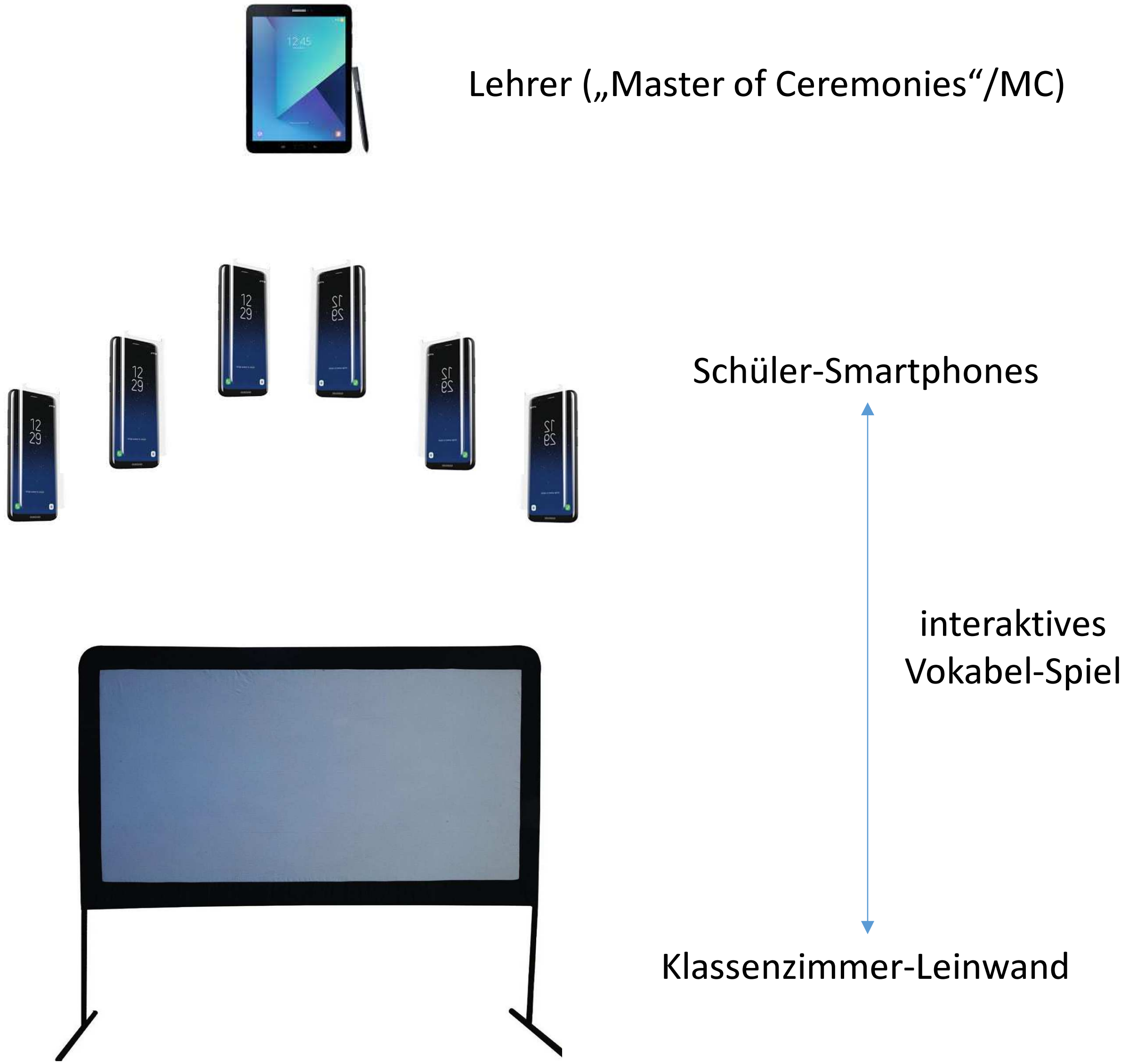
Projekt *Digital Media Pupils*: interaktiver Vokabeltrainer VOCACOACH



