

Health Rival

Test Plan

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Introduction

This document describes the usability evaluation plan for Health Rival. This plan includes the following sections:

- Purpose and goals of the usability evaluation
- Target audience
- Design of the usability evaluation
- Data collection methodology
- Deliverables
- Resources
- Schedule

Purpose of the Usability Evaluation

The purpose of a usability evaluation of the Health Rival is to predict the expected performance of the actual customer using the current product and materials, as well as detect any serious problems prior to the release of the product. The features that will be tested through the usability evaluation process are functionality of each of the pages inclusive of:

Home: Ease of use and navigation as well as prompted sign in.

Competition: Competing with friends to motivate each other through means of sharing what they have done.

Buddy System: Easily find a nearby friend to go to the gym with.

Goals: Set goals and reach them.

Schedule: Stay organized and schedule your life and your gym times.

Forum: Communicate and collaborate with the community. Ask questions and discuss various topics.

Sign-In: Sign in to a profile.

My Profile: View your profile details and what others see.

Friends: View friends added.

Settings: Edit user settings.

Usability Evaluation Goals

The goals of usability evaluation include establishing a baseline of user performance for future usability evaluation, establishing and validating user performance measures, and identifying potential design concerns to be addressed in order to improve the efficiency, productivity, and end-user satisfaction. Specific usability

goals allow for the creation of evaluation scenarios and tasks that will let us evaluate the extent that you are meeting those goals, and what measures can help us determine if in fact the participants are having trouble completing the tasks. Consider any areas of the design where you may have particular usability concerns.

This evaluation will be based on the following usability goals:

- Users will be able to access any page from the home page in under a minute.
- Users will learn how to create an account and view profile information with under 5 errors.
- Users will be able to access friends as well as add them with minimal help.
- Users will learn to use all pages efficiently in under 2 minutes for each page with very little help from prompts.
- Users will learn how to utilize friends to their advantage in real world situations.

We will also use a questionnaire to determine post-test subjective emotional reactions:

- Users feel error messages are understandable.
- The users feel the overall user experience was satisfying.
- Users feel that the website was easy to navigate and descriptions were satisfyingly accurate.
- Users feel layout of the pages was effective in pushing their desired goal.
- Users feel they were easily able to create an account and view profile information.
- Users feel the color scheme was pleasing.
- Users feel each page was useful and would be enjoyable to use in their daily lives.
- Users feel they were provided with adequate help when trying to understand the system.

Target Audience

Subject Selection Criteria

The selection of participants whose background and abilities that are representative of the products intended end user is a crucial element of a successful usability evaluation. The evaluation will be valid only if the people evaluated are typical end users of the product, or as close to a selected set of characteristics as possible.

The participants' responsibilities will be to attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible, and to provide feedback regarding the usability and acceptability of the user

interface. The participants will be directed to provide honest opinions regarding the usability of the application, and to participate in post-session subjective questionnaires and debriefing.

The following list shows the key characteristics of the end users that are considered as critical differentiators for successful adoption, and use, of Health Rival. These characteristics are the basis for participant selection for the usability evaluation.

For our participants we will look for: a wide variety of prior gym experience, different genders and age groups, people looking to lose weight, people who are competitive and also looking to get fit, as well as your average person. Covering a wide variety should be key as our product should be usable by as many people as possible. We will select our participants from personal contacts and/or personal contacts who know people who may be interested.

Design of the Usability Evaluation

Individual evaluation sessions will take place in the following order:

- A performance evaluation in which each participant is asked to perform a series of real-life tasks
- A questionnaire and an interview after each performance evaluation to gather additional insights about Health Rival and demographic information from the participants.

Evaluation Team Roles

The roles involved in a usability test are as follows. An individual may play multiple roles and tests may not require all roles.

Trainer

Provide training overview prior to usability testing

Facilitator

- Provides overview of study to participants
- Defines usability and purpose of usability testing to participants
- Assists in conduct of participant and observer debriefing sessions
- Responds to participant's requests for assistance

Data Logger

Records participant's actions and comments

Test Observers

- Silent observer
- Assists the data logger in identifying problems, concerns, coding bugs, and procedural errors
- Serve as note takers.

The Evaluation Process

The usability evaluation process is as follows:

Participant Greeting

Each participant will be personally greeted by the evaluation facilitator and made to feel comfortable and relaxed. The issue of confidentiality will be explained and the participants will be asked to sign the consent form indicating their agreement to volunteer in the evaluation.

Orientation

The participants will receive a short, verbal scripted introduction and orientation to the evaluation. This material will explain the purpose and objective of the evaluation, and additional information about what is expected of them. They will be assured that the product is the center of the evaluation and not themselves, and that they should perform in whatever manner is typical and comfortable for them. The participants will be informed that they are being observed.

