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Artist Statement

Sonar Defense is a tower defense inspired game where enemies funnel through pre-determined paths\* towards the players main base. Towers are placed along said paths to attack oncoming enemies and destroy them before they reach their destination. The kick in Sonar Defense is that vision is limited to a small radius around towers. To determine enemy type, weakness, and location, the player must use sonar and sound acquisiton. Sonar establishes enemy location and possible direction while sound acquisition further establishes exact position as well as sound hints to the kind of enemy found. There will be multiple entry points into the players base, pushing the use of previous mechanics to appropriatly prepare. Also towers will be salvageable with little consequence to allow proper rotation of assets to suitable areas of defense.

Never has a tower defense focused so closely on sound and limited sight. It will completely change the dynamic and flow of the genre, Usually there isn't much strategy beside tower placement in the genre. With unique enemy types weak to only certain towers, the player must focus on establishing what kind minion is approaching or else risk no preparing the necessary defenses. Another factor is that the player usually only tends to one narrow hall, in Sonar Defense, there are multiple lanes to worry about. If successfull the dynamic of this game will superceed most competing iterations and create a compelling experience that isn't just another mind numbing tower defense that doesn't maximize audio and hidden information as game mechanics.

Sonar is rather simple, ellipses will spawn and grow from the click point and will spawn a visual cue directly over enemies that it collides with. Sound acquisition works with distance, the further the mouse from the enemy, the quieter the sound. Both these mechanics simply calculate the distance between two points and when small enough, the visual/sound cue starts.

Vision limitation through fog of war remains tricky, simply due to multiple objects interacting with a single image. At its core, a fog layer calculates and translates distance from x and y to a limit to opacity at the pixel level creating circles of vision for the player.

Minion and Tower interaction is a matter of fetching specific objects variable when close enough to each other. (reduction of hp, strengths versus weaknesses, etc...)