IoT-Hackathon

StayFocussed

Jutta Degele, Sascha Krauß, Julia Hain, Manh Phi Nguyen
GitHub Repository: https://github.com/jules185/IoT_Hackathon/wiki

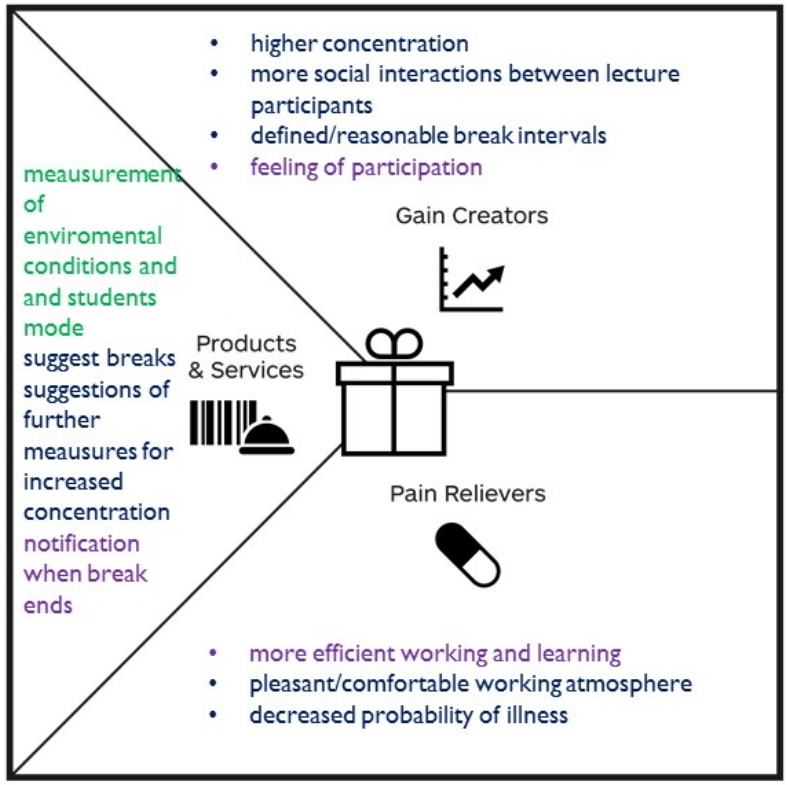
Internet of Things, Prof. Decker, 13.06.2017

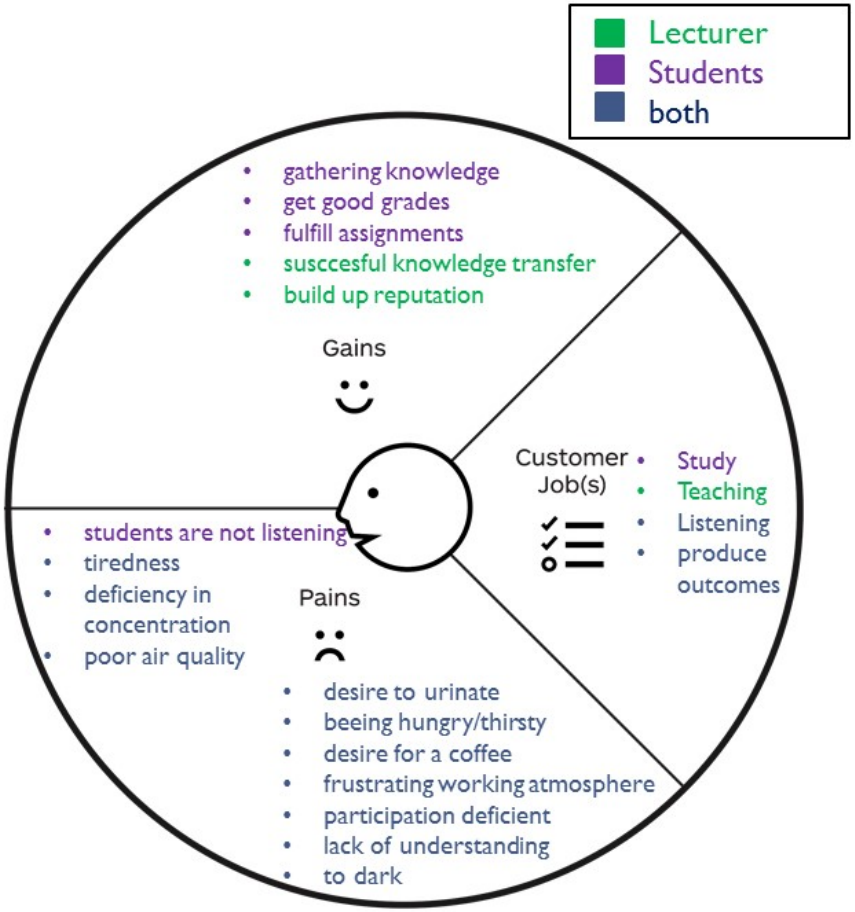
Project Goal

Develop **a service enabling improved concentration** during lectures, more flexible **scheduling of breaks**, enhanced **productivity**, **unified break start** and **ends.**

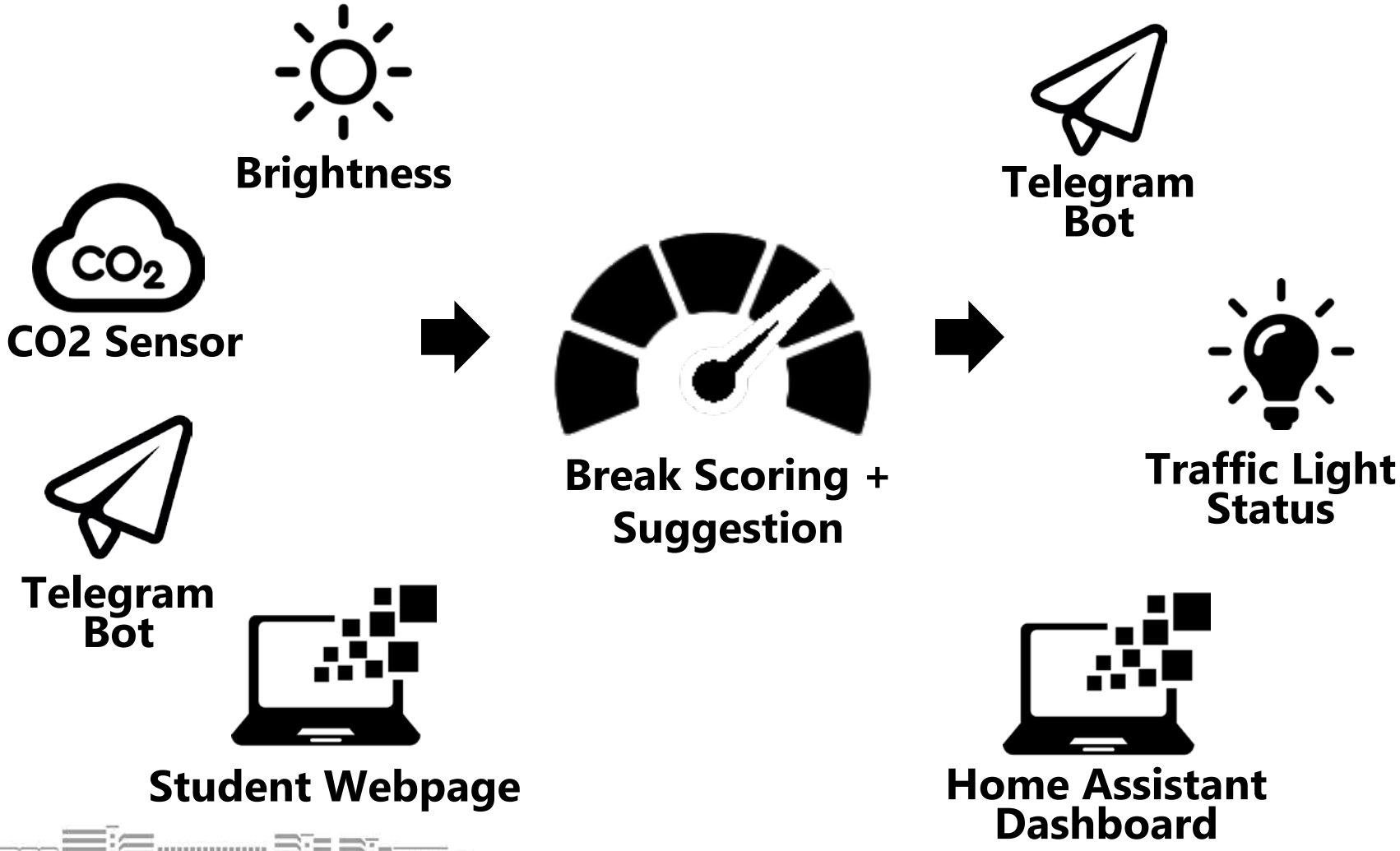
The service should be **based on human** and **sensor input** and should give **break** and other **recommendations** to the lecturer.

Value Proposition Design





Minimum Viable Product



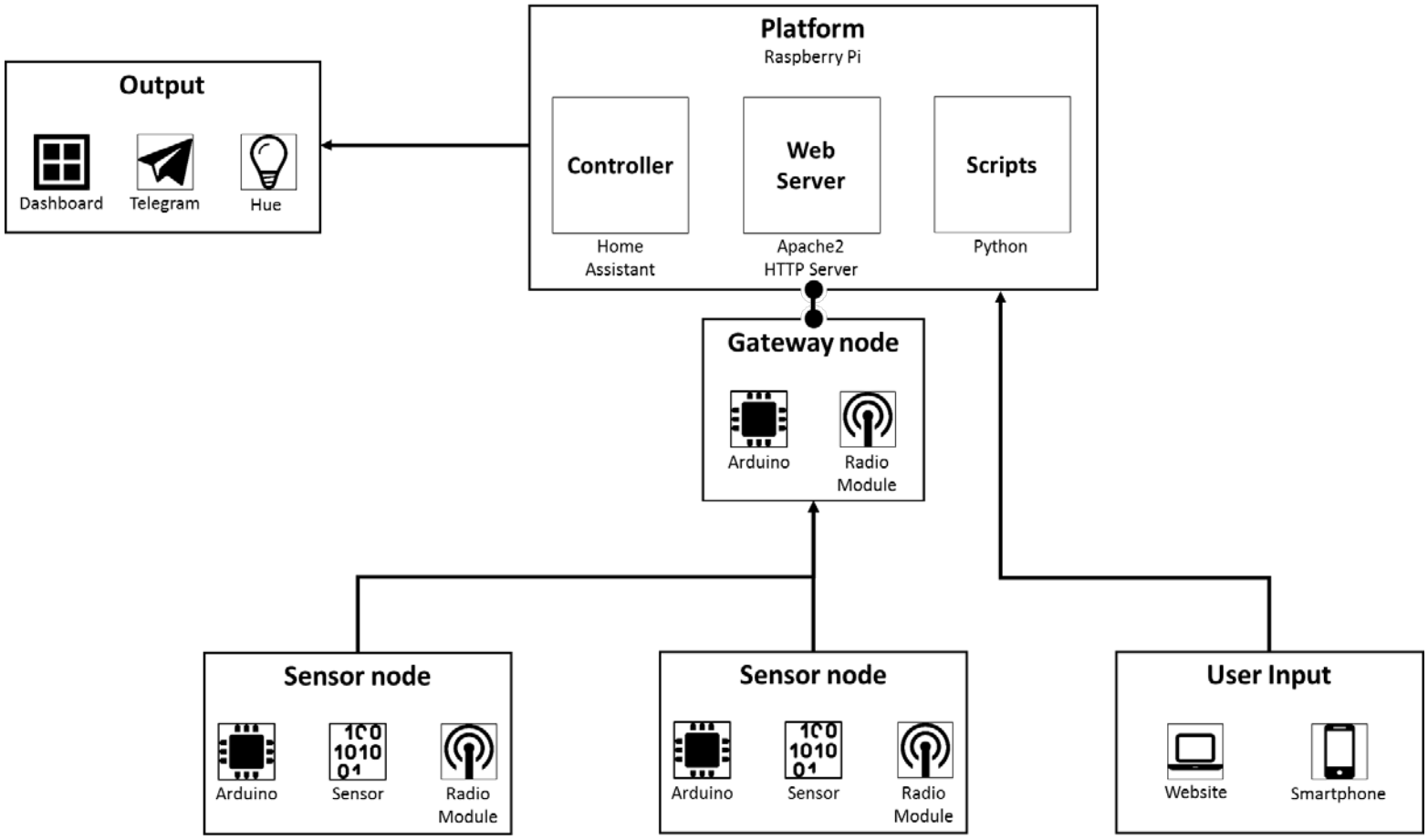
Business Model Canvas

BUSINESS MODEL CANVAS

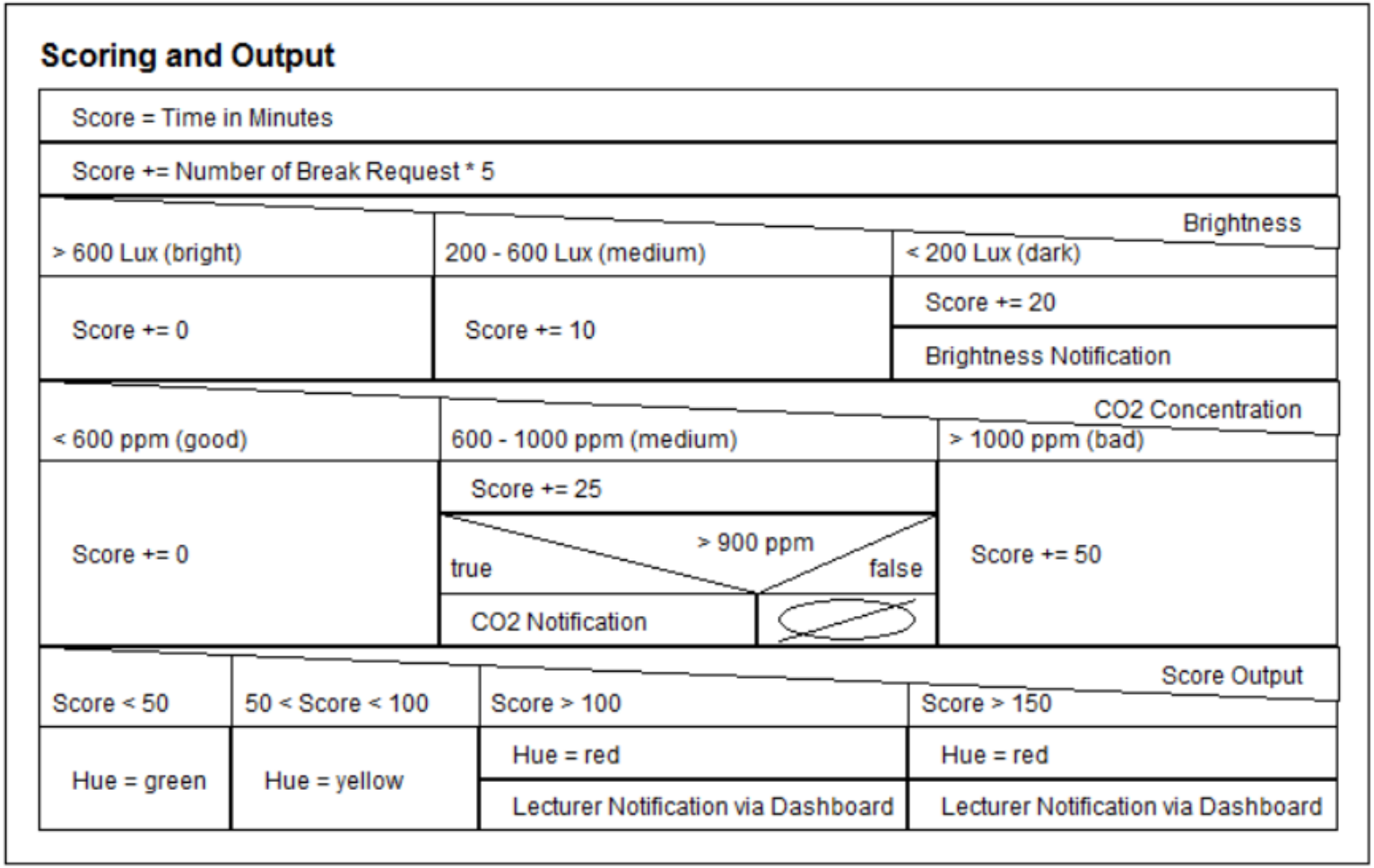
Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
• HHZ • Reutlingen University • Other universities • Lecturers	• Aggregate sensor information • Make suggestions to enhance learning process • Calculate Score	• More alert students • Better break scheduling • Improvement of work atmosphere • Measurement of environmental conditions and students mode • Suggest breaks • Suggestions of further measures for increased concentration • Notification when break ends • Image improvement for university	• Online (GIT) • Relax • Word-of-Mouth-Marketing	• Students • Professors • Academic workers • Visitors of HHZ
	Key Resources • Raspberry Pi • Arduino • Website • Telegram Bot • Home Assistant Dashboard • Scoring algorithm • Sensor network		*Channels* • Website • Dashboard • Telegram Bot	

Cost Structure	Revenue Streams
• Power bill • Cost of HW infrastructure • Network • Website hosting • Maintenance • Sensor installation • Setup and administration of lecturer accounts	• Better image for HHZ • Marketing opportunity • Advertising • Licensing

Architecture

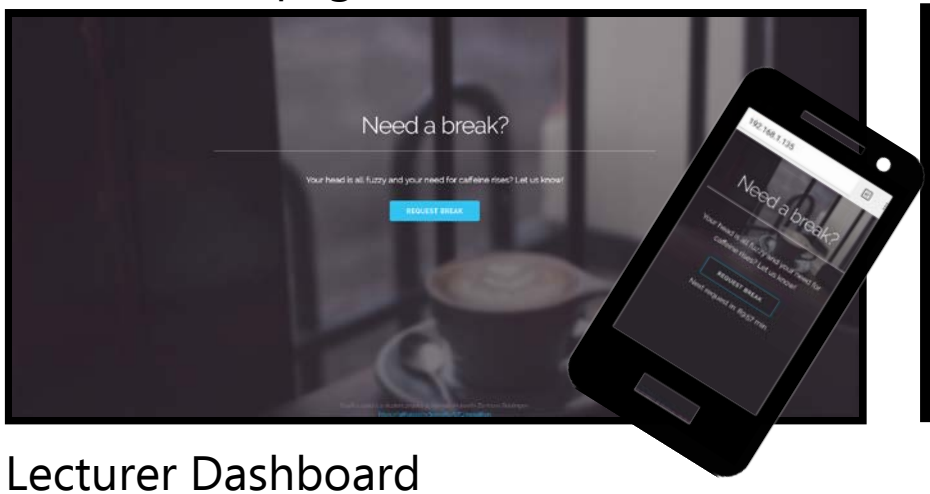


Scoring and Output



Service Design

Student Webpage – Break Button



Telegram StayFocussed Bot

Lecturer Dashboard

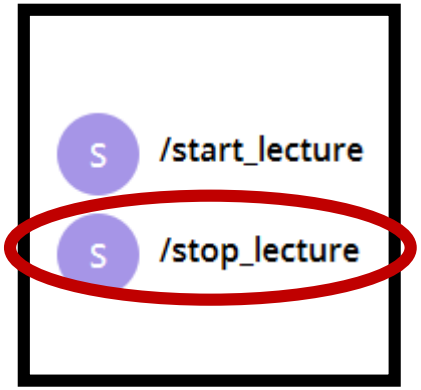
Sensors and Hue Traffic Light

Lecturer Access StayFocussed

1. Scan QR Code or visit https://telegram.me/stayfocussed_bot

2. Open in Telegram

3. On first visit click „Start“ and send /start_lecture to StayFocussedBot to start the lecture



4. Receive break and learning experience suggestions. Stop the lecture with /stop_lecture

Visit Dashboard for Analytic Insights:

Scan QR Code or visit

http://192.168.1.135:8123/states/group.stayfocused

Prerequisite: Your Telegram ID needs to be hardcoded to be authorized as an lecturer.

DEMO

Student Access StayFocussed

1. Scan QR Code or visit https://telegram.me/stayfocussed_bot

2. Open in Telegram

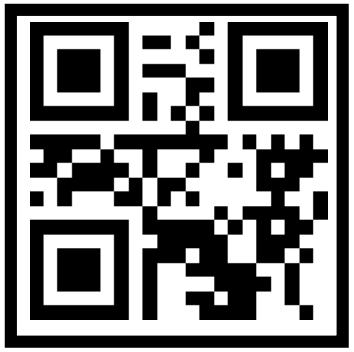
3. On first visit click „Start“ and send /register to StayFocussedBot to register for the current lecture

4. Request /break or get message when lecture break is over

Don`t have Telegram? Use our **Webpage** …

Scan QR Code or visit

https://telegram.me/stayfocussed_bot



Thank you!