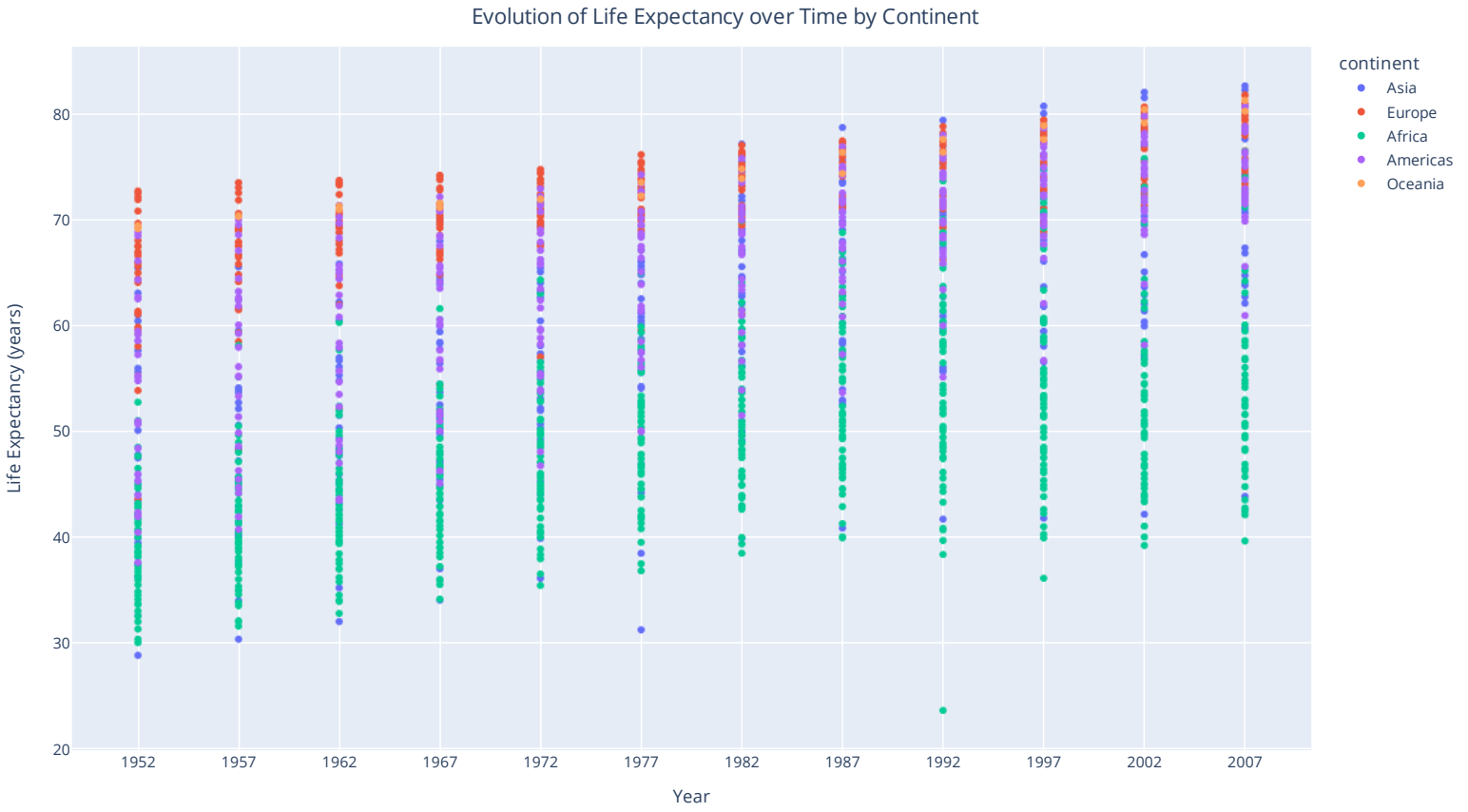
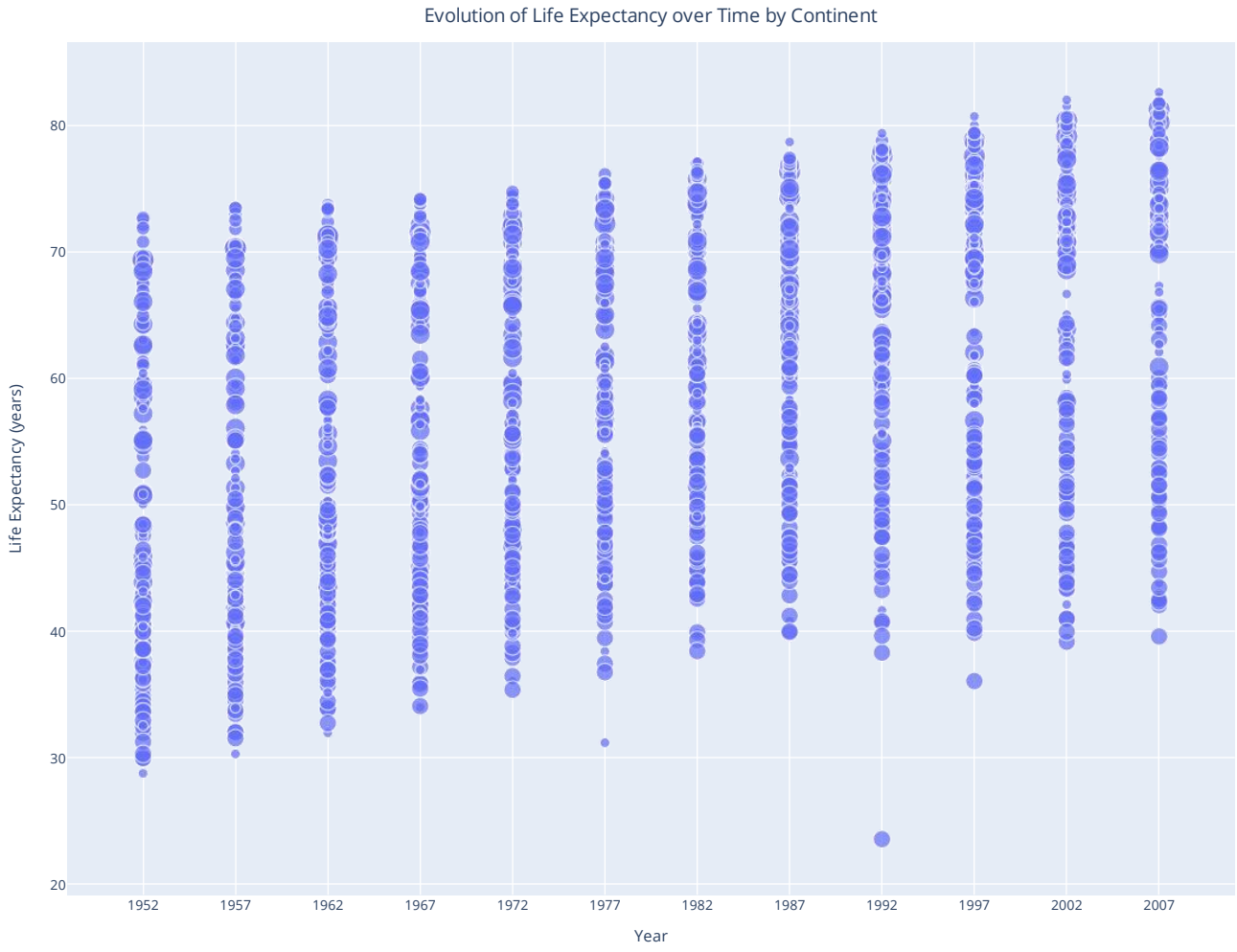