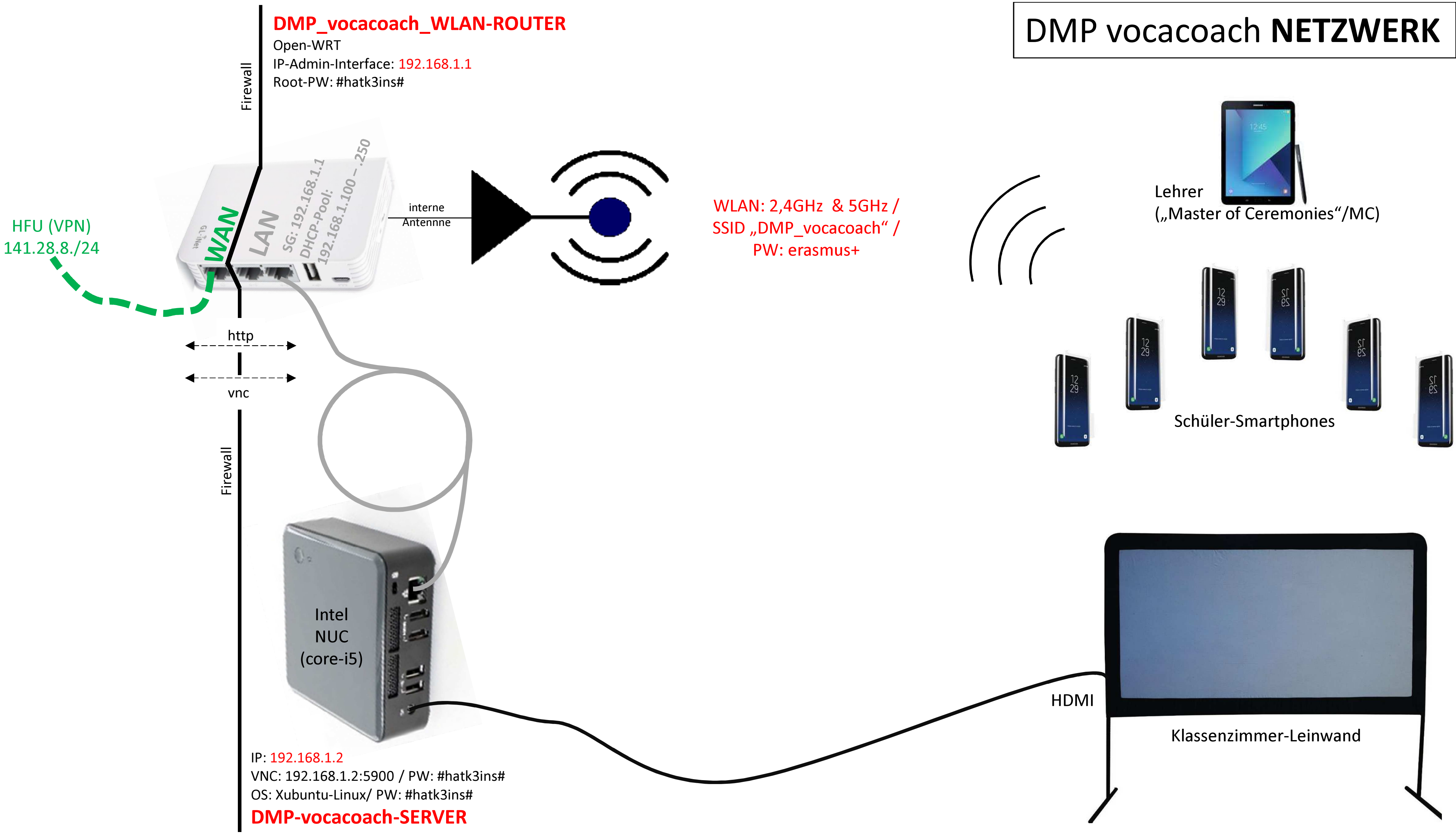
Lehrer („Master of Ceremonies“/MC)

