Introduction

● What is the problem?
  ○ Lack of easily understandable and interesting sexual health information among young people.

● Our App
  ○ Uses visualizations to gain attention.
  ○ Targets youth population and related medical demographics.
Motivation and Goals

- **Our Purpose**
  - Key idea and contribution

- **The people problem**
  - Benefits for the world at large

- **The technical problem**
  - No trivial solutions

- **Previous solutions**
Previous Solution #1

- CLUTTERED!
- I have no idea what to click or where to go.
- Information overload!!!

Source: http://www.advocatesforyouth.org/
Previous Solution #2

- Cost
- I’ll get right on that with all that money I have. Thanks.

Source: https://answer.rutgers.edu/subscribe
Previous Solution #3

- Wall of Text
- A bunch of words and...
  - Close the tab.

http://www.sexedlibrary.org/index.cfm?pageId=789
Design

- Prototypes
- Wireframes
- Pros and cons
- Changes over time - timeline
- Peer feedback
- Final design
Design

- Modern
- Transparent
- Eye Catching
- One-Page Design for ease
- Infographic Style
- Color Scheme
- Interactive
System Development

- Architecture
- Technology used
- Features – technology
  - 1. Responsive user interface
  - 2. D3 visualization of STD statistics with map and pie graph
  - 3. D3 visualization of map and Planned Parenthood locations
  - 4. Contact form
Technology Stack

FrontEnd
- HTML (Handlebars)
- CSS (Sass)
- JavaScript
- Bootstrap
- D3.js - visualization
- Leaflet
- Mapbox

BackEnd
- Node.js
- Express.js
- PostgreSQL
- JSON/geoJSON
Datasets from DELPHI

STD Information

- AIDS/HIV, Chlamydia, Gonorrhea, and Primary/Secondary Syphilis
- Date Range: 2010 - 2012

cogs121_16_raw.hhsa_aids_hiv_2010_2012
cogs121_16_raw.hhsa_chlamydia_2010_2012
cogs121_16_raw.hhsa_gonorrhea_2010_2012
cogs121_16_raw.hhsa_primary_and_secondary_syphilis_2010_2012
HCI Principle and their Application

- Application of HCI principles
- Features – HCI principle
  - 1. Responsive user interface
    - Aesthetic and minimalist design
  - 2. D3 visualization of STD statistics with map and pie graph
    - Match between system and the real world
  - 3. D3 visualization of map and Planned Parenthood locations
    - Match between system and the real world
  - 4. Contact form
    - Help and documentation
Testing and Evaluation

● A/B Testing
  ○ Compared two design (color scheme) versions for the page

● Statistics
  ○ Counted number of clicks
  ○ Measured overall duration spent on page

● Results
  ○ By statistical evaluation, version 2 outperformed version 1
  ○ By personal evaluation, version 2 was preferred over version 1
Conclusion & Future Direction

● Sex Ed website that SHOWS importance to teens.
  ○ Widespread use in classrooms
  ○ Shared and promoted by health organizations

If only if only the woodpecker sighed...

● Companies to sponsor donations
  ○ Condoms/Birth Control/$$ donations?

Source: http://66.media.tumblr.com/tumblr_lxzhonGODi1qjz098o1_500.png
Demo Time!
Thank You!
Questions?