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Project Proposal

Apartment living is a common reality for students. Whether in the dorms, or off-campus, you must be conscientious of how your behavior affects your neighbor's environment. Many will put up with noise, but everyone has their breaking point. Keeping track of how much noise you are making, how consistently you are making it, and when you are making it would help you to maintain neighborly relationships. However, this is not easy to do with current solutions. Volume is a unique metric to measure, and can be quite complex, but with recent advances is small form factor computing, a distributed set of microphones and an application could take care of the complexity for you. Ensuring that your volume is to a reasonable level is dependent on tie of day and noise frequency. A single loud crash is very different than a party, as is some loud music at 2pm rather than 2am. Alerts on a webpage and integration with your speaker setup would provide volume control. The product could also provide a chart over time of decibel level, allowing you to look for patterns, or when you might need to go apologize to the neighbors. An extension of the product could be installation throughout a building, allowing each unit to know the noise preferences of it's neighbors. This will allow for a better tuned and more flexible system.