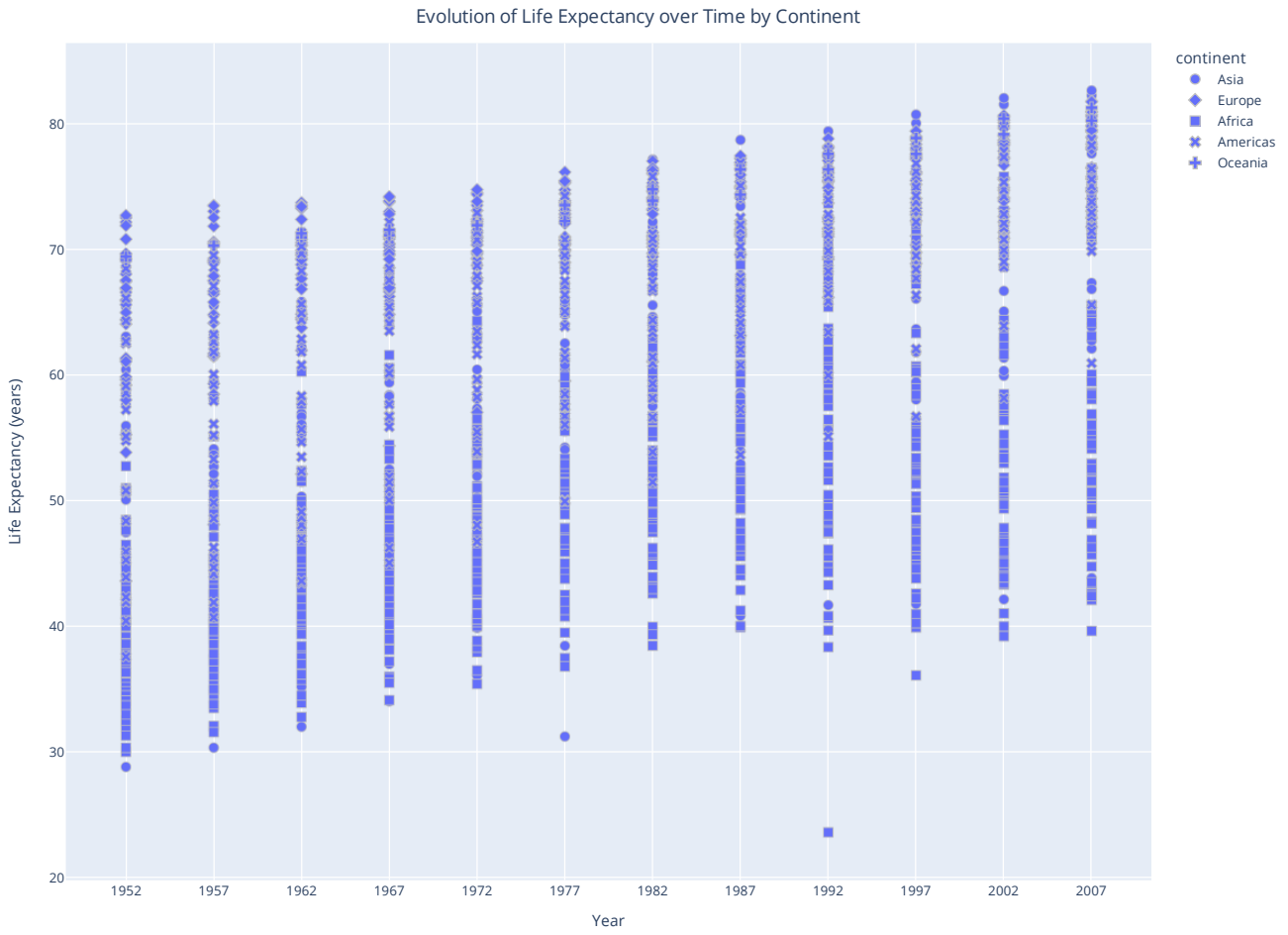


