Development of Data Visualization Products

## Competency development areas in data visualization

* Fundamentals of Data Visualization: The principles of effective data visualization, including visual perception, data types, and design considerations.
* Data Visualization Tools and Technologies: Popular data visualization tools and technologies such as Tableau, Power BI, D3.js, and Python libraries like Matplotlib and Plotly.
* Dashboard Design and Storytelling: Techniques for designing dashboards that provide a comprehensive view of data and tell a coherent story. Learn about layout, hierarchy, and effective use of annotations and narrative.
* Data Visualization Best Practices: Best practices in data visualization and using appropriate visualization techniques for different types of data and insights.

## Online training resources:

* Data Visualization and Communication by the University of Illinois at Urbana-Champaign on Coursera. This course provides an introduction to data visualization principles and techniques. ([coursera.org/learn/datavisualization](https://www.coursera.org/learn/datavisualization))
* Fundamentals of Visualization with Tableau: fundamental concepts of data visualization (coursera.org/learn/data-visualization-tableau)
* Tableau self-paced eLearning paths and courses ([tableau.com/learn/training/elearning](https://www.tableau.com/learn/training/elearning))
* Data Visualization and Communication with Tableau: Offered by the University of California, this course covers the principles of effective data visualization, explores different chart types, and teaches how to create interactive dashboards using Tableau. ([coursera.org/learn/datavisualization](http://www.coursera.org/learn/datavisualization))
* DataCamp ([datacamp.com](http://www.datacamp.com)); Udemy (udemy.com); Coursera (coursera.com); LinkedIn Learning ([linkedin.com/learning](http://www.linkedin.com/learning)); Tableau Public (public.tableau.com); YouTube Channels.

## Online training resources in data visualization specifically tailored for federal employees:

* Data Visualization Communities of Practice at different agencies.
* Federal Virtual Training Environment (FedVTE) - free online training courses for federal employees, including courses on data visualization (fedvte.usalearning.gov).
* Digital.gov - a resource hub for federal agencies, providing guidance, tools, and training resources related to digital services and technology (digital.gov).
* Data.gov - open data portal, providing access to various datasets; also offers resources and tutorials on data visualization and analysis using government datasets ([data.gov](http://www.data.gov))