Schüler-Smartphones

interaktives Vokabel-Spiel

Klassenzimmer-Leinwand

DMP vocacoach **NETZWERK**



DMP_vocacoach_WLAN-ROUTER
Open-WRT
IP-Admin-Interface: 192.168.1.1
Root-PW: #hatk3ins#

HFU (VPN)
141.28.8./24

WLAN: 2,4GHz & 5GHz /
SSID „DMP_vocacoach“ /
PW: erasmus+

Lehrer
(„Master of Ceremonies“/MC)

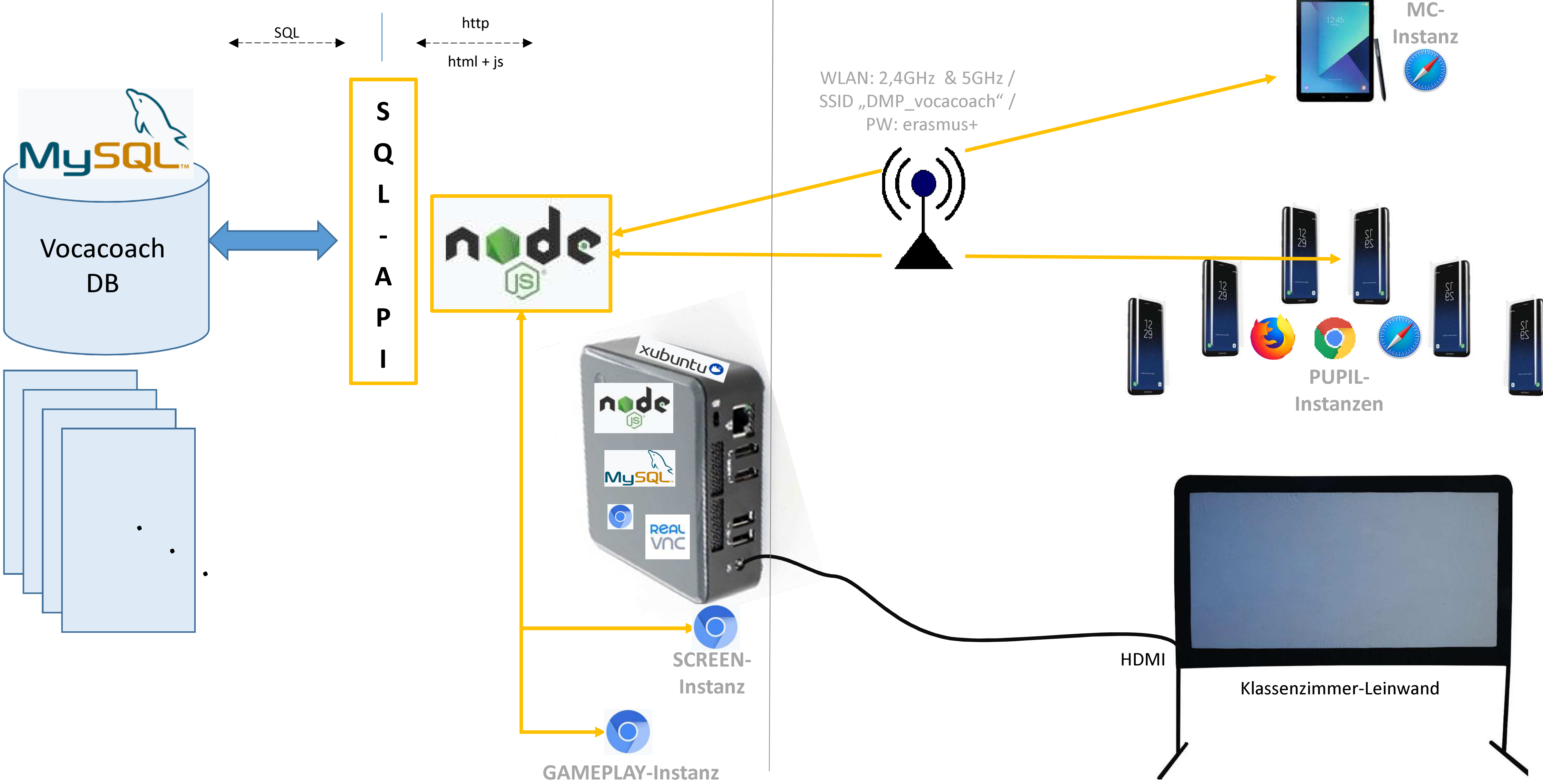
Schüler-Smartphones

Klassenzimmer-Leinwand

IP: 192.168.1.2
VNC: 192.168.1.2:5900 / PW: #hatk3ins#
OS: Xubuntu-Linux/ PW: #hatk3ins#
DMP-vocacoach-SERVER

