

SUMMER OLYMPICS

1896 - 2008



Table Of Contents

Executive summary	3
Design Aim	4
-Goals	
-Product Analysis	
-Purpose	
Data Analysis	5
-Gephi Network	
Designing Visualisation	6
-Client Branding	
-Colour Selections	
Poster Product	7
-Trend	
Tablet Application	8
-Personalization	
Wearable Product	9
-Design element	
Reflection	10
Reference	11



Executive Summary

The aim in this visualization report is to represent the history of the summer Olympics and how many countries have contributed around the world from 1896 to 2008. The series of visualizations will also presents the number of medals each country has won.

These visualisations will include showing a statistical data analysis which is according to ranks of gold, silver and bronze.

Since the Olympics have a large diversity of cultural activities, it is important to show the data visualisation across various platforms. These platforms include posters, tablet applications and wearable products such as T-shirts.

The overall intentions for this project is to not only represent the strong and important influence of the Olympics on the world, but to also help motivate countries to further push and strive to increase their level of performance and earn more medals over the coming years.

Products such as the tablet application will allow users to record and create their own profile and use to analyse with existing athletes.



Design Aim

The key aim to consider through out the visualisation in this report is to create a brand statement that touches on three main goals.

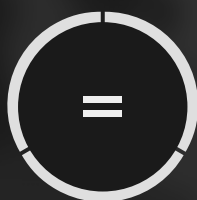
These goals will help keep consistency through the products in terms of visual elements.

When coming up with the products for the client, it is important to make sure that they are relevant to the company/brand and something they require, making it unique and different from existing products they already have

Each individual product will show different datasets and share different goals for various target audiences.

The main three goals are:

Creative & innovative



Easy to understand

Tell a story

Product Analysis

The three products share individual goals and target groups which will please particular audiences. These products are a poster, Mobile application and a T shirt. The reason for selecting different media formats of products is so that many people around the world can get access to at least one or more.

Purpose



The tablet application is designed to motivate users to get into fitness and keep up to date with all past and present Olympic records held by professionals.



The poster presents the audience about how the Olympics has been held in different countries over time. The reason for creating a poster as a product is so that even countries which don't have much access to devices and internet to get the message across of the statistics within the data.



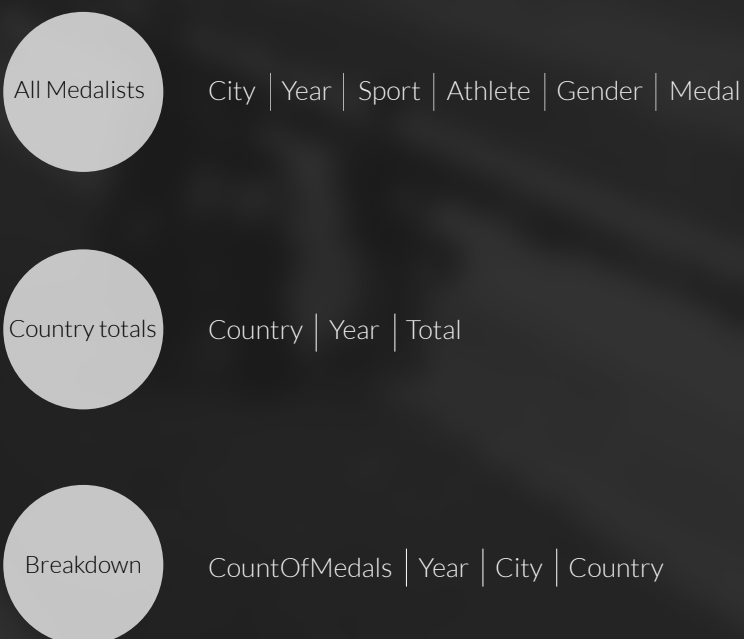
The wearable product designed for both genders, creates a nice branding touch for the Olympics. Because it's all about being active and getting involved, t-shirts will work well in showing individual designs generated from datasets, which represent sport themes or sport types.



Data Analysis

Since the Olympics has been an ongoing event in the world since 1896, The data accumulated had to be divided into subclasses in order to clean up the data and make it more concise. The way I went about doing this was by grouping important attributes which have strong networks with each other into separate excel sheets, giving me the flexibility to organize and create better visualisations.

Below are the list of grouped excel sheets and which attributes each group contains.

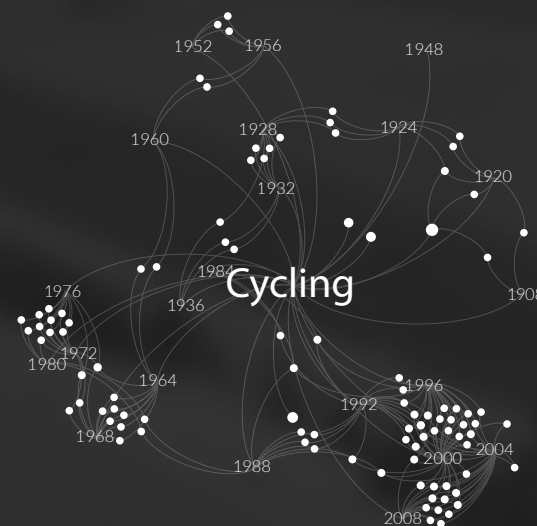


Gephi Network

Once all the data was subdivided into groups and cleaned up, Gephi came in handy to see visible networks within the data set, and getting a more direct understanding of how each node is connected to one another.

