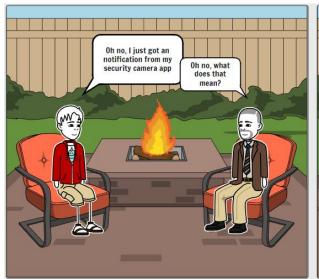
Secure IoT camera system

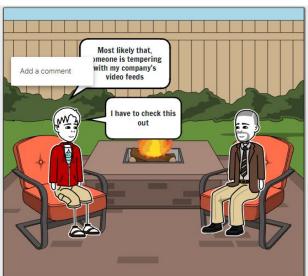
Innovation project

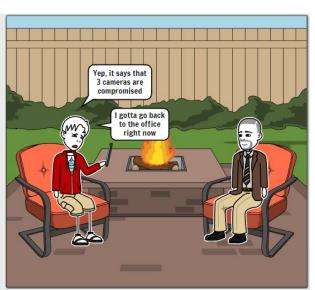
Tiitus Telke, Leevi Paattilammi, Abdulla Masum, Merili Elnadi, Jasu Honkanen

Product concept

- Security camera system with multiple modules
- Highly secure
- Camera module
 - o runs on IP-camera
- Analytics module
 - o software either on-premises or in-cloud
- UI module
 - on end user's device

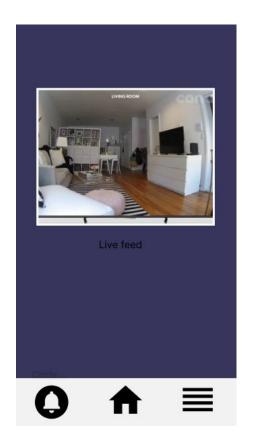




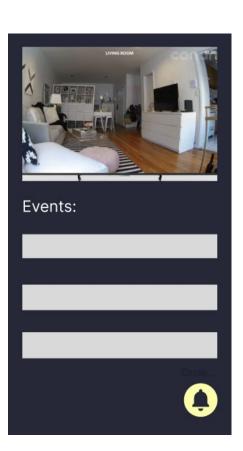


Goals Actors Steps Knows Checks his about Customer phone security incident Receives and inspects incident report, escalates Inspects his dashboard Admin alert to customer Notices that the image feed has Sends incident Software possibly been report to Admin tampered with

UI ideas







Technical details

- Among camera feed metadata is published on MQTT
- Backend analysis checks that the feed is from actually from the real camera device
 - Possible implementation is using a certificate signed by a key from the device's TPM chip
- UI backend that subscribes both to camera data and analysis data and shows the feed + alerts if analysis finds something concerning