DMP vocacoach **SYSTEMKOMPONENTEN**

DMP-vocacoach-SERVER
IP:192.168.1.2



SQL

http

html + js

Vocacoach DB

SQL-API

WLAN: 2,4GHz & 5GHz /
SSID „DMP_vocacoach“ /
PW: erasmus+

MC-Instanz

PUPIL-Instanzen

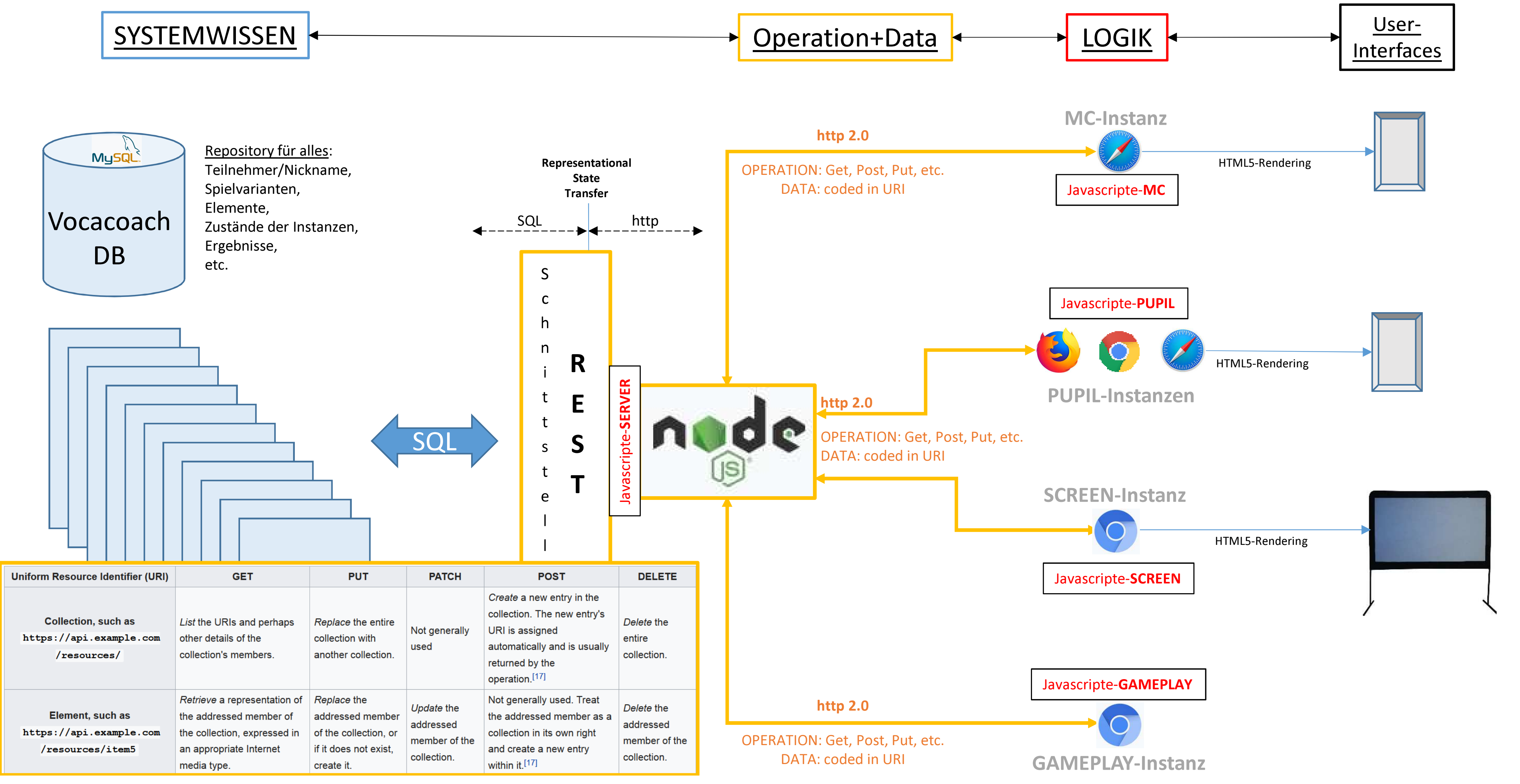
SCREEN-Instanz

GAMEPLAY-Instanz

HDMI

Klassenzimmer-Leinwand

DMP vocacoach **SYSTEMDESIGN** (Variante1)



SYSTEMWISSEN ↔ Operation+Data ↔ LOGIK ↔ User-Interfaces

Vocacoach DB

Repository für alles:
Teilnehmer/Nickname,
Spielvarianten,
Elemente,
Zustände der Instanzen,
Ergebnisse,
etc.

