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Data Processing: Linked Views

## Design Choices

### Step 2: interactive visualizations

- first visualization is a **map**, because the goal of my website is to compare countries to one another. The map is actually a world map, but it is a map that is zoomed in on Europe.
- the countries on the map are coloured (bright light green to dark green, and light grey for those countries that were not part of the original dataset).
- a legend is added to explain the colours. The brighter the green, the more a country spend (respectively to one another) on its own healthcare. Green was chosen because of its association with health. The other colours on the website [europeanHealth.html](http://europeanHealth.html) were chosen after visiting <http://colorbrewer2.org>.
- a tooltip was added to allow the user to see more details on the map. If the user hovers over a country, that same country will also change colour (light red).
- second visualization is a **bar chart**, because a bar chart is ideal to illustrate what the average life expectancy is for every single group (male, female, combined)
- the y-axis starts at 65 because not a single countries has a life expectancy of 69 or less. 65 was chosen, because it still allows the bars to show up. The y-axis end at the maximum age that was found in the original dataset.
- a tooltip was also added to the bar chart to allow the user to see more details. If the user hovers over a bar, that same bar will also change colour (light red).

### Step 3: linked views

- only by hovering over a country on the map is it possible to update the bars on the bar chart. If you settle the mouse on another country, the bar chart will adapt accordingly.
- the title of the bar chart also shows which country is currently selected on the map.
- the choice for updating the bar chart based on mouse movements instead of mouse clicks, is simply based on personal preferences

#### **Step 4: bootstrap**

- bootstrap was used to make the header, and the website in general, more mobile-friendly.
- bootstrap was also used and place the map and the bar chart alongside each other.
- also a dropdown menu was added, which can be found directly above the map.
- with the dropdown menu, the user can change the expenditure measurement from USA dollar/capita to % of the Gross Domestic Product or vice versa. Thus another interactive element, and another variable was added to the website and the map.
- two functions were written to change the value of the expenditure measurement that is shown on the map. The title of the map also changes if the user switch between the expenditure measurements.
- map with either of the measurements still linked to the bar chart.

#### **Step 5: storytelling**

- large black textboxes were added underneath both the map and the bar chart. These textboxes explain the purpose of the visualizations.
- a short, introduction can be found in the header. It gives a quick overview of the purpose of the website.