Alert 1 - Evacuation Alarm for a Nuclear Power Plant
This first auditory alert is especially for operation within a Nuclear power plant or a similar environment. This alert is triggered when an evacuation is necessary in the plant and creates a sense of emergency with a repetitive one-beat resonance. The low reverberation reduces chaos but still retains the notion of importance, alerting the employees that they should evacuate the premises immediately to avoid danger. The shallow, low pitch of the alert lessens annoyance to the workers when hearing it for long periods of time. Unlike high pitched alerts, this alarm minimizes distraction with the reduced volume and startle response but still preserves the need for urgency when the alert is heard. With the added noise and rust aspect at the end of each beat it creates an industrial nature, linking it directly to the environment in which it will be heard giving it familiarity. Reducing the stress levels of employees in this situation that requires this alarm is of number one priority as it will consequently reduce the potential for human error which would create additional hazards.

Alert 2 – Parking Sensor Alarm (Scenario)
This Scenario-orientated alert is designed as an everyday parking sensor alarm to warn a driver when they are too near a parking curb, vehicle or person. The design of a 3 beat alarm continuously accelerates as time goes by, therefore if a car continues to move closer to another vehicle or object, the alarm will speed up and eventually become a continuous beep if they result in hitting one another. The alert intensity is intentionally played down, reducing the need for drivers to seek a means of silencing the alarm rather than analysing the meaning of it and resolving the condition as quick as possible. The longer the alarm is heard, the urgency of the beat increases. There is a slight change in beat just before the 3 beats changes to a continuous one-tone beep, which is an indication to the driver that they are about to have an imminent collision. The loudness level of the alert is greatly decreased enabling the driver to focus on the situation at hand.

Alert 3 – Arcade Game/Computer Game “Winner” Alert
(Note: the alert is only supposed to be heard once. I just looped it to make it more convenient.)
Alarm 3 is custom made for vintage arcade games and simple inbuilt computer games like solitaire. This alert is intended to inform/advise rather than warn or alert someone of an event. The beat of this alert has no sense of urgency but rather creates an upbeat emotion for the player informing them that they have won the game. The use of a six beat alert and the simplicity of the tone are especially customized to suit a gaming environment. There is no indication of annoyance or stressor in the pitch and tone as it rather relieves the player of stress instead. The sound parameters are similar to that of a midi audio tone, creating a
sound that is enjoyable to listen to and essentially, one that is craved to be heard. The multiple beats acts as a simple song or jingle to accompany the event of winning. Intentionally, the effectiveness of this alert operates as an award to the player.

Alert 4 – “Computer Virus” Alert on a Computer
This is a computer auditory alert to notify the user that they have a possible computer virus attacking their system. The use of a 4 beat reverberation notifies the user immediately allowing them to abort an action or program. The alert intensity is augmented as it is important to notify the user as soon as possible of the problem. The annoyance factor is replaced with the use of urgency mapping. The tone acts as a caution or advisory to the user as each end-note is extended, reducing the stressing factor. The low vibrato helps play down the annoyance of hearing the alert while still maintaining the message of needed immediate action. The loudness level is minimized to cater to the ear, while the clean and clear notes generate a distinguishable alert similar to one you would hear on a computer. The use of a slow tempo leaves the user un-startled as the urgency to stop the alert isn’t as important as processing the problem and solving it. By increasing the silent intervals between every 2 beats it helps the user stay focused and minimizes the potential of error and in turn diminishes the likely-hood of contracting an unwanted computer virus.

Alert 5 – Retail Security/Tag Gates Alarm
My fifth and final auditory design is centered on the retail and consumer industry. This Alarm is specifically made for security gates we see and walk through in most clothes stores around the world. The alert notifies the employees of a possible theft and also garners unwanted attention towards the person stealing. The use of a high pitch tone creates distraction and urgency for attention, allowing the employee to quickly catch the culprit in time before they escape. Unlike the other alerts designed above, this breaks the standards of normal alerts as it is intended to startle and distract. By decreasing the interpulse interval between each beat and raising the pitch, the alert intensity is increased greatly. Once the alarm is heard, the distraction of the alarm takes into effect and the employees are notified immediately via the urgency of the sound. Although it is intended to startle, the annoyance factor is not as great, as the loudness levels are not to the maximum capacity. Along with garnering attention of the employees it also captures the attention of surrounding customers and security, increased attention on the person stealing is therefore more prominent and this allows more people to identify the stealer and catch them. The design of this alarm is based loosely on the concept of a warning siren. The use of the high pitch is intended to irritate customers making them want to locate the source of where the sound is coming from, therefore revealing the person stealing.