SQL

Representational State Transfer

SQL http

Schnittstell REST

Javascripte-SERVER

http 2.0

OPERATION: Get, Post, Put, etc.
DATA: coded in URI

MC-Instanz

Javascripte-MC

HTML5-Rendering

Javascripte-PUPIL

PUPIL-Instanzen

HTML5-Rendering

http 2.0

OPERATION: Get, Post, Put, etc.
DATA: coded in URI

SCREEN-Instanz

HTML5-Rendering

Javascripte-SCREEN

Javascripte-GAMEPLAY

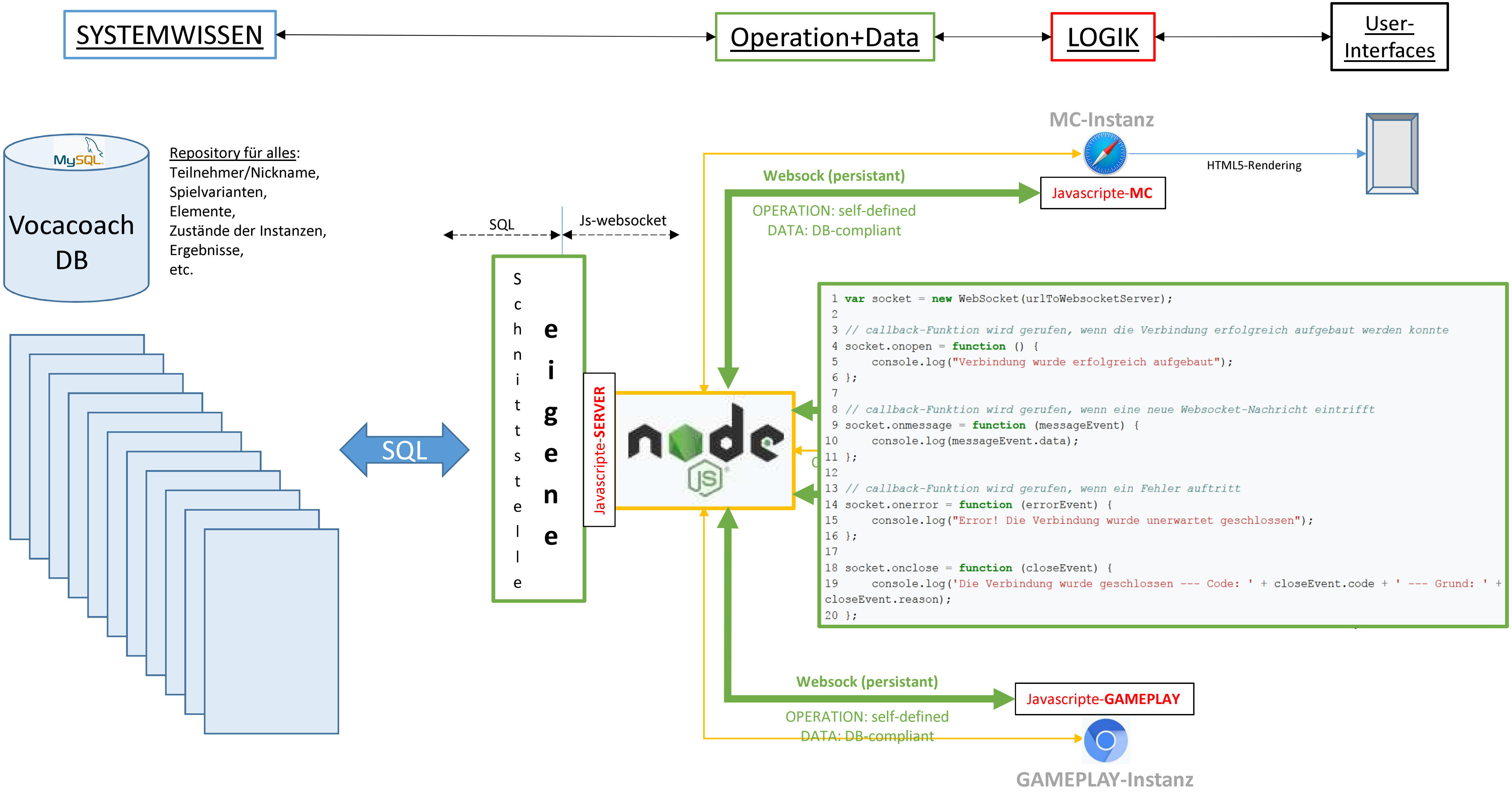
http 2.0

OPERATION: Get, Post, Put, etc.
DATA: coded in URI

GAMEPLAY-Instanz

Uniform Resource Identifier (URI)	GET	PUT	PATCH	POST	DELETE
Collection, such as `https://api.example.com/resources/`	*List* the URIs and perhaps other details of the collection's members.	*Replace* the entire collection with another collection.	Not generally used	*Create* a new entry in the collection. The new entry's URI is assigned automatically and is usually returned by the operation.[17]	*Delete* the entire collection.
Element, such as `https://api.example.com/resources/item5`	*Retrieve* a representation of the addressed member of the collection, expressed in an appropriate Internet media type.	*Replace* the addressed member of the collection, or if it does not exist, create it.	*Update* the addressed member of the collection.	Not generally used. Treat the addressed member as a collection in its own right and create a new entry within it.[17]	*Delete* the addressed member of the collection.

DMP vocacoach **SYSTEMDESIGN** (Variante2)



Repository für alles:
Teilnehmer/Nickname,
Spielvarianten,
Elemente,
Zustände der Instanzen,
Ergebnisse,
etc.

```
var socket = new WebSocket(urlToWebsocketServer);

// callback-Funktion wird gerufen, wenn die Verbindung erfolgreich aufgebaut werden konnte
socket.onopen = function () {
    console.log("Verbindung wurde erfolgreich aufgebaut");
};

// callback-Funktion wird gerufen, wenn eine neue Websocket-Nachricht eintrifft
socket.onmessage = function (messageEvent) {
    console.log(messageEvent.data);
};

// callback-Funktion wird gerufen, wenn ein Fehler auftritt
socket.onerror = function (errorEvent) {
    console.log("Error! Die Verbindung wurde unerwartet geschlossen");
};

socket.onclose = function (closeEvent) {
    console.log('Die Verbindung wurde geschlossen --- Code: ' + closeEvent.code + ' --- Grund: ' + closeEvent.reason);
};
```