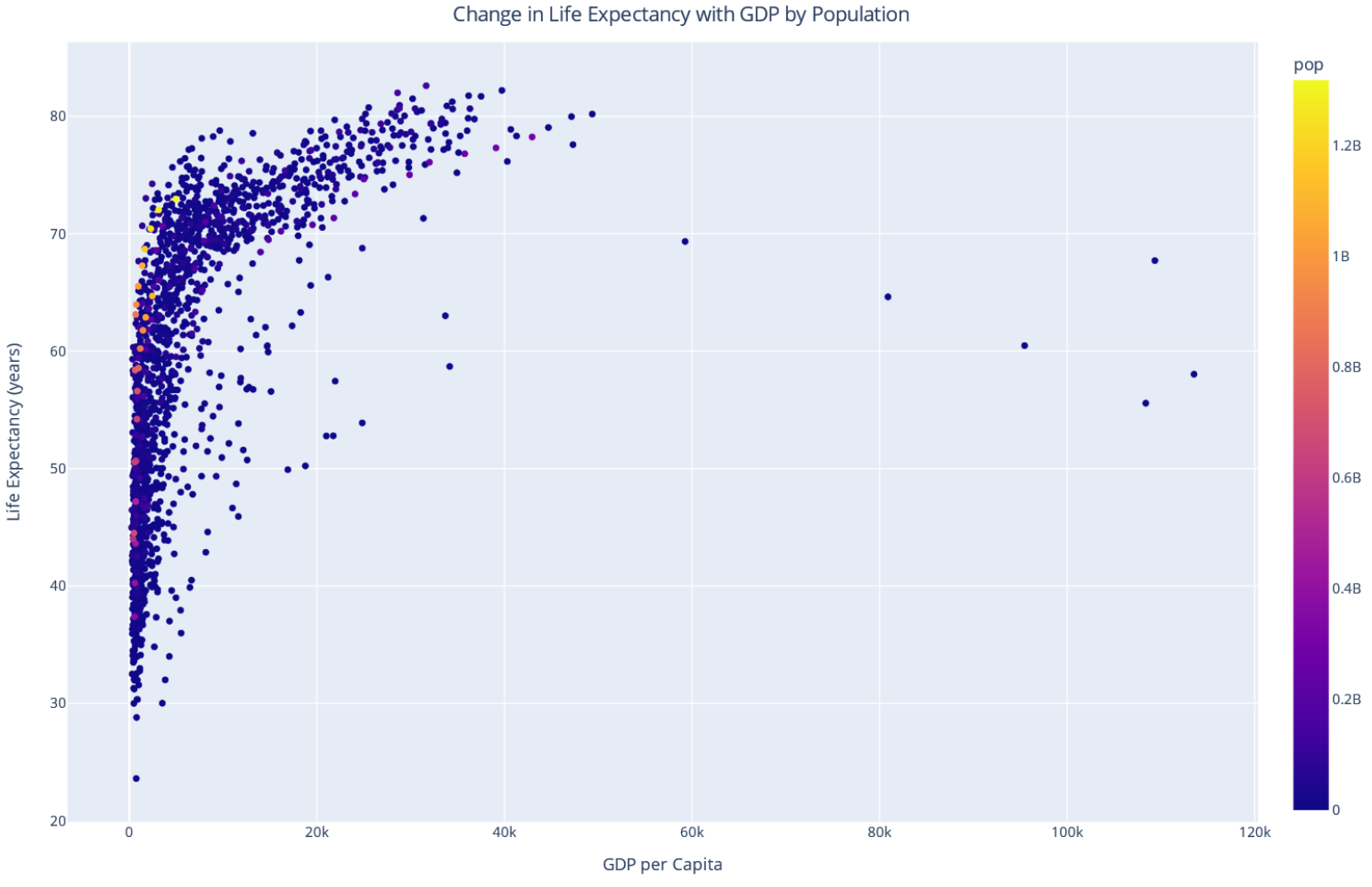
1.1 - The above graph uses position and colour as encoding channels – colour representing the continent.