The key elements which made Gephi a powerful and useful tool for this report was due to the fact that the data set provided Spatial, temporal and relational networks. In order to make the temporal data change overtime, I had to look into how to format the data from excel sheet format to GDF file types, adding in the accurate time intervals for the data to process further and change overtime.

For example below is an example of a Gephi visualisation of all the cyclists who have won in more than one year in the Olympics.





Designing Visualisation

Client Branding

The main client is Olympic events and their main branding is played significantly by the design and use of their logo. The logo is recognized worldwide which holds strong influence and distinction. It is important to represent this logo throughout the report and products so that it tells the users who the client is.

When researching logos that have been designed for the Olympics for each event/year, I noticed that they vary in use of colour, shape and font styles. This made it very difficult to have a grounding which represents the Olympics over a span of years.

Since this report focuses on temporal data, showing the summer Olympics from 1896 to 2008, It was important to stick to using the Original and main symbol/logo of the Olympics.



Colour Selection

According to articles based on the Olympics, The primary symbol of the Olympic Games is composed of five interlocking rings, colored blue, yellow, black, green, and red on a white field, known as the "Olympic rings." The symbol was originally designed in 1912 by Baron Pierre de Coubertin, co-founder of the modern Olympic Games.

Colours



Shades



The reason for designing the visual report in dark tones is so that colours such as these stand out more, whereas on a light background, the contrast is not so strong on the reds, yellows and greens. This will make the colours more vibrant and execute well on the chosen products.

Another reason for selecting a darker toned theme for the Olympics is because this visualisation focuses on the historic period of the Olympics and this gives a less contemporary feeling to the visualisation of the report. When presenting the report on a lighter toned interface, it gave a very strong modern feeling which did not match the mood for the project.



Poster Visualization

For HiRes quality, please see PDF poster in folder

This poster represents all the locations in which the summer Olympics took place from 1896 to 2008. Creating a demographic chart to represent a timeline across the globe to show how the Olympic events start to spread across the globe.

Trend

Alongside the timeline are some host countries with medals ranked from 1st, 2nd and 3rd. This shows which countries have won in their own hometown, showing a strong trend that majority of Olympic winners have a tendency to be the same countries that host the Olympics.

For example in the poster, you can see that U.S.A has won all Olympics that were held in America.

Another interesting trend found from the dataset was that there were two Olympic events during the summer that were cancelled due to World War 1 and World War 2. The first war was going to be hosted in Berlin, Germany and the other countries were meant to be held in Tokyo and London.





Tablet Application

The tablet application provides users the ability to access all the records of the summer Olympics. These records primarily focus on the athletes that took part in categorized sport disciplines such as archery, swimming cycling, etc...

