Depression Analysis

Seminar IBM Watson – Final Presentation
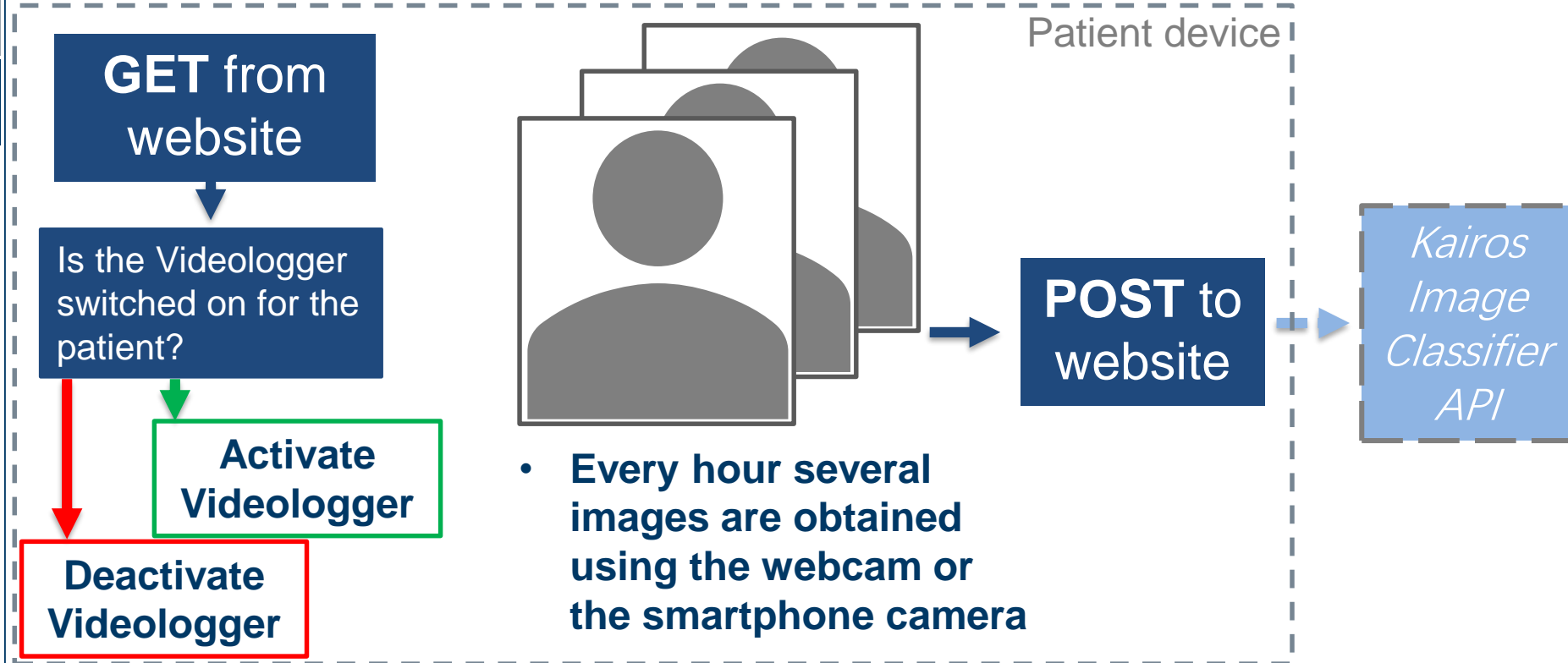
Benedikt and Lukas