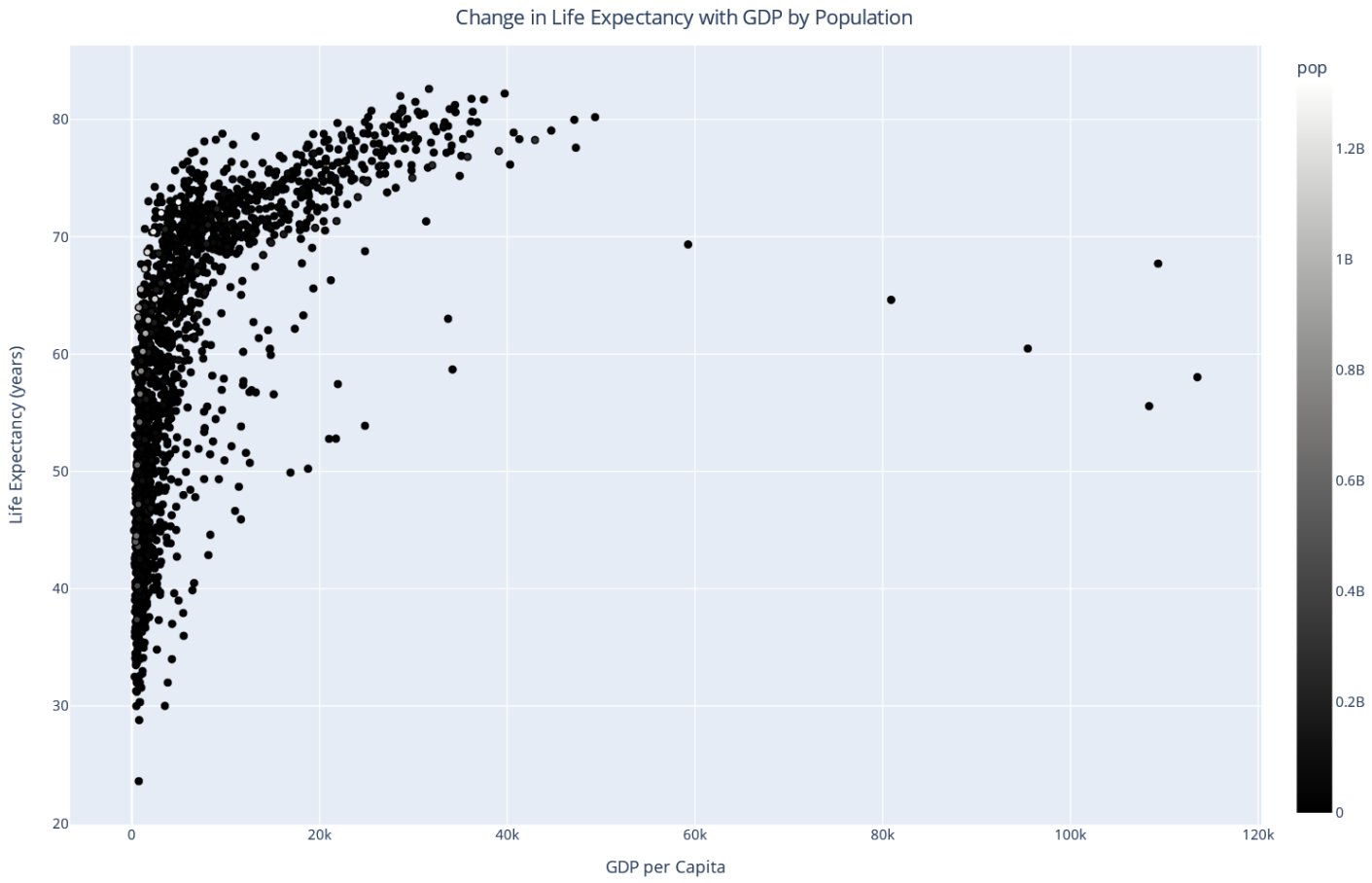
1.2 – The above graph uses position and size as encoding channels – size representing the continent.



