

MICHIGAN STATE
UNIVERSITY

Beta Presentation

Using Sensors to Study Human Behavior

The Capstone Experience

Team Michigan State University CSE

Rainier Devolder

Merryn Marderosian

Ben Seeger

Lianghao Shu

Taylor Whitacre



*From Students...
...to Professionals*

Department of Computer Science and Engineering
Michigan State University
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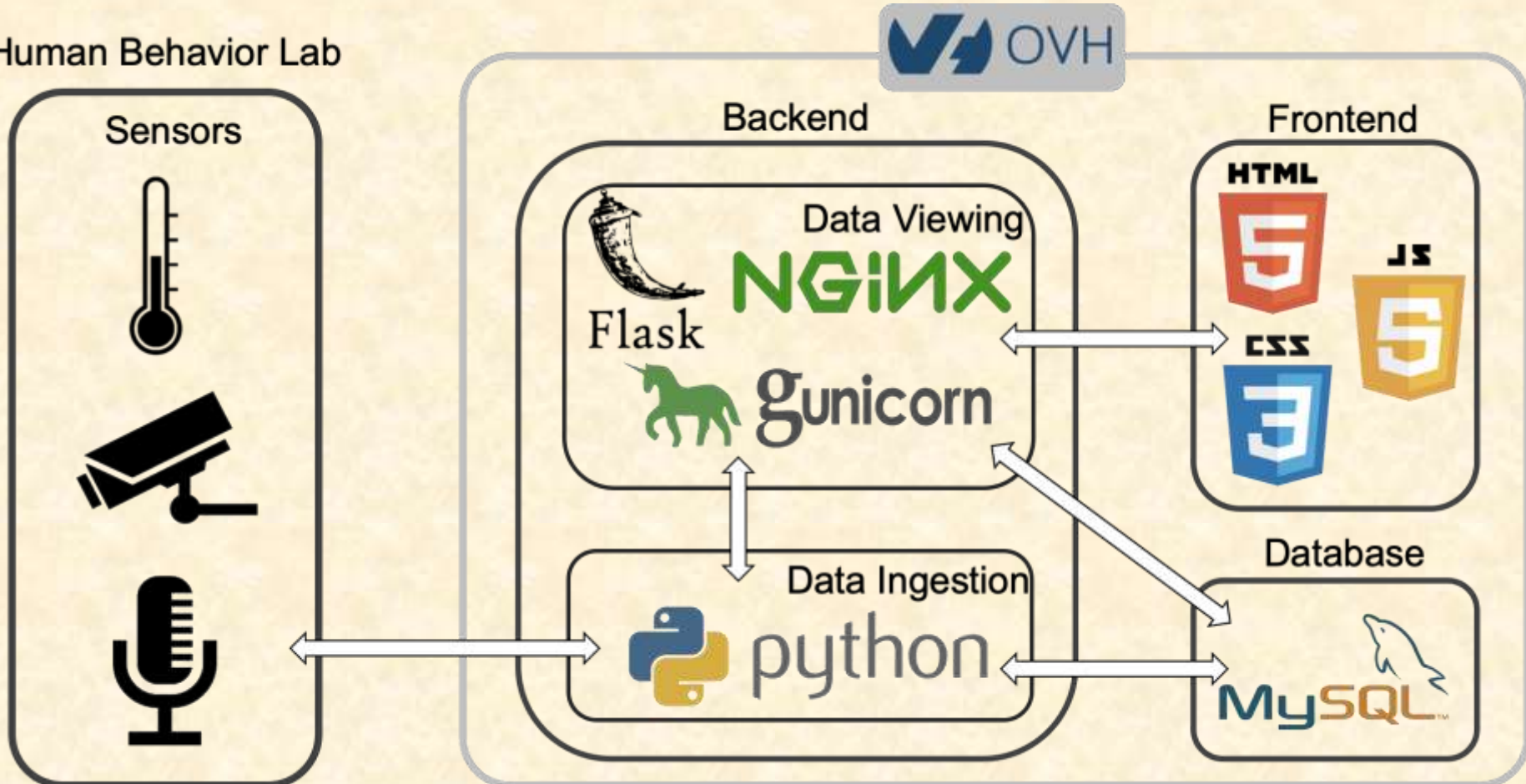
Project Overview

- Convert Room 3155 EB into a Meeting Space
- Stream Data From Sensors
- View and Store Data on a Single Web Application
- Ability to Trigger Actions
 - Data Thresholds
 - Data Stream Start/Stop

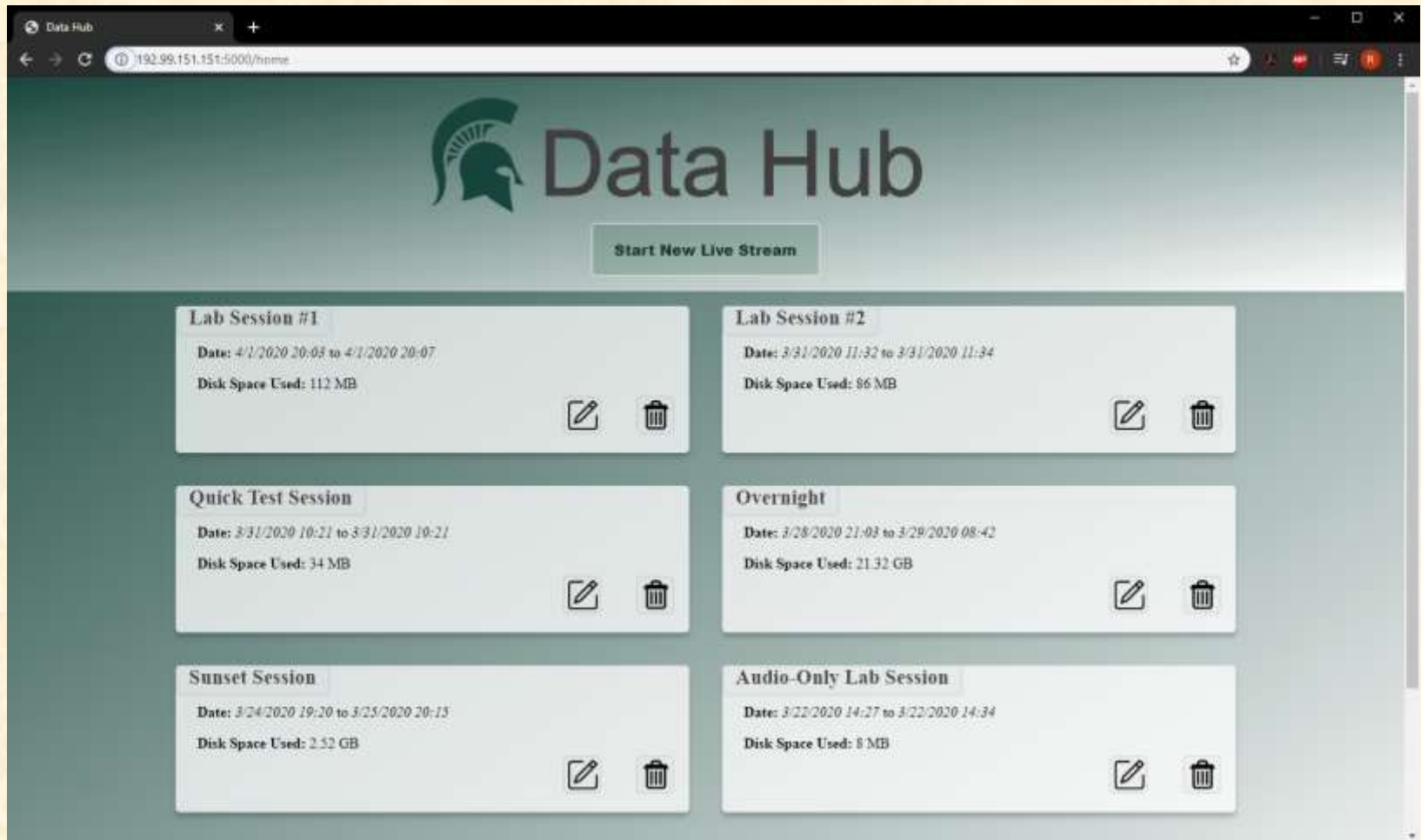


System Architecture

Human Behavior Lab



Home Page and Sessions

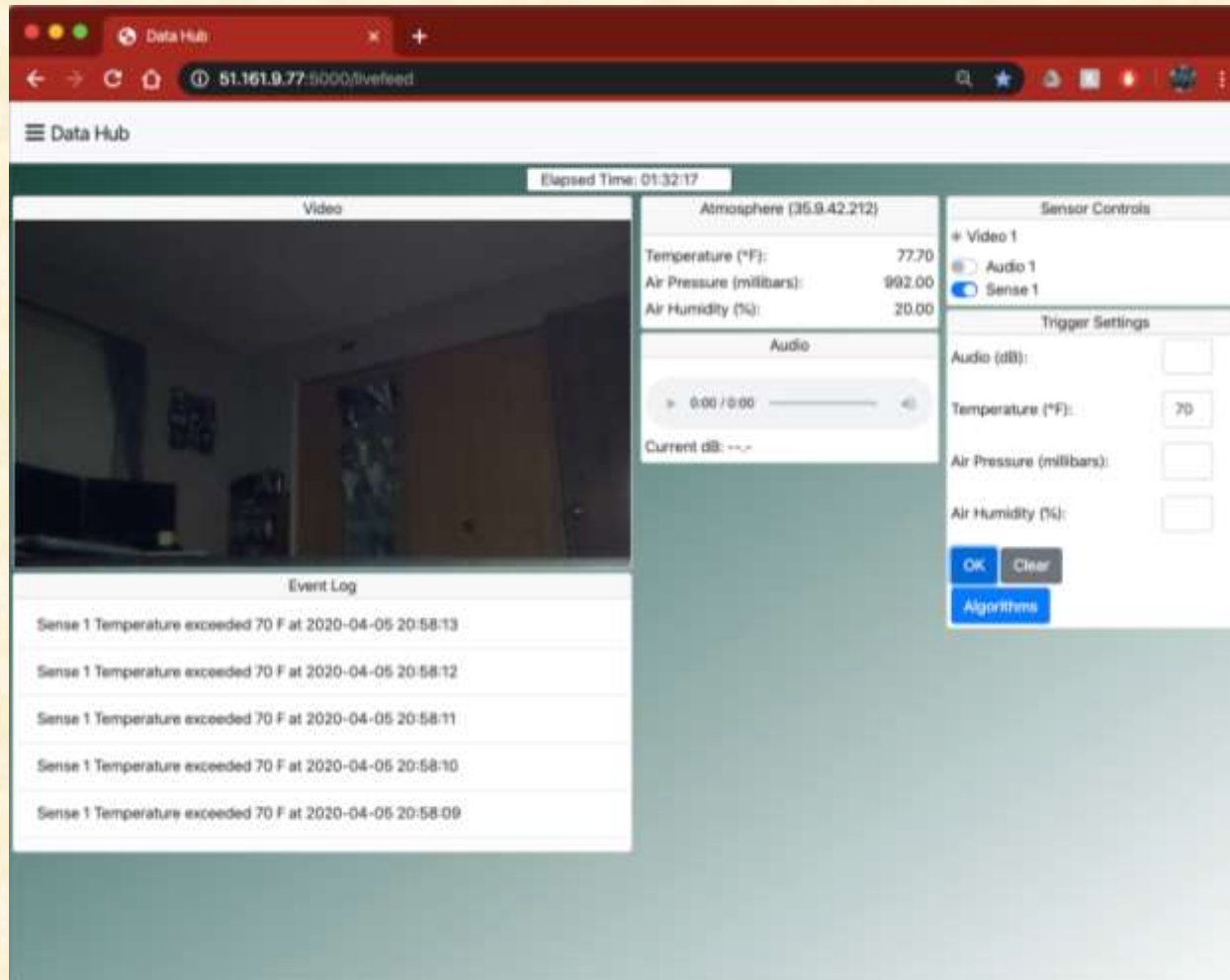


The screenshot shows a web browser window with the address bar displaying "192.99.151.151:5000/home". The page features the "Data Hub" logo, which includes a green Spartan helmet icon. Below the logo is a button labeled "Start New Live Stream". The main content area displays six session cards, each with a title, date range, disk space usage, and edit/delete icons.

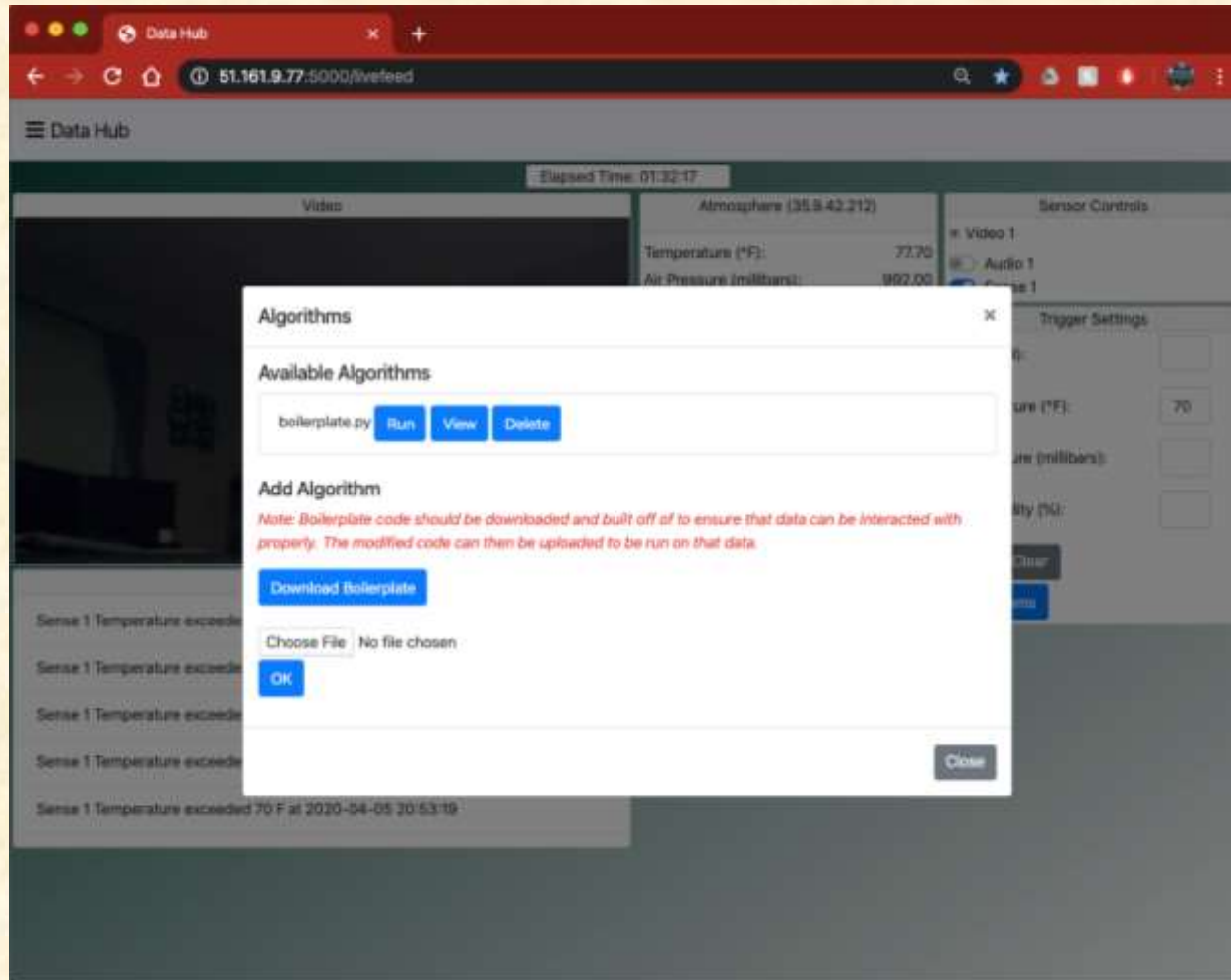
Session Name	Date	Disk Space Used
Lab Session #1	4/1/2020 20:03 to 4/1/2020 20:07	112 MB
Lab Session #2	3/31/2020 11:32 to 3/31/2020 11:34	86 MB
Quick Test Session	3/31/2020 10:21 to 3/31/2020 10:21	34 MB
Overnight	3/28/2020 21:03 to 3/29/2020 08:42	21.32 GB
Sunset Session	3/24/2020 19:20 to 3/25/2020 20:13	2.52 GB
Audio-Only Lab Session	3/22/2020 14:27 to 3/22/2020 14:34	8 MB



Live Feed Page



Algorithm Upload



Archives Playback

The screenshot shows a web browser window titled "Data Hub" with the address bar displaying "192.99.151.151:5000/archive/56". The interface is divided into three main sections:

- Session Selection:** A list of five sessions with timestamps: "04/05/2020 @ 22:07:53", "04/05/2020 @ 22:04:54", "04/05/2020 @ 21:55:07", "04/05/2020 @ 07:45:11", and "04/05/2020 @ 01:38:40".
- Video 1:** A central video player showing a dark room with a bed and a wooden door. Below the video, there is a play button, a progress bar with a green indicator, and two time boxes: "Elapsed Time: 00:01:05" and "Archive Time: 04/05/2020 22:08:58".
- Sensor Selection:** A panel on the right with checkboxes for "Video 1" and "Sense HAT 1", both of which are checked. Below this, there are two sections:
 - Audio 1:** Includes a play button, a progress bar, and a volume icon. The text "Current dB: 0" is displayed below.
 - Sense HAT 1:** A table showing sensor data:

Temperature:	73.2
Air Pressure (millibars):	1013.82
Air Humidity (%):	32.8



What's left to do?

- Code Reviews and Refactoring
- Documentation to Allow Project to be Open-Sourced
- Usability Fixes



Questions?

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