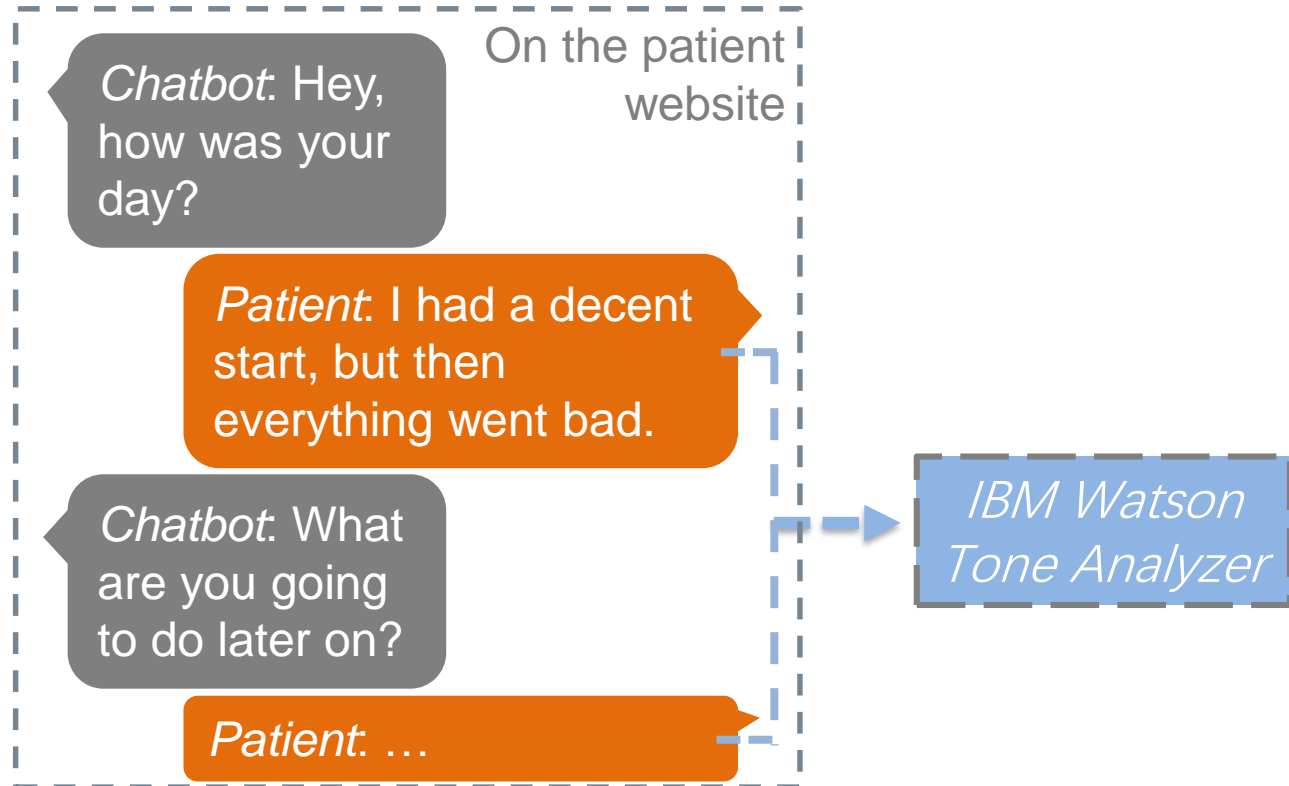# Keylogger

GET from website

Is the Keylogger switched on for the patient?

Activate Keylogger

Deactivate Keylogger

Hi Chris, today was a awesome day! We really had lot´s of fun at the beach!

Facebook : Sunday, 23th July

Hey mom, I feeling really stressed out right now. Can we talk?

Mail : Monday, 24th July

POST to website

Patient device

IBM Watson Tone Analyzer

Videologger

GET from website

Is the Videologger switched on for the patient?

Activate Videologger

Deactivate Videologger

Patient device

- **Every hour several images are obtained using the webcam or the smartphone camera**

POST to website

Kairos Image Classifier API

Chatbot

- **Chatbot asks question about the current mood, strongest feelings and activities at that day**

Chatbot: Hey, how was your day?

On the patient website

Patient: I had a decent start, but then everything went bad.

