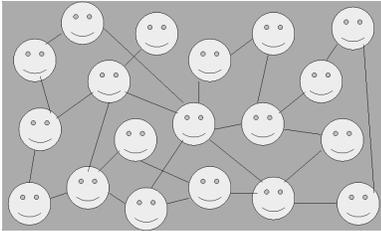


Teaching Security Lesson 1: The Security Mindset

Activity: Threat Modeling a Computer System Using the Security Cards

Choose one of the systems below to threat model using the Security Cards. (Beta version -- new handout with diagrams coming soon!)



Koreshky via Wikimedia Commons. Public domain.

A Social Network

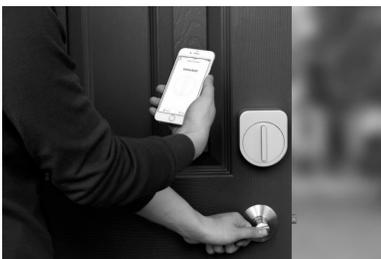
You work for a new online social network (a competitor for Snapchat, Instagram, and Tumblr). Your social network is designed to allow people to communicate with each other, on the website or via mobile apps. It will have standard features like the ability to post photos, videos, and notes, and chat features so people can talk to one another one-to-one or in groups of up to 250 people.



Steve Jurvetson via Flickr. CC BY 2.0. Modified.

A Self-Driving Car

You're part of a new division at a major car company, designing a self-driving car (AKA driverless car, autonomous vehicle). The car uses a combination of cameras, radar, other sensors, and artificial intelligence to travel between destinations without a human operator. Self-driving cars have GPS systems, and they may also have 5G mobile connections to connect to various services via the Internet, as well as ways to connect and communicate with nearby vehicles.



Scott Lewis via Flickr. CC BY 2.0.

A Smart Lock

Your company's smart lock replaces physical keys with a smartphone app. Someone installs a new lock, or adds new hardware to the current deadbolt, and installs an app on their smartphone. Then they can use the app on their smartphone to lock and unlock the door, monitor who enters and leaves through the door (using their own phones), and lock and unlock the door from anywhere they have an Internet connection.



Daniel Cardenas via Wikimedia Commons. CC BY-SA 4.0.

An In-Home Voice Assistant

An in-home voice assistant (AKA virtual assistant, smart device, home automation hub) is a computing device connected to the Internet that responds to voice commands. Your company's smart home assistant will be even smarter than Siri, Alexa, or the Google Home assistant. These devices wait until they hears a "wake-word" (like their name) and then respond to voice commands to do things like play music, make to-do lists, set alarms, answer voice-based search queries, or provide weather updates.