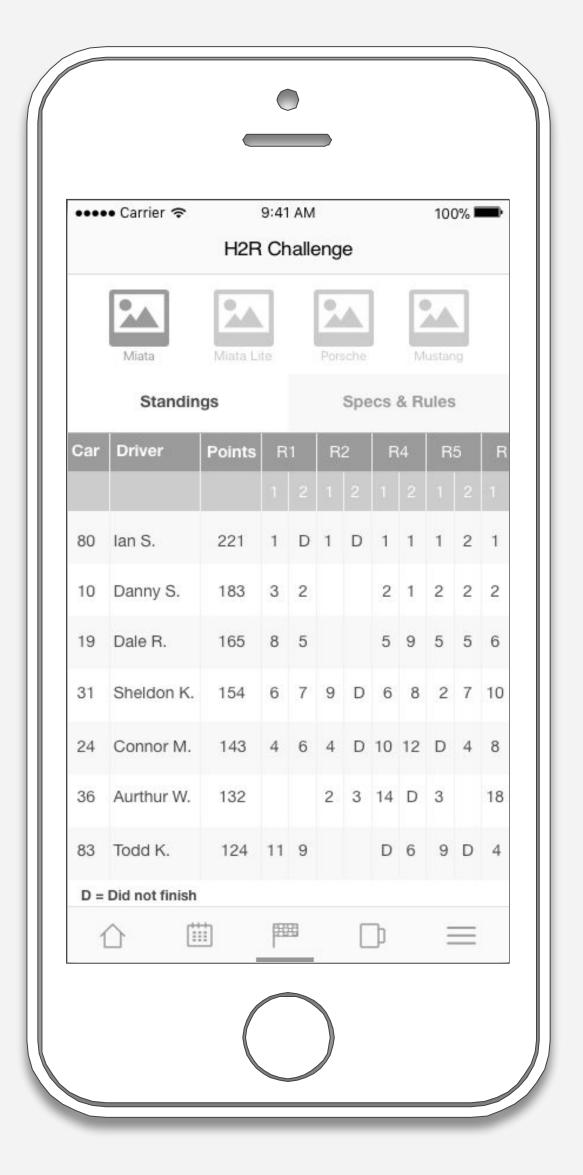
User clicks on the checkered flag icon to open it.

> Now, you're being asked to search the results of a race.

User clicks on the checkered flag icon.

- > Lets review the Miata racing group.
- > What other information can you find on this section?

User should be able to find "Specs and Rules" tab



Navigating H2R website using my phone is not easy, it works but it takes a few clicks whereas using this app, you pop this open take a look at the schedule or the weather forecast. This is time saving. No one is sitting on their computer anymore.

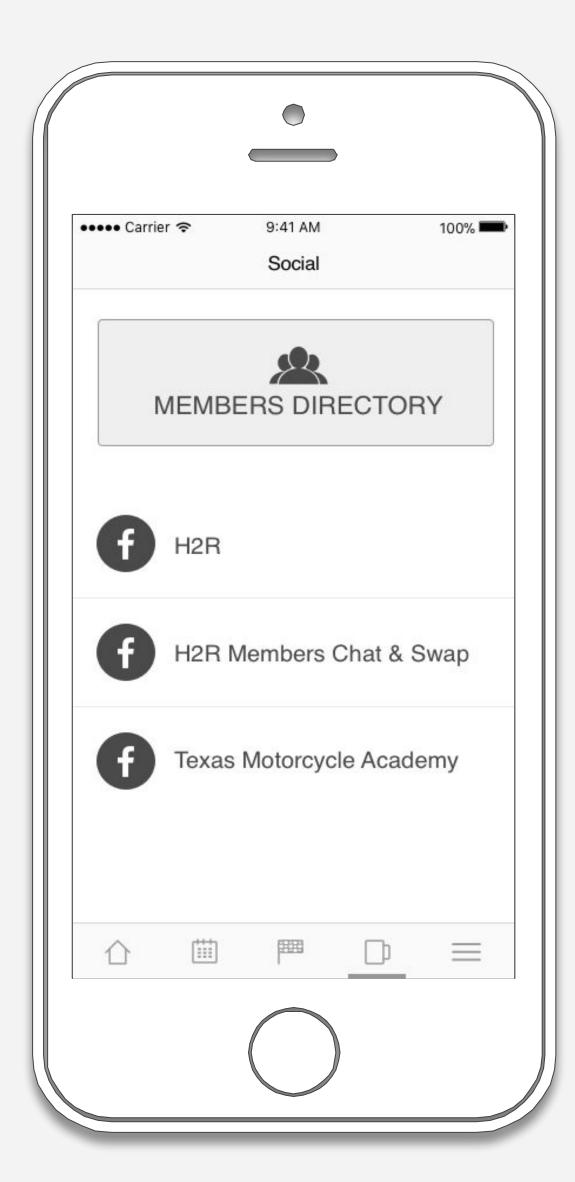
TYLER H.

