

Equi-Track

Giving horse owners the peace of mind in daily riding and unexpected emergencies

Problem

In 2017, 29 out of 60 horses living at a Californian ranch were killed when a brush fire consumed the area. The ranch owners had no time to evacuate their horses before they were forced to flee.

Additionally, not every horse goes missing because of horse thieves; some horses leave their land or escape due to emergencies. We define an emergency as natural disasters, including wildfires, hurricanes, floods and tornadoes, threats from surroundings, such as wildlife animals, or losing horses while riding.

Solution

Equi-Track is a wearable piece of leather horse tack which tracks location and activity data and transfers it to a mobile app. The wearable piece was designed to be installed effortlessly around the horse's neck. Powered by T-Mobile 5G and 4G LTE network, the GPS location coordinates collected by the wearable piece are sent to the mobile app for a clear visualization.

Our team understands that an emergency does not happen everyday, so the device is designed for multiple situations, some of which could occur more frequently. The user would need to define a safezone initially. Within the designated safezone,

Mode	Within Safezone	Active Tracking	Riding
Frequency	15 minutes	30 seconds	2 minutes

Process/Approach

Building on the knowledge gained from our secondary research and primary research, our team has identified the main user scenarios. From that, we surveyed 508 horse owners and interviewed four subject-matter-experts (private horse owners, horse farm manager, equine veterinarian) to further explore the gap existing in the current solution and the needs from the users, which would be a long lasting, accurate emergency solution to track their horses. The design requirements led our team to create three iterations over time, from the initial iteration with a Figma prototype and laser cutting boards. With two rounds of evaluations in the end to test the usability and the functionalities, we are proud to present our final version of leather packaging with a functional React Native mobile app.