Chatbot: What are you going to do later on?
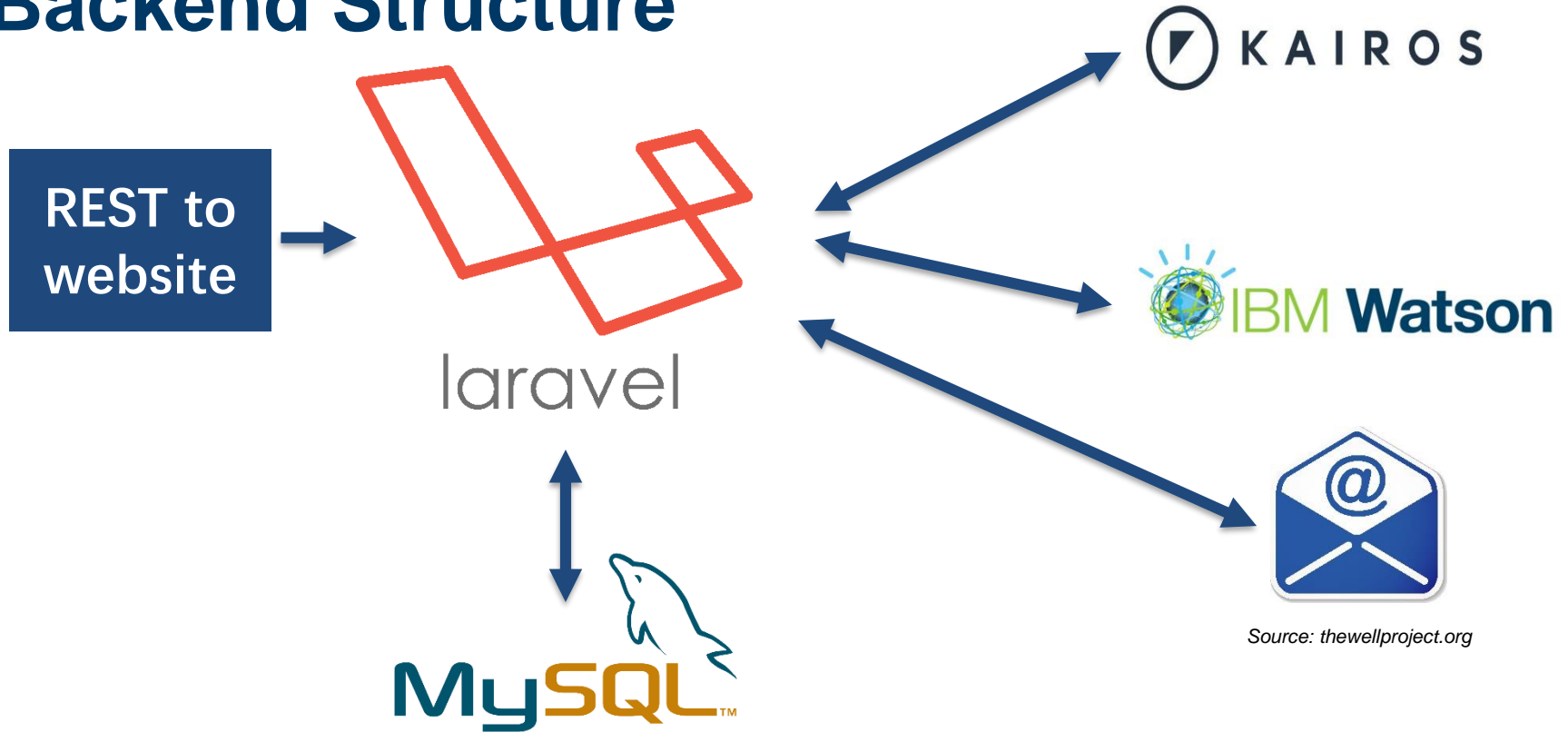
Patient: …

