

Michael Kibbe
Seewan Kim
1/6/2016
CSE 403 Product Proposal

Happy New Ear

Vision

For big purchases, people often want to try it before they buy it. With something like software, demo versions can be downloaded at home at the convenience of the consumer. However, with hardware, it's much trickier.

Specifically, people in the audio enthusiast community have a lot of trouble with trying audio equipment like headphones before they buy them. You either have to find a demo in a store, which is often impossible and only allows you a couple of minutes in a noisy situation, or ask around on the internet or on local forums to see if someone is willing to let you come over to demo them.

For Happy New Ear, we want to create a platform that connects audio enthusiasts directly, creating a network that allows for people to more easily share their audio equipment with each other. Happy New Ear is a website that allows users to coordinate either the short-term exchange, or the short term loaning, of audio equipment. When a user signs up, they list their location, the audio equipment they're willing to lend out, and the equipment they're interested in. After this, by searching for a specific product, Happy New Ear lists all the people who have it, prioritizing those who are nearby and who are interested in something the user has. Then, the user can send a request for an exchange (or to rent, if there is no compatible product exchange), either for 1 week, 2 weeks, or 1 month. The other person can then either accept the terms of the exchange, provide a counter-offer, or decline. We could also potentially add a payment aspect for renting, where the lender lists the prices along with the exchange periods.

Profiles for users shows ratings and comments from both those who this user rented to and borrowed from, detailing how smoothly interactions with this user went. Each audio equipment also has a page with general details about the device and user feedback, as well as a listing of other equipment commonly rented by those who rented this one.

Software Architecture

The project must model Users, Products, Exchanges, Comments, and Ratings, while being able to have filtered searching functionality on the main page, profiles for users, and stored user input. We propose making the database in MySQL, and the web app in Ruby on Rails. This project takes the basic database and web development practices we have learned in our courses and expands them into a fully realized consumer application.

Challenges and Risks

The biggest challenge we see is testing effectively. The application is meant to run on a timescale of weeks and months. To combat this, comprehensive unit tests for the time-critical portions must be made, and for development purposes, much smaller time frames can be worked with.