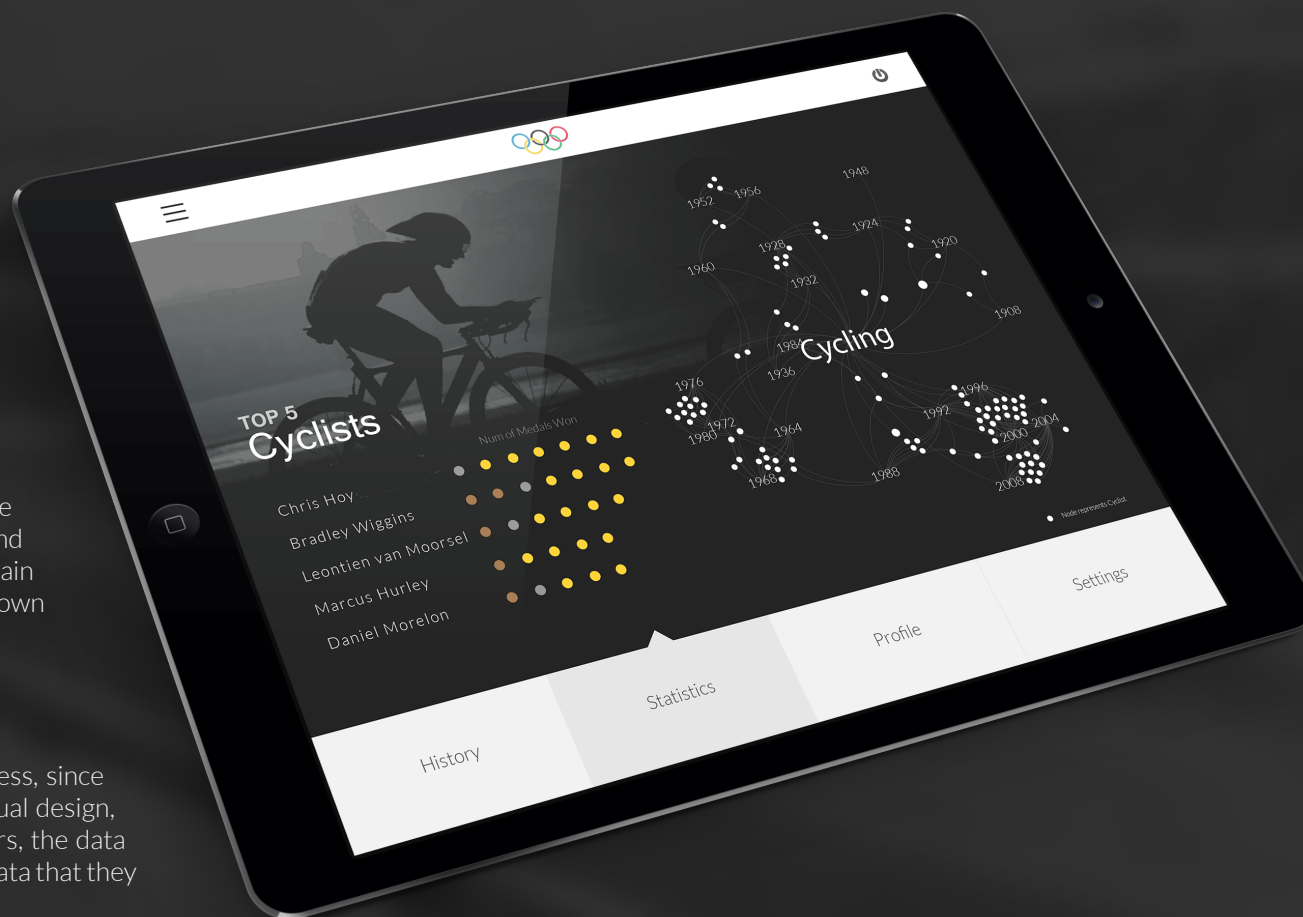
Personalization

The application also provides users the functionality to create their own account and access their own personal space, favourite certain athletes, view top statistics and record their own statistical activities based on various sports.

Usability

Majority of user testing was a successful process, since the interface is simple and has good use of visual design, and alignment of the Ui. According to few users, the data representation is minimal and gives the “exact data that they want to see, without having any fluff.”

The representation in this mock up allows users to even share their profile with friends and share their statistics that get recorded within the data sets that give them more value for the application.





T-Shirts

The shirt designs are generated using Gephi, each node in the example represents all American athletes that took part in the summer Olympics.

Design Element

The designs presented with Gephi are generated by playing around with layouts that would present the nodes and edges in a more clear way.

Using layouts

Noverlap

Radial Axis Layout

Since the data visualisation is presented on a wearable product, it was important to create designs of the same dataset that would appeal to men and women.

Colour

Since this is just one example of how a T shirt design would look, Colour scheme is to represent the American flag colours, Red, blue and white.





Reflection

As an overall reflection, it is clear to see a strong representation of the quality of the brand and identity of the Olympics showing through all three products. The data being broken down into sub classes has helped create a more flexible and manageable way of implementing Gephi into the visualisation.

Once into software's such as Gephi, it was easy to work around with the complexity of the temporal data and simplify the relations within the network between the sportsman and sports category.

Using the features such timeline intervals and animating the nodes, it was easily to see which parts of the data needed to be filtered and showing only main important roles in which event for certain parts of the Olympics.

Another aspect that was important to show, was finding interesting trends which could be easily noticeable when mapping out the data in a visual form. For example seeing how countries that hosted an Olympic event were most likely to win 1st, 2nd, or 3rd place.

Because the Olympic events are strongly affiliated with different cultural backgrounds, branding was a key element through the report. In the end the products play out the representation of the data accurately and appropriately.



Reference

<http://www.olympic.org/>
<http://www.tableausoftware.com/public/community/sample-data-sets>
<https://twitter.com/Olympics>
<http://www.rio2016.com/en>
<http://corporate.olympics.com.au/>

Image Resources

<http://gleasoncoaching.files.wordpress.com/2013/11/triathlon-training-biker.jpg>
<http://wallwidehd.com/wp-content/uploads/Olympic-Stadium-Sochi-2014-Wallpaper.jpg>
<http://www.fastcodesign.com/1670425/infographic-a-100-year-history-of-athletic-world-records>
<http://blogs.walkerart.org/design/files/2014/02/Olympic.png>

Softwares Used

Gephi
Microsoft Excel
Sublime Text 2
Adobe Illustrator
Adobe Photoshop
Gimp 2
Igraph

Inspiration links are provided in a separate text document.