IBM Watson Tone Analyzer

Privacy

- **The Keylogging and the Videologging deeply invade the patients privacy**
- **To use the Depression Analysis Software the patients would need to sign an agreement**
- **Important to log only the patient data and any other persons data**
- **Encryption of the data transfer between patient device and the website**
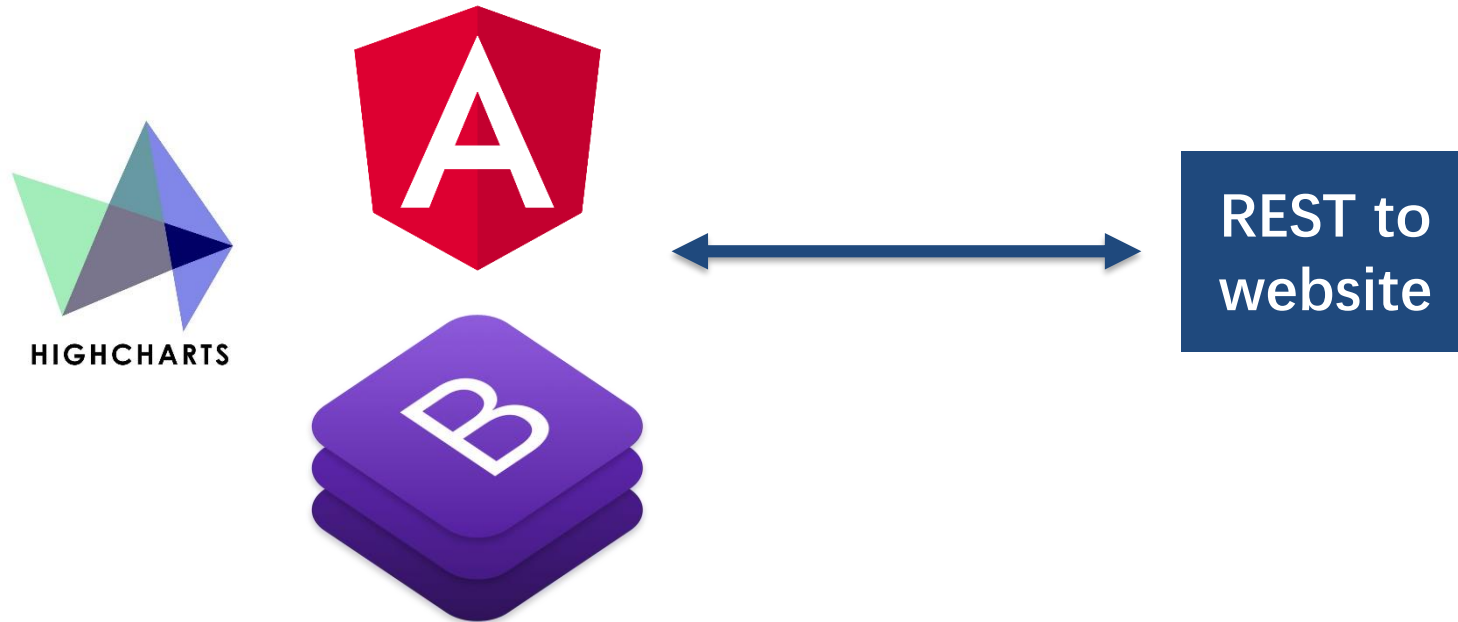

Source: legaldesk.com

Backend Structure

REST to website

Source: thewellproject.org

Laravel

- **PHP Framework**
- **Works with ORM for Database communication**
- **Job Backend for asynchronous workload**
- **Routing**
- **REST API**
- **Build in JWT Authentication**
- **Possible connection to AWS and Google Cloud for storage**

Frontend Structure

REST to website

Angular

- **Typescript based frontend Framework**
- **Compiles Typescript into Javascript**
- **Two way binding and datatypes**

Bootstrap

- **CSS Framework**
- **Originally developed by Twitter**
- **Defines classes for responsive design**

Deployment Structure

HTTP request → HA-Proxy

all other requests → Apache for Angular

API requests → Laravel Backend

MySQL

Watson Kairos SMTP

Laravel Worker

Storage-container