Data Analytics Project 2  
interactive visualization

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## Project Background and Description

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|  | Our group set out to create a dynamic, user-interactive dashboard showcasing inspirational women from around the world through the means of the world map, graphs, and other visually pleasing tools.  Our most up-to-date data sources:  **BBC 100 Women 2020**   * <https://github.com/rfordatascience/tidytuesday/tree/master/data/2020/2020-12-08> * Women.csv (<https://raw.githubusercontent.com/rfordatascience/tidytuesday/master/data/2020/2020-12-08/women.csv>)   **World Records from World Athletics**:   * <https://www.worldathletics.org/records/by-category/world-records> |

## Project Scope

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|  | **Applicable Skills**  Mapbox, HTML/CSS, D3, Javascript, Matplotlib, MongoDB  **Extract Data**  We will be webscraping these data sources to extract the select necessary data and translate those into an interactive and intuitive visualized tool.  From the BBC 100 Women 2020, we will webscrape the following:   |  |  | | --- | --- | | * Name | * Category | | * Country | * Description | | * Role | * Image |   From the World Records Data, we will webscrape from Women Outdoor and Women Indoor:   |  |  | | --- | --- | | * Competitor | * DOB | | * Country | * Date |   With the extracted data, we will then use D3, HTML, CSS and possibly Matplotlib to create visually pleasing graphs, use Mapbox to create an interactive map, and JavaScript to create the overall look of the dashboard.  **Create Visualization Tools** Using the following resources and inspirations (flexible):   * Graphical user interface, application    Description automatically generatedGoogle Chart Gallery for developers:   <https://developers.google.com/chart/interactive/docs/gallery>   * A picture containing chart    Description automatically generatedToastUI Chart Repo:   <https://nhn.github.io/tui.chart/latest/tutorial-example08-02-combo-chart-pie-and-donut>   * A picture containing text    Description automatically generatedamCharts   <https://www.amcharts.com/demos/word-cloud/?theme=kelly>   * Twitter Sentiments Repo   Graphical user interface, website  Description automatically generated<https://github.com/Lissy93/twitter-sentiment-visualisation> |

## Deliverables

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| --- | --- |
|  | A dashboard with links to (not finalized):   * Ice cream cones on a world map with pop-ups containing the women’s pictures and profiles * Drop-down menus that allow the users to filter and sort what appears on the map * Timeline of female athletes’ achievement over the years, with Achievement pop-ups. * A word map of the most common roles * Graphs: * Women by category * Women by continent (pie chart) * Female athletes by age (scatter plot) * Most commonly occurring roles (word map) |

Graphical user interface, website

Description automatically generated**Rough Draft of the deliverables:**

Graphical user interface, application

Description automatically generatedTimeline

Description automatically generatedGraphical user interface

Description automatically generated