NORTHERN ARIZONA UNIVERSITY

Nathan Franklin, Josh Baker - Group 12: Trainer Tuesday
GitHub: https://github.com/jrb688/Group12_Trainer_Tuesday
D1.2 - Consumer Discovery
Spring 2017 - CS386 Software Engineering - Marco Gerosa
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Refined value-proposition:

When the weather outside sucks, you have to ride your bike inside on a stationary trainer. Riding your stationary bike alone gets boring, so a lot of bike shops host group trainer rides in the winter when the sun sets too early to get a training ride in after work, when road conditions are unsafe for biking, or when it's too cold to bike outside.While there are multiple software options designed to receive the wireless signals transmitted by the special equipment that most bicycle racers ride with, there is no program designed to connect *multiple* users through one computer, and easily display information together on one screen. Current programs only allow one person to see their data on a computer screen. *This software will allow the trainer ride host to easily communicate the workout to the group.*

This software will support the following with additional features being added in the future:

- Allow the bike shop to easily communicate the current workout to all participants
- Online database that will users to access their data at any bikeshop using the program.
- Because of the different setups shops might use (projector screen, tv, laptop), the font size and layout will be adjustable.
- Users will pay per workout and shops can use the program for free while collecting a percentage of the user's fee.
- The shop can purchase pre-created workouts or a training plan that fits the race season for the region.
- Power, cadence and/or heart rate will be displayed specific for each user's preference.
- Certain statistics will be saved and viewable through the workout history of a user to show their improvement.
- Workouts will be exportable as a .fit file to be uploaded to other bike workout data tracking websites.

Consumer Segment:

Table showing important answers for trainer ride attendees

Question	Singletrack bikes (Kyle Hornbeck)	Flagstaff Bike Revolution (Mike Vanderberg)
How do you put on your group trainer ride?	Kyle designs and writes workouts onto 4 or 5 pieces of cardboard and sets them out on the floor in front of people. He keeps track of the time on his bike computer unit, and shouts when segments of the workout end/begin.	Laptop with generic countdown timer program - timers start one-after-another. Host explains the next segment right before it starts.
What does it cost?	Currently free, $10-$30 in tips for each session, 2-3 employees working 5pm-8:30pm to: set up + do the 1.5 hour workout + clean up. Employees don't get paid for this.	5-10 people show up and it is complementary. Make only a few dollars in tips each time. Employees don't get paid for this. 20 minutes to design workout, 2 minutes to put into the program on pc, 15 minutes to clear floor space, 15 minutes to clean up. All the furniture (shelves) are on caster wheels and roll out of the way.
What ANT+ compatible sensors do attendees have?	Out of the average of 15 people that do the event, 7 have power meters, 3-5 don't have heart rate, 20% have no equipment	25% of people have power meter, 25% only have heart rate, 50% rely on perceived effort. Half the class is highschool student with limited money. They don't have a power meter because they're expensive, they don't have an (inexpensive) heart rate strap because it requires an expensive bike computer.
What would make it better?	If he didn't have to keep track for everyone, not having to shout. (better interface)	"better communication of the workout"- displayed description for the segment of the workout, real-time communication, target intensity (power, heart rate, cadence+gear ratio(would be dependent of type of trainer)) Next few segments, countdown, total elapsed time, user data should be shown on screen.
What specific features do you want to see	Coaching would be nice-get pre-programmed workouts. "Give them what they can't do themselves"	Premade workouts would be cool. Workouts should be uploadable to other website.

Table showing important answers for trainer ride attendees

Question	Jenny Quijada (attends Singletrack's group trainer bike ride)	Richard Baker
What is it:	everyone sets up their trainers in a circle. Music playlist specific for the night's workout. Kyle designs a workout- starts with warmup, ends with cooldown with specific workout in the middle. Written on five pieces of cardboard laid out around the room in front of people.	People bring their bikes to the shop in the evenings. There is a board posted in the front of the shop with that weeks specific workout. People are welcome to join anytime during the session. Complete the ride at your own pace. Not as popular because in their area winter is not as long as it is in other areas so riders only attend usually December - February. Not offered very often during the other months due to nicer weather. He does see its potential if a few things were included in the project.
What would make it better:	If Kyle didn't have to write it down so many times or shout. If it was visible to everyone. If it told you <u>when</u> to do the workout segments. A program that uses the 'training zones' could bridge the casual rider into someone that understands and cares about their 'numbers'	Right now, he has to manually input his data into a spreadsheet to get a graph and he believes the system could be made better if this were incorporated into the system as well as allowing each user to set a goal and then define workouts to reach that goal such as distance or times.
Specific features	Not everyone is on the same 'level', and it has to be designed for them all: ● 'into numbers'-has lots of equipment for data, goes home and looks at the data. ● 'into training'-likes the planned out workout, is fine with perceived effort. ● 'social'-just there to hang out and have fun on the bike	simple enough for "non-techie" people to use some form of a race mode where riders could get together at a specific time and start a race.