Performance evaluation

The performance evaluation consists of a series of tasks that are evaluated separately and sequentially. The individual participants complete the tasks while being observed by the usability specialists. The scenario is as follows:

- After the orientation, the participants will be asked to sit down at the computer. The evaluation administrator will give the participants the task scenario packet and instruct them on the use of the task scenarios, where the participant will complete the tasks one at a time in the order provided in the packet.
- After the participants begin working through the evaluation scenario, they will be encouraged to work without guidance except for the provided material and the product itself. The evaluation administrator may ask the participant to verbalize his or her thoughts if the participant becomes stuck or hopelessly confused. These occurrences will be noted by the evaluation administrator, and will help to pinpoint the cause of the problem.

Participant debriefing

After all tasks are complete or the time expires, each participant will be debriefed by the evaluation facilitator. The debriefing will include the following:

- Completion of a brief post evaluation questionnaire in which the participants share their opinions on the product's usability, appearance of application screens, and general impressions of the product
- Participant's overall comments about his or her experience

- Participant's responses to probes from the evaluation facilitator about specific errors or problems encountered during the evaluation

The debriefing session serves several functions. It allows the participants to say whatever they like, which is important if tasks are frustrating. It provides important information about each participant's rationale for performing specific actions, and it allows the collection of subjective preference data about the application and its supporting documentation.

After the debriefing session, the participants will be thanked for their efforts, and released.

Logistics

Physical logistics include:

- Any location suitable to the user
- A laptop for the user
- A notebook for the evaluator to record any heuristics and general observations
- Tasks for the user to complete
- Debriefing questionnaire
- Cameras
- Sound recorder

Data Collection Methodology

Data will be collected through the use of a "thinking aloud"/verbal protocol, observation of behavior, and a timer. We will use the usability measurement table in **Appendix B** for reporting quantitative measurements. Document the measurements you identify below in the table.

Measures to be collected include the following:

1. The mean amount of time to complete each task
2. The percentage of participants who finished each task successfully
3. The level of satisfaction a user gets from completing a task on a 1-10 scale
4. Number of and types of errors, including:

Observations and comments: The evaluation facilitator notes when participants have difficulty, when an unusual behavior occurs, or when a cause of error becomes obvious.

Non-critical error: A participant makes a mistake but is able to recover during the task in the allotted time.

Critical error: A participant makes a mistake and is unable to recover and complete the task on time. The participant may or may not realize a mistake has been made.

8. The number of indications of frustration or joy from the participant
9. The number of subjective opinions of the usability and aesthetics of the product expressed by the participants

Deliverables

At the completion of the usability evaluation, a formal analysis will be performed. A final evaluation report will be included in the project presentation. The analysis will detail the significant problems and observations detected during the usability evaluation, and recommendations to address the findings.

Schedule

The usability evaluation will be conducted in November from the 2nd to the 9th. The following is an estimate for the total schedule.

Activity	Person Responsible	Time (Hours)	Date(s) Conducted
Planning for the evaluation, including the creation of evaluation materials			
Arranging logistics			
Piloting the materials and procedure			
Running the evaluations			
Analyzing data			
Preparation of final report and peer review			
Preparation of final presentation			
Total Time			

Appendix A – Task Scenarios

1. A user needs to log in with their existing account
2. A user needs to create a new account and then use this account to log in
3. A user is able to navigate to a page they want
4. A user goes to the goal page and adds a new goal
5. A user needs to delete a goal
6. Marks a goal when it is done
7. A user navigates to the schedule page and adds a new event to the calendar
8. A user navigates to the buddy system page, enters their city name and selects their city from the autocomplete
9. A user sends a message to a potential buddy
10. A user navigates to the competition page and adds a recent workout
11. A user views current high scores of a specific workout
12. A user sees the history of their previous workouts
13. A user navigates to the forums page and searches for a forum
14. A user creates a new forum thread
15. A user comments on a previous forum thread
16. A user can view their friends and their profile

Appendix B – Usability Measurement Table

User Role	UX Goal	UX Measure	Measuring Instrument	UX Metric	Baseline Level	Target Level	Observed Results
User	Ease of Use and satisfaction	First Impression	Navigate to the forum page, find a forum and add new forums	Likert Scale	7/10	9/10	
User	Walk-up ease of use for new user	The response time, how long does it take from start to end?	Navigate to a goal page, adding a new goal and set it to be done when the user finishes it	Time on task	3 min	<2.5 min	
Competitive Person	Satisfaction	First Impression	Navigate to the competition page and	Likert Scale	7/10	8.5/10	

			input personal records and view leaderboards				
User	Ease of Use	Average number of errors	Sign-in	Count	<2	0	
User	Functionality and Ease of Use	Average time taken	Navigate to the schedule page and add an event to the schedule	Time on task	<2 Mins	<1 Min	
User	Functionality and Ease of use	User satisfaction	Navigate to the my profile page and edit profile information	Likert Scale	5/10	8/10	
User	Functionality	Average time taken	Navigate to the buddy page, search in an area, and add a friend	Time on task	<4 Mins	< 2 Mins	
User	Satisfaction and ease of use	User satisfaction	Navigate to the friends page and view added friends as well as send them messages	Likert Scale	5/10	8/10	