This is my favorite part of race monitor where I can scroll down and find my team, yeah, I love that.

It is easy, intuitive, plus there are not many buttons, I get lost when there are too many options...

BO R.

GREG S.



H 2 R

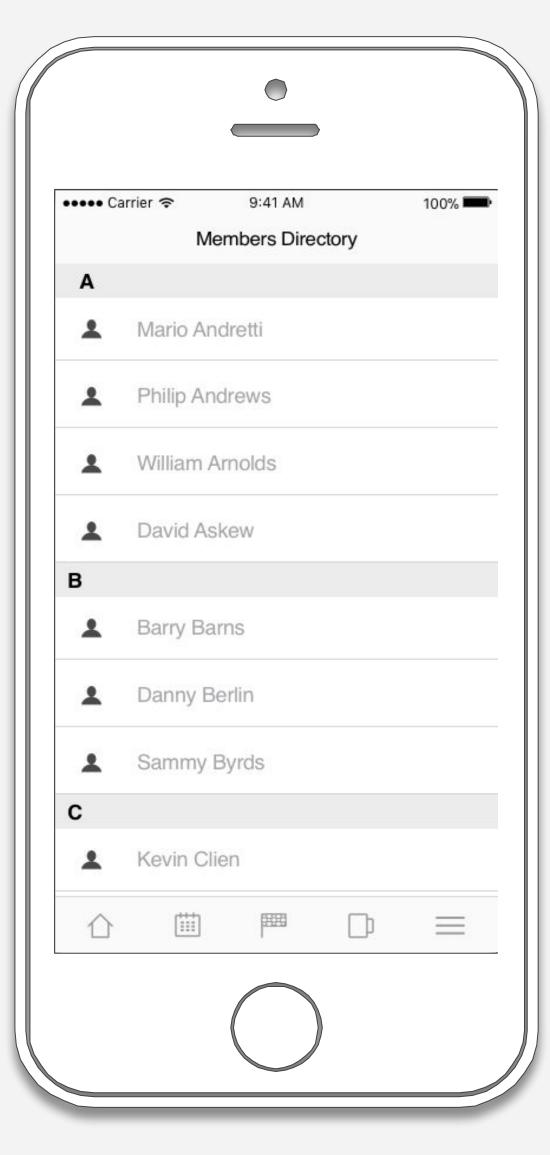
TASK 4.1: MEMBERS DIRECTORY

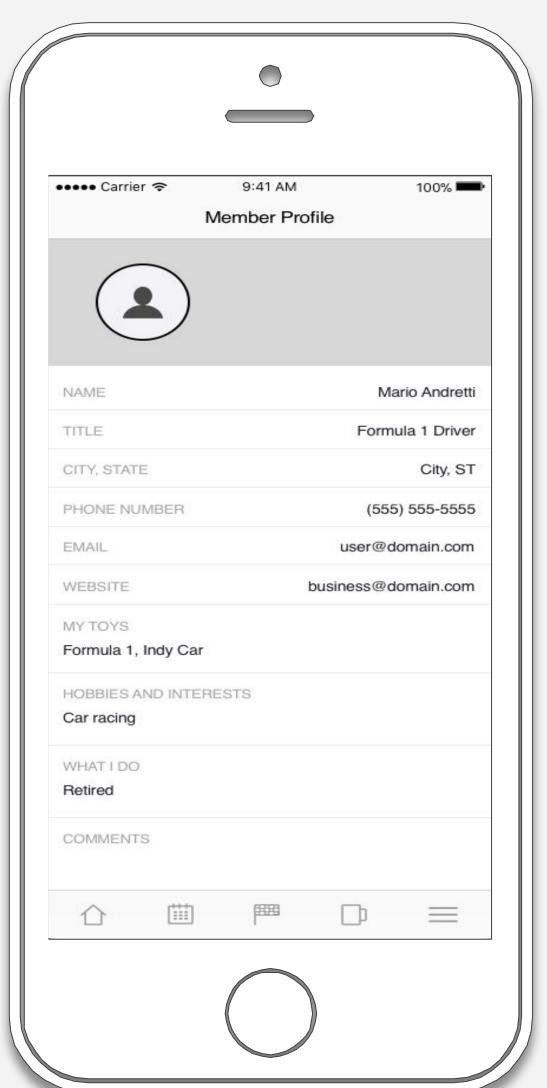
Task 4.1 - Search for members and/or business service expert.

Let's say that you are looking for one of the members' contact info. How would you do that?