Interviews:

Kyle Hornbeck (manager at singletrack bike shop, host of 'Trainer Tuesday')
Interviewed by Nathan Franklin on 2/2/2017
What it is: Kyle designs and writes workouts onto 4-5 pieces of cardboard and sets them out on the floor in front of people. He keeps track of the time on his bike computer unit, and shouts when segments of the workout end/begin. Currently free, $10-$30 in tips for each session, 2-3 employees working 5pm-8:30pm to: set up + do the 1.5 hour workout + clean up. Employees don't get paid for this.

What would make it better: If he didn't have to keep track for everyone, not having to shout. (better interface)

It can't require heart rate or power meters, because not everyone has those (they're expensive).

Has to "provide what I can't get at home" (group experience)

Data being saved to be viewed later would be cool (hard to remember what's going on during hard intervals)

A program wont save time, but would add quality to the workout.

Shop would want to make $115/session to pay for employees and stuff.

Out of the average of 15 people that do the event, 7 have power meters, 3-5 don't have heart rate, 20% have no equipment

Would be interested in paying a monthly/quarterly/bi-annually/annually fee to use the software to host trainer rides whenever they wanted.

Might do multiple times a week, or all year.

Coaching would be nice-get pre-programmed workouts. "Give them what they can't do themselves"

Heart rate doesn't change instantly (slowly rises), power meter isn't that stable of a number.

What if there was praise or awards or free class when you get faster

Probably 300 shops in the U.S. probably do group trainer rides

Mike Vanderberg (Employee at Flagstaff Bike Revolution, group trainer ride host that week)
Interviewed by Nathan Franklin on 2/2/2017
Laptop with generic countdown timer program - timers start one-after-another. Host explains the next segment right before it starts. 5-10 people show up and it is complementary. Make only a few dollars in tips each time. Employees don't get paid for this. 20 minutes to design workout, 2 minutes to put into the program on pc, 15 minutes to clear floor space, 15 minutes to clean up. All the furniture (shelves) are on caster wheels and roll out of the way.

25% of people have power meter, 25% only have heart rate, 50% rely on perceived effort. Half the class is highschool student with limited money. They don't have a power meter because they're expensive, they don't have an (inexpensive) heart rate strap because it requires an expensive bike computer.

The shop also does complimentary yoga class weekly, has a bigger turnout. Why isn't the trainer ride as popular? It requires more equipment and a car that can transport bike.

November-March aren't a busy time (don't make as much money then) for a bike shop because cold/snowy/earlier sunset so people aren't riding the bikes as much, so they don't buy bikes then and don't get their bikes worked on them. If there was a way to bring in more money then, it would be great.

Estimate 100-1000 shops do this-it's common

What he wants: "better communication of the workout"- displayed description for the segment of the workout, real-time communication, target intensity (power, heart rate, cadence+gear ratio(would be dependent of type of trainer))

No plans on changing how the trainer ride is done at the moment.

What should be shown on the screen: next few segments, countdown, total elapsed time, user data.
Premade workouts would be cool.

Workouts should be uploadable to other website.

Jenny Quijada (college student, attends 'Trainer Tuesday' at singletrack bike shop)
Interviewed by Nathan Franklin on 2/13/2017
What it is: everyone sets up their trainers in a circle. Music playlist specific for the night's workout. Kyle designs a workout- starts with warmup, ends with cooldown with specific workout in the middle. Written on five pieces of cardboard laid out around the room in front of people.

What would make it better: If Kyle didn't have to write it down so many times or shout. If it was visible to everyone. If it told you <u>when</u> to do the workout segments.

She doesn't have a power meter (too expensive) but there are some people that have money and just need a better reason to buy a power meter.
Not everyone is on the same 'level', and it has to be designed for them all:
- 'into numbers'-has lots of equipment for data, goes home and looks at the data.
- 'into training'-likes the planned out workout, is fine with perceived effort.
- 'social'-just there to hang out and have fun on the bike

She has a cadence sensor and would buy a heart rate strap if the data helped her train better. A coach told her to get a cadence sensor to improve her training. A program that uses the 'training zones' could bridge the casual rider into someone that understands and cares about their 'numbers'

For a better experience it's worth even if it takes time for each person to set it up, everyone shows up early to trainer tuesday. It would be useful if it saved data for each user.

Richard Baker (Recreational Cyclist)
Interviewed by Josh Baker on 2/12/2017

What it is: People bring their bikes to the shop in the evenings. There is a board posted in the front of the shop with that weeks specific workout. People are welcome to join anytime during the session. Complete the ride at your own pace. Not as popular because in their area winter is not as long as it is in other areas so riders only attend usually December - February. Not offered very often during the other months due to nicer weather. He does see its potential if a few things were included in the project.

He says it would be interesting to have some form of a race mode where riders could get together at a specific time and start a race. He liked the ability to save and review session data from his heart rate monitor as well as his bike computer. He says the system would be very useful as long as it is simple enough for "non-techie" people to use. Such as power on the system, load a predefined workout, and go. Right now, he has to manually input his data into a spreadsheet to get a graph and he believes the system could be made better if this were incorporated into the system as well as allowing each user to set a goal and then define workouts to reach that goal such as distance or times.

Group Participation
Nathan Franklin created the new table that breaks down the interviews
Josh Baker redesigned the value proposition