OECD Unemployment Rate Visualisation Using D3.js

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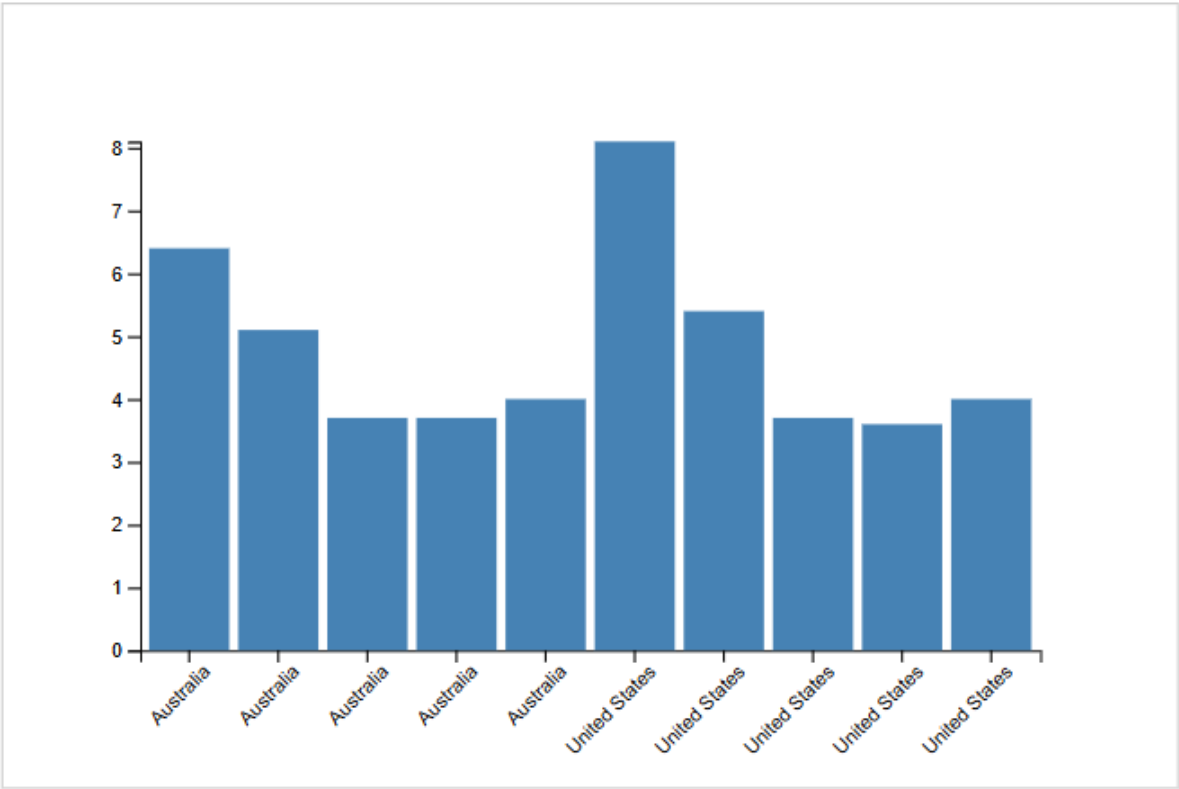
Section 1: Work Completed Since the Last Standup

Since the commencement of the project, and more specifically following our most recent team standup meeting, we have been actively involved in several essential aspects of our ongoing data visualization initiative. Below is an expanded summary highlighting the key contributions and achievements to date:
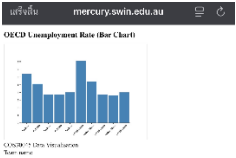
Visualization Refinement

- We adjusted chart spacing and refined label positioning to significantly enhance readability and ensure visual consistency across various screen sizes and device types.
- The updated unemployment data was successfully integrated into the bar chart, enabling it to accurately reflect year-by-year changes from 2020 through 2024 for both Australia and the United States.
- implementing an interactive tooltip for value display on hover.
- Proposed and tested responsive design improvements to enhance user experience and layout consistency.
- Drafted sections of the Assignment 3B: Project Process Book, especially focusing on visualisation methodology and challenges.
- Minor display-related bugs were detected and documented, particularly those affecting the mobile view when loading the chart.
- To address these, we proposed responsive design modifications and subsequently conducted visual regression testing to verify layout and style consistency across devices.

OECD Unemployment Rate (Bar Chart)

COS30045 Data Visualisation
Team name

Section 2: Plan Before the Next Standup

As we move forward, our focus will be on accomplishing the following objectives before the upcoming team standup meeting:

- Finalize the parsing and transformation of the OECD dataset to ensure its full compatibility with D3.js and maintain a high level of data accuracy.
- Actively contribute to the development of at least one interactive feature in the visualization—such as a tooltip or a hover-based animation effect.
- Participate in drafting the **Methodology** and **Challenges** sections for Assignment 3B, which documents our project process and technical journey.
- Thoroughly test all code that has been merged into our GitHub repository to detect and resolve any runtime issues or data-related inconsistencies that may arise.

Section 3: Challenges and Obstacles

While progress has been steady, we have encountered several obstacles that have increased the complexity of our workflow:

- **Time Constraints:** Balancing other unit deadlines resulted in minor delays in visualization enhancements.
- **Data Transformation Complexity:** Parsing and preparing the OECD dataset for D3.js required additional validation to ensure accurate outputs.

Section 4: Summary of Contributions

Estimate of Individual Effort

Task	Hours Spent	Contribution % (Team-wide)
Locating and working with the dataset	3 hours	~20%
Designing and refining the visualization	2 hours	~10%
Writing the Project Process Book (Assignment 3B)	1 hour	~10%

Research and implementation using D3.js	2 hours	~15%
Total	**8 hours**	**~55% of my overall contribution**

Task Distribution & Progress Summary

Throughout this phase of the project, team members collaboratively worked on the following key areas:

- **Data Preparation & Cleaning:** Completed by Aung, with integration of OECD unemployment data from 2020 to 2024.
- **Visualization Design & Refinement:** Led by Kim, with focus on responsive bar chart creation using D3.js.
- **Interactive Feature Development:** In progress; tooltip and hover effects are being implemented.
- **Report Writing (Methodology & Challenges Sections):** Contributions made by both team members; current draft stage.
- **Testing & Debugging:** Ongoing; visual regression tests and mobile responsiveness being actively improved.

Section 5: Summary of Tasks to Be Completed Before the Next Meeting

The upcoming tasks prioritized