Expected Actions:

User clicks on the "mug" icon for "Social".





TASK 4.2: SOCIAL ICON

Task 4.2 - Is the social icon hard to find and is it understandable?

Expected Actions:

These tasks address the Members Directory and tries to answer the following questions?

- Is the icon hard to find and is it understandable?
 (ie. does it convey the idea of social?)
- What is the alternative to this icon?
- Are they comfortable sharing their personal information, which is not mandatory?

Members Directory is a great place to find members to contact or to find a service expert when needed and try to keep the business with members.

PHILIPP H.

Great to have the swap option. A ton of people have tons of stuff they would like to swap.

GREG S.

RESULTS

TASK COMPLETION SUCCESS RATE

- Task 1.1 Home Screen navigation to explore what it has to offer.
- Task 1.2 Is information sufficient giving a summary of today's events and how the weather looks like?
- Task 1.3 Check In.
- Task 2.1 Locate the calendar icon on the screen to open it.
- Task 2.2 Search for what is happening on 4/14.
- Task 2.3 Did the user see the filter icon?
- Task 3.1 Find race results.
- Task 3.2 Can user find race Specs and Rules?
- Task 4.1 Search for members and/or business service expert.
- Task 4.2 Is the social icon hard to find and is it understandable?

All participants successfully completed the majority of the following tasks:

- Task 1.1, Task 1.2, Task 2.1, Task 3.1, Task 3.2, Task 4.1 (100%).
- Out of the eight participants, one participant wasn't able to do Task 1.3 (88%).
- Task 2.2, only two participants out of the eight (**75%**) were able to complete this task.
- Task 4.2 had a completion success rate of 50%.
- Task 2.3 was the worst... It had **38%** completion success rate, where only 3 participants were able to complete the task.

TASK COMPLETION SUCCESS RATE

Participant	Gender	Task 1.1	Task 1.2	Task 1.3	Task 2.1	Task 2.2	Task 2.3	Task 3.1	Task 3.2	Task 4.1	Task 4.2	Average
Danny	М	1	1	1	1	1	1	1	1	1	1	100%
Alex	М	1	1	1	1	1	1	1	1	1	1	100%
Во	М	1	1	1	1	1	0	1	1	1	0	80%
Greg	М	1	1	1	1	1	0	1	1	1	1	90%
Harrison	М	1	1	1	1	0	0	1	1	1	0	70%
Tyler	М	1	1	1	1	1	1	1	1	1	0	90%
Philipp	М	1	1	0	1	1	0	1	1	1	0	70%
Brianne	F	1	1	1	1	0	0	1	1	1	1	80%
Average		100%	100%	88%	100%	75%	38%	100%	100%	100%	50%	85%

SUS SURVEY

Scale: Strongly disagree 1 2 3 4 5 Strongly agree

- 1. I think that I would like to use this app frequently.
- 2. I found the app unnecessarily complex.
- 3. I thought the app was easy to use.
- 4. I think that I would need the support of a technical person to be able to use this app.
- 5. I found the various functions in this app were well integrated.

- 6. I thought there was too much inconsistency in this app.
- 7. I would imagine that most people would learn to use this app very quickly.
- 8. I found the app very cumbersome to use.
- 9. I felt very confident using the app.
- 10. I needed to learn a lot of things before I could get going with this app.

Participant	Gender	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	SUS Score
Danny	М	5	1	5	1	5	1	5	1	5	1	100
Alex	М	5	1	5	1	5	1	5	1	5	1	100
Greg	М	4	1	5	1	5	1	5	2	5	1	95
Tyler	М	5	1	5	1	5	1	5	1	4	1	97.5
Philipp	М	4	1	4	1	5	1	5	1	5	2	92.5
Во	М	5	1	5	1	5	1	5	1	5	1	100
Harrison	М	5	1	5	1	5	1	5	1	5	1	100
Brianne	F	5	1	5	1	5	1	5	1	5	1	100
											Average	98.125

LIKES, DISLIKES, & RECOMMENDATIONS

Upon completion of the tasks, participants provided feedback for what they liked most and least about the app, and provided recommendations for improving the app.



LIKED MOST

Today at the H2R
Weather
Alert Notifications
Calendar
Race Results
Members Directory



LIKED LEAST

Some icons were unclear like
Filter and Social icons



RECOMMENDATIONS

The following recommendations will improve the overall ease of use and address the areas where participants experienced problems or found the interface to be unclear.

JUSTIFICATION

SEVERITY LEVEL

The recommendations section provides recommended changes and justifications driven by the participant success rate, behavior, and comments.

Each recommendation includes a severity rating.

JUSTIfication

HIGH

- Search for a specific date by providing additional filters that allows searching for a specific date.
- Calendar font is too small. Will use color code blocks in order to better utilize the available space. A legend will be utilized to define the color code.

- Task 2.2 Search for what is happening on 4/14.

 Current search is only available for a specific event.
- Task 2.2 Search for what is happening on 4/14. It is visually easier on the eye to differentiate what each color means (ex. Green means track is open, or red means track is closed, etc.)

JUSTIfication

MEDIUM

Enlarge "Check In" label or make it more visible. In addition, we need to have a button showing who checked in already (automatic check-in or manual).

- Change the filter icon or replace all navigation icons with labels.
- Change the social icon or replace all navigation icons with labels.

- Task 1.3 Check In.
 Some participant didn't see the label. Whereas, others saw it but were not sure what to do with it. The already checked in option is for those who wants to know who is at the track as a motivation to join.
- Task 2.3 Did the user see the filter icon?
 Filter icon was too small and some participants did not recognize it or understood what it does.
- Task 4.2 Find Social icon.
 Using the social icon was confusing to some participants as they did not know what it meant.

JUSTIfiCATION

LOW

Ability to list multiple cars including car make and number. The two fields would be searchable.

Task 4.1 - Search for members and/or business service expert.

Current "My Toys" allows members to enter information about their vehicles (one or many) as a text field.

CONCLUSION

Most of the participants found the H2R app to be useful, simple, easy-to-use, and informative.

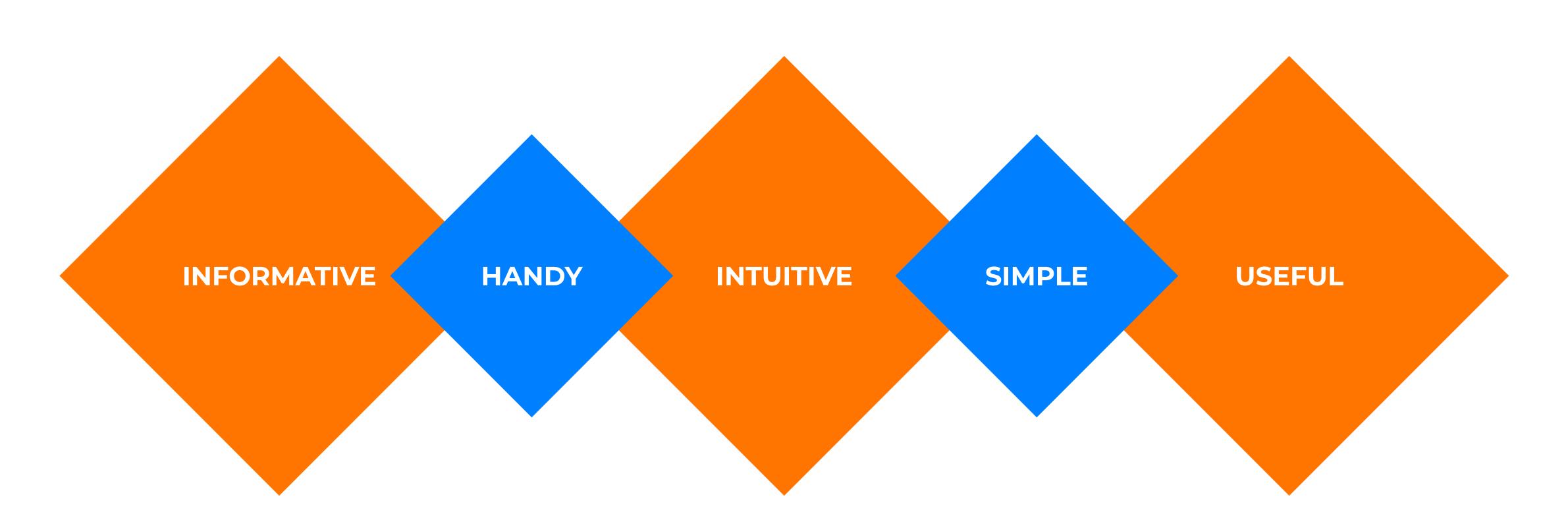
Having information handy for members is key for its success. They all concurred that a native app provides valuable and timely track and weather information that is accessible at all times when compared to a website.

Many participants expressed their appreciation of the Members Directory feature which allows them to network, recommend, or offer expertise to other members.

Majority of the participants found the overall structure/design to be intuitive.

All participants said they will definitely use the app as well as recommend it to other members.

CONCLUSION



The conclusion met the hypothesis that H2R members would benefit from a Club App that offers information regarding what is happening at the track, provide race results, have the ability to trade / sell / buy auto parts, and find / offer business expert services.

APPENDIX / RAW DATA

H2R APP SURVEY & RESULTS
Link

THANK YOU