1.2 – The above graph uses position and symbol encodings – symbols representing the continent



2.1 – The above graph uses position and colour as encoding channels – colour represents population



2.2 – The above graph uses colour and brightness as encoding channels – brightness represents Population.

2.3 - The above graph uses position and size as encoding channels – size represents population

3 – The above graph uses position to show Life Expectancy with Time, colour to show GDP, size to show population and symbol to show continent.

The tool I used for this assignment was the plotly python library. This was a much more familiar environment for me to work in compared to processing which I used for assignment 1.2, since I have extensive experience in using the Python programming language. Out of the box, it provides some powerful tools for creating some really striking visualisations. It also allows for graphs to be saved as scalable vector graphic files (.svg) which helps to maintain image quality while presenting the graphs.

The graph in part 3 of this assignment, although it encodes 6 different attributes and conveys a lot of information, it is rather cluttered and difficult to understand. Given that most of the countries lie in the mid to low side of the population scale, many of the points become so small that it becomes difficult to distinguish which colour they even are. A similar issue is present with the colour map of the GDP – some of the colours are hard to differentiate. Symbol shows continent but without a legend this is not much use. Although it is impressive that one graph can encode 6 different attributes, I believe having multiple visualisations would be more effective in conveying the trends present in the data.

Joseph Brown | 19334845 | CSU44056 | Assignment 1.2
I understand that this is an individual assessment and that collaboration is not permitted. I have read and I Understand the plagiarism provisions in the General Regulations of the University Calendar for the current year, found at http://www.tcd.ie/calendar. I understand that by returning this declaration with my work, I am agreeing with the above statement.