# **Beating Heart of the World: readme document**

Website URL: <a href="http://beatingheartoftheworld.nil249.webfactional.com/">http://beatingheartoftheworld.nil249.webfactional.com/</a>

Screencast URL: <a href="https://www.youtube.com/watch?v=N0QX8SDmT44">https://www.youtube.com/watch?v=N0QX8SDmT44</a>

For best results, this website should be viewed on a Chrome web browser at 1435px X 772px.

The Beating Heart of the World files and folders are organised as follows:

## Beating Heart of the World

- One folder containing all of the project files and documents.
- Read me document
  - Details the organisation of the files and folders comprising this submission.
- Process book
  - Contains the Team Expectation Agreement.
  - Details the process used to reach the final website design.
- Website files
  - index.html
    - The main website html file that reads in all css and JavaScript elements.
  - CSS
    - bootstrap.min.css
      - o Front-end component library.
      - Source: https://getbootstrap.com
    - scatter.css
      - o The style sheet for view 5 of the website.
    - style.css
      - The style sheet for views 1-4 and views 6-9 of the website.
    - viewScroller.css
      - The styling library of the ViewScroller.js (one-page scroll library).
      - Source: https://github.com/Viewdesic/viewScroller.js
  - data
    - continents.json

 Dataset defining the geographic coordinates of each country.

## data\_bp\_combined\_fixed.csv

- Dataset for the view 5 visualisation that contains the following variables:
  - country
  - region
  - year
  - gender
  - population
  - CVD DALYs
  - blood pressure

## mean-total-blood-cholesterol-age-adjusted.csv

- Dataset for the view 7 visualisation that contains the following variables:
  - Country
  - Year
  - Cholesterol
  - Gender
  - Threshold for cholesterol levels
  - High cholesterol cutoff
  - Prevalence of High Cholesterol Diagnosis (extracted from

raised-total-cholesterol-adult-6plus-2008.csv)

#### merged\_worldmap.csv

 Dataset used to create view 2 visualisations that contains worldwide mortality data.

## • Prevalence-overweight-obese-physical-activity.csv

 Dataset used to create view 8 visualisations. It describes the prevalence of overweight, obesity, smoking, and physical inactivity in each of the countries.

## raised-total-cholesterol-adult-6plus-2008.csv

 Dataset used to create view 7 visualisation that contains high cholesterol prevalence data for each country, by gender.

#### risk factors.json

- Dataset defining the number of risk factor images appearing in the view 3 visualisation.
- Additional datasets used to create the main visualisation datasets are also contained in this folder.

### ■ js

#### bootstrap.min.js

o Front-end component library.

Source: <a href="https://getbootstrap.com">https://getbootstrap.com</a>

# • cholesterol\_line.js

- Creates the line graph on view 7 by:
  - Setting margins, width and height.
  - Defining variables.
  - Reading in the following datasets and formats the variables.
    - mean-total-blood-cholesterol-age-adjusted.c
      sv
  - Configuring and rendering the line graph.
  - Setting initial graph parameters.
  - Defining how graph responds to user interaction.

# • d3.min.js

- JavaScript library for visualizing data using web standards.
- Source: https://github.com/d3/d3/wiki

## • d3-legend.min.js

- o D3 legend library.
- Source: <a href="https://gist.github.com/ZJONSSON/3918369">https://gist.github.com/ZJONSSON/3918369</a>

## d3-tip.js

- Javascript library enabling d3-tip for D3.
- Source: <u>http://bl.ocks.org/davegotz/bd54b56723c154d25eedde650</u> 4d30ad7

#### heart.js

- Creates the animation on view 3 by:
  - Defining icon, heart, margin, height and width size, as well as the size of the animation itself.
  - Defining and rendering the start, transition and end of the animation.

#### • jquery.animateNumber.min.js

- o jQuery library for number animation.
- Source: <a href="http://aishek.github.io/jquery-animateNumber/">http://aishek.github.io/jquery-animateNumber/</a>

### • jquery.easing.min.js

- ¡Query library that gives advanced easing options.
- Source: <a href="https://github.com/gdsmith/jquery.easing">https://github.com/gdsmith/jquery.easing</a>

#### • jquery.min.js

- iQuery JavaScript library.
- Source: https://jquery.com/

## • jquery.mousewheel.min.js

- jQuery library that adds cross-browser mouse wheel support.
- Source: https://github.com/jquery/jquery-mousewheel

## load\_data.js

 Reads in .csv and .json datafiles for use in the view 5 and view 3 visualisations.

#### main.js

 Defines the view scroller and navigation dots that appear on the right hand side of each page on the website.

# • Popper.min.js

- Javascript library that works as a positioning engine. Its purpose is to calculate the position of an element to make it possible to position it near a given reference element.
- Source: <a href="https://popper.js.org/">https://popper.js.org/</a>

# Prevalence.js

- Creates the bar-chart on view 8 by:
  - Defining margins, sizes, svg elements, and variables.
  - Loading prevalence-overweight-obese-physical-activity.csv
  - Ranking data in order of prevalence.
  - Defining what happens to the chart when the user selects from the drop down menu and hovers over chart elements.

## • queue.v1.min.js

- JavaScript library that enables loading of multiple files before running the rest of the code.
- o Source: <a href="https://github.com/d3/d3-queue">https://github.com/d3/d3-queue</a>

#### scatter.js

- o Creates the visualization in view 4 by:
  - Setting initial parameters.
  - Configuring and rendering the scatterplot.
  - Defines how the visualisation is updated when the user selects from the dropdown menus.
  - Performs linear regression in order to obtain trend.
    data presented on the right hand side of the screen.

## • topojson.min.js

- GeoJSON extension to that encodes topology.
- Source: <a href="https://cdnjs.com/libraries/topojson">https://cdnjs.com/libraries/topojson</a>

#### viewScroller.js

- A JavaScript library that allowed us to create a full page scrolling template.
- Link to ViewScroller Library: <u>https://github.com/Viewdesic/viewScroller.js</u>

## world\_legend.js

 Creates the world map that forms the legend for the scatterplot on view 5, by:

- Defining margins, sizes, svg elements and variables.
- Rendering the world map.
- Defining what events follow a region being selected and mouse hovering over the image.

# worldmap.js

- o Creates the visualisations on view 2 by:
  - Defining margins, sizes, svg elements and variables.
  - Reading in:
    - world-110m.json
    - Merged\_worldmap.csv
  - Rendering the world map and bar chart.

# Images

• This folder contains all images and icons used in the website.