Bodylogical AR
Feature Overview

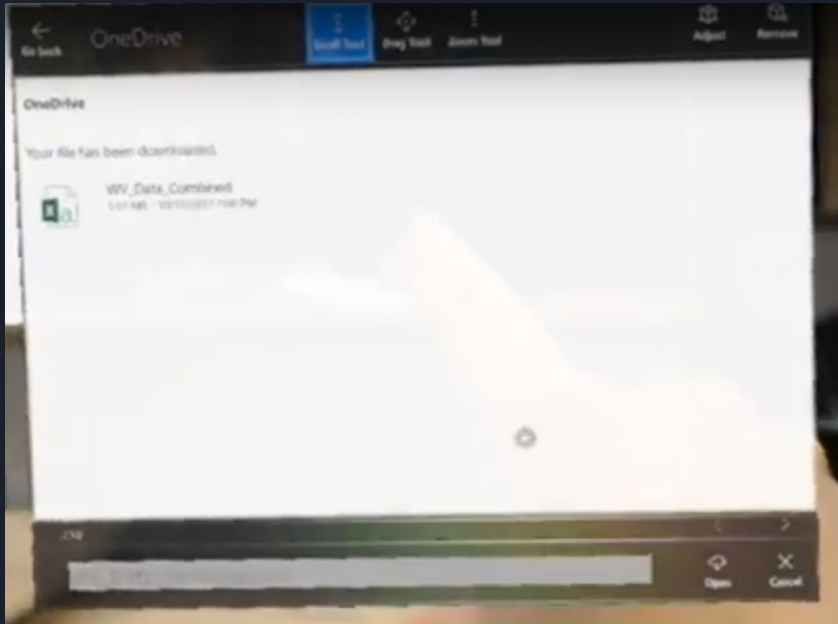# BodylogicalAR - 3D Data Analytics tool in Augmented Reality

User Flow of Bodylogical AR
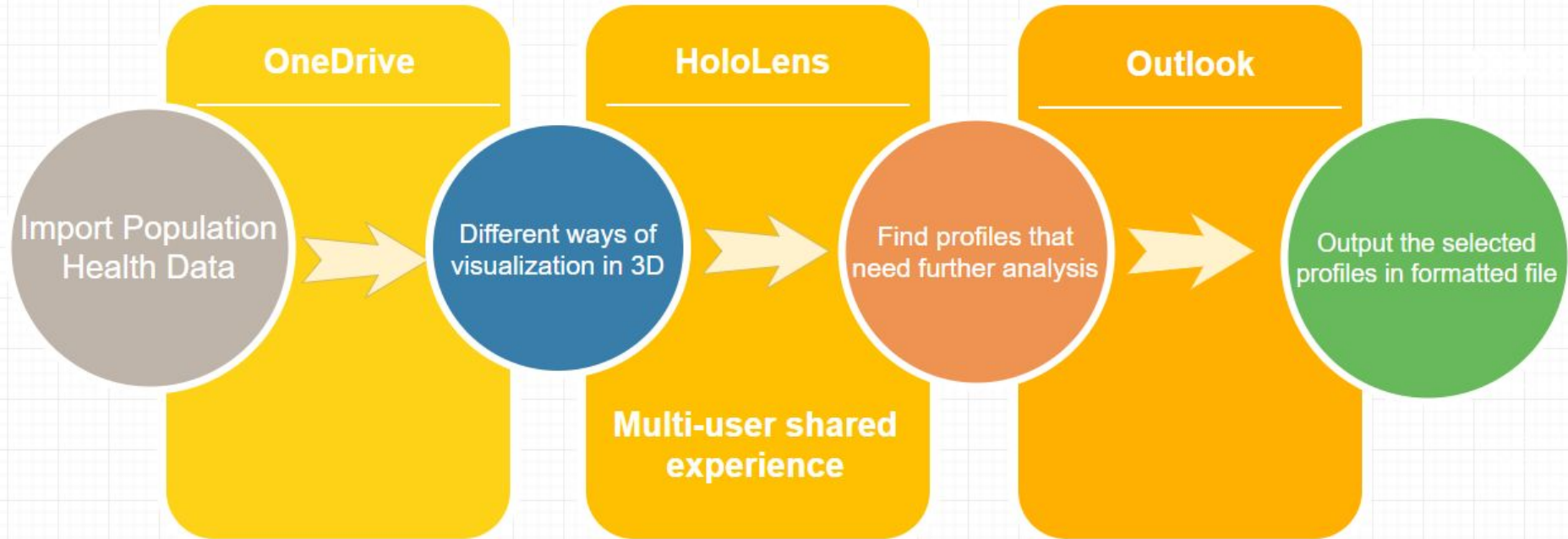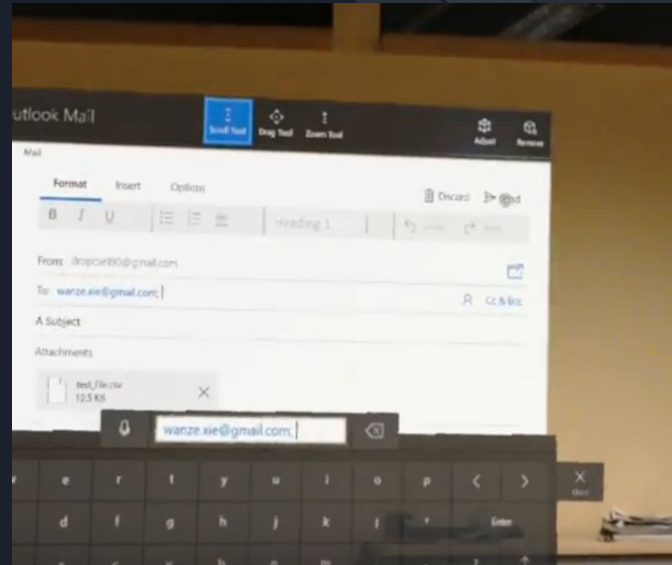
Load different csv file

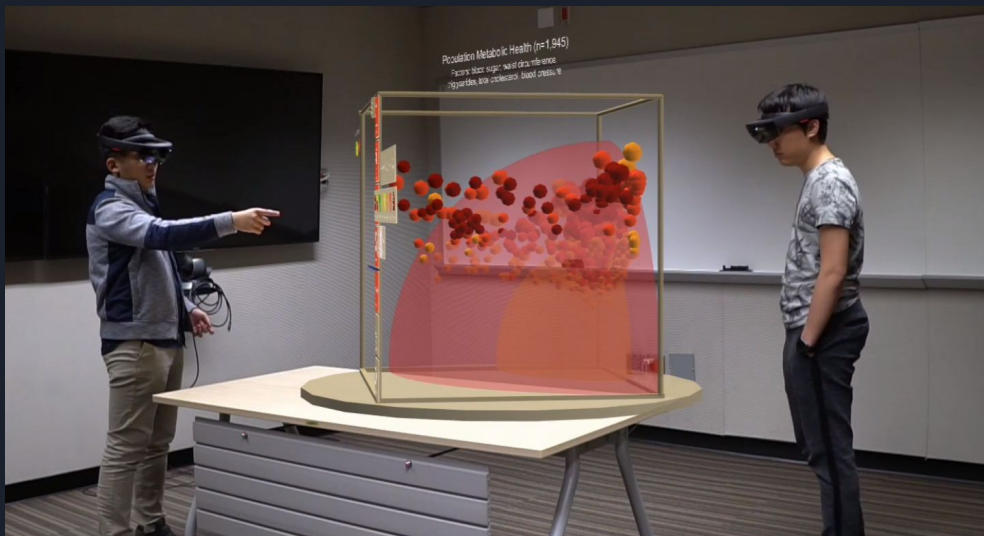- From Microsoft OneDrive

Demo Video Link:

Export Selected Profiles
- In csv format to an email
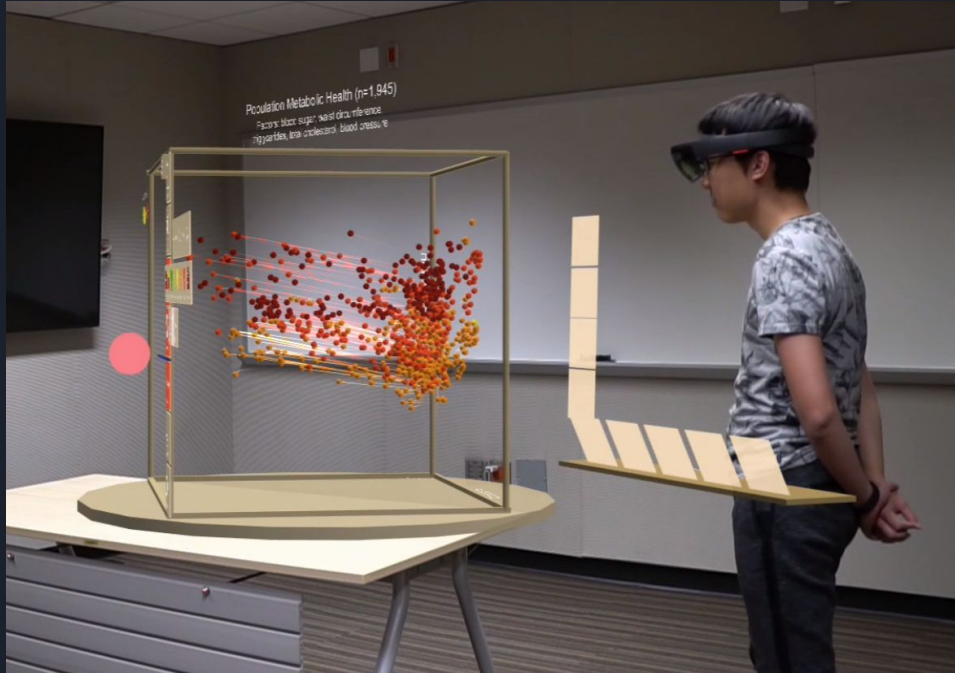
Visualize Group Data with High Dimensional Features

- HbA1c
- Total Cholesterol
- Systolic Blood pressure
- Body Mass Index
- Time
- Chronic Diseases Risk (HBP, HC …)
- ROI Tier
- Diabetes
- And more

Bodylogical Analysis Tool Bench Design

# Traceline
From current year to future 10 years

Data Prediction Based on Bodylogical Model

Filters - Highlight and compare data
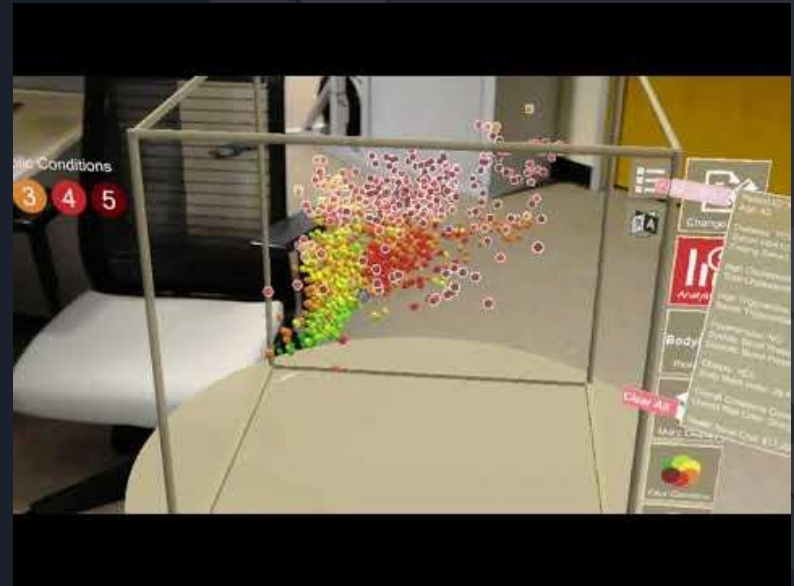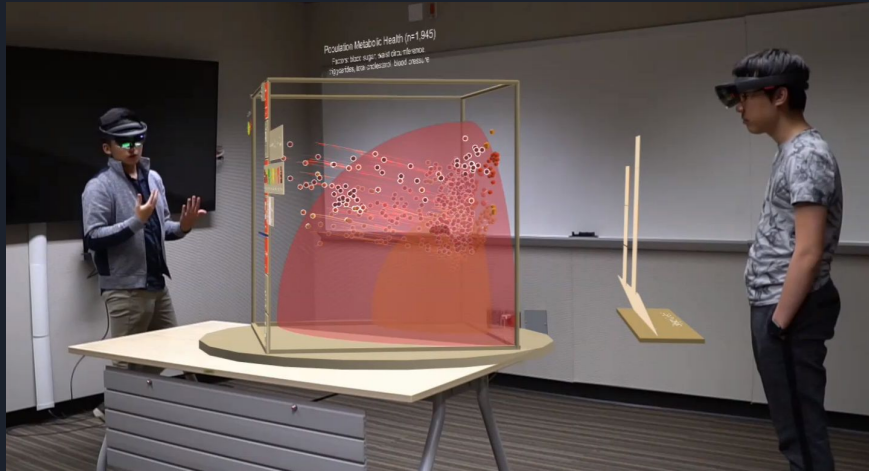
Filter data dots by:
1. Number of conditions
    Health conditions from good to bad.
2. Metabolic syndrome
    One goal of Bodylogical data analysis.
3. High Return On Investment
4. High Speed
    Changes a lot in a fixed time interval.
5. Health intervention
    Use of health care.
6. Customized Selection and highlighting
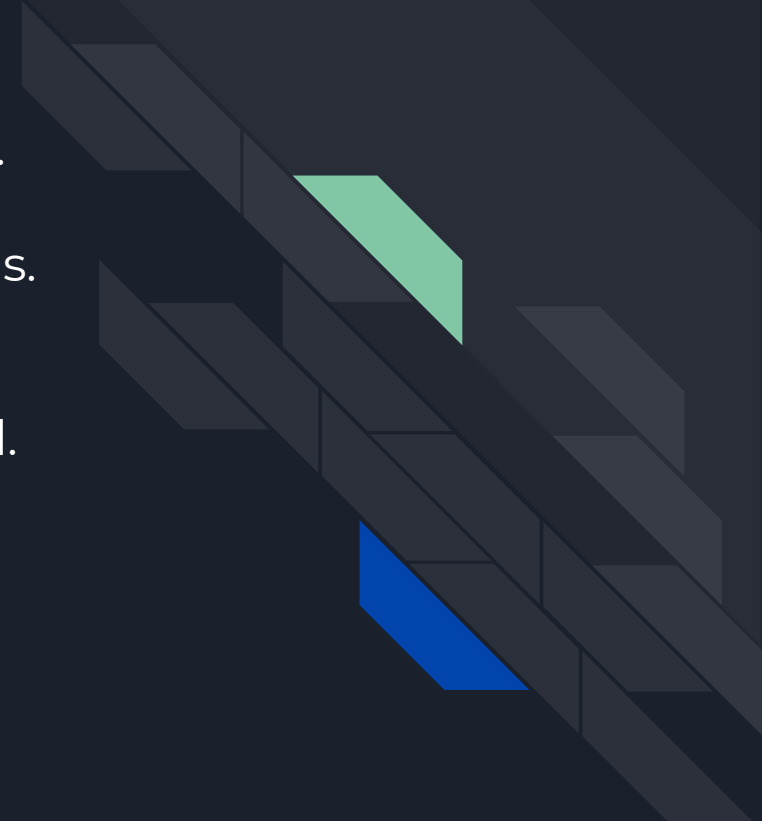
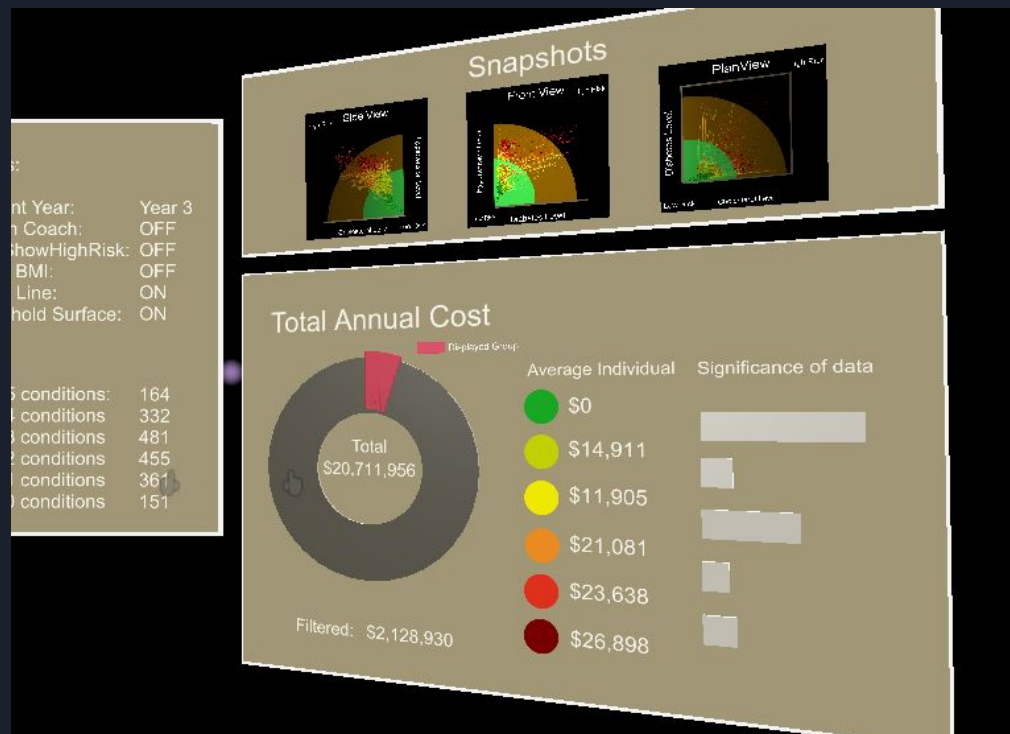# Highlight group of dots for visualization

Demo Video Link:

Highlight group of dots for visualization about Chronic Diseases

1. Diabetes
2. Hypertension
3. Obesity
4. High Triglycerides
5. High Cholesterol

Design of Analysis Wall

Cost analysis of population health
+
2D Plane Views

DayDream Controller Integration
- Auxiliary 3D input for HoloLens

Approaches:

- **We used Daydream controller connected to Hololens via Bluetooth LE.**
    - Created a plugin that translate bluetooth packages into tracking data.
    - Microsoft doesn't provide 3-DOF 3D input devices? We do it, with controller from Google.

- **A user can switch between gestures and controllers at any time.**
    - Implemented a 3D user interface that extends native Mixed Reality Toolkit.
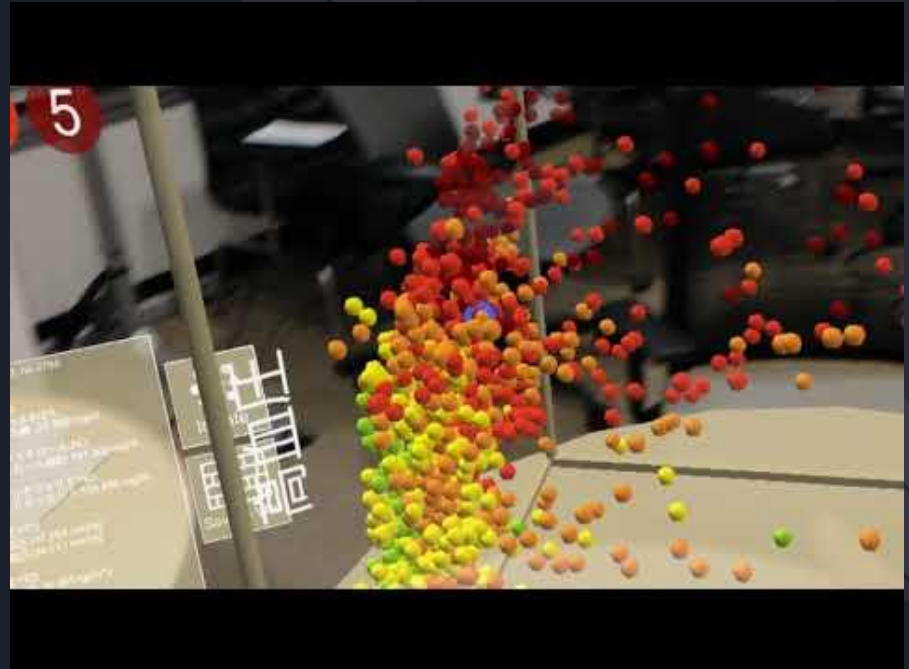
Demo Video Link:
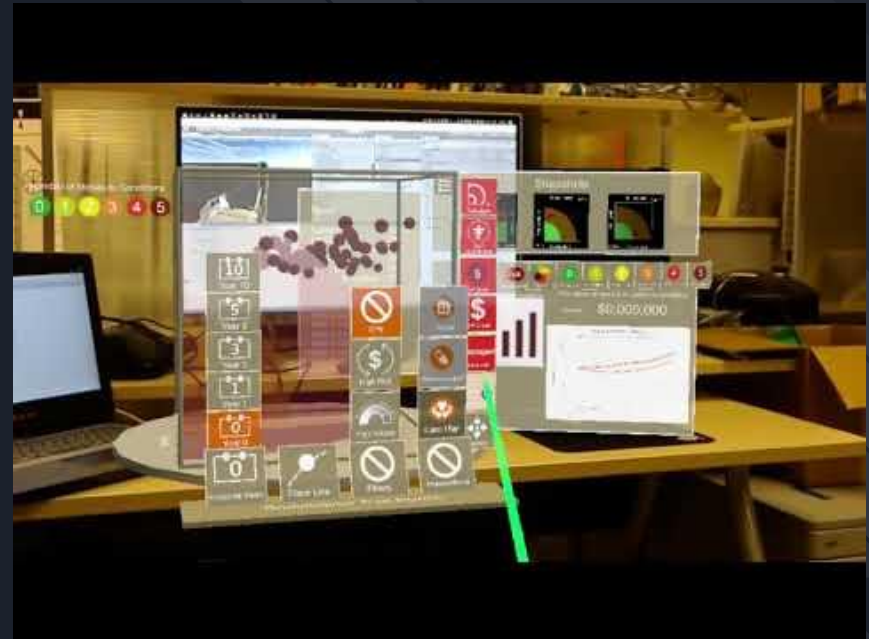
Multi-language support

- AR experience in your native tongue!

Support for English and Japanese:

- **How does it work?**
    - Users can choose their preferred languages.

- **What did we do?**
    - Created a translation system that makes adding more languages easy, once we have the translations.

- **What's the outcome?**
    - This feature was developed intended for a demo on a conference by PwC in Japan and the feedback is great.

Demo Video Link:

Multi-user Shared Experience

Demo Video Link:

Mixed Reality Capture Methods

Refer to Microsoft Official Document: Spectator View for HoloLens

Photos of BodylogicalAR in action at PwC's demo in a conference in Japan

Thank you!

To learn more about this project, please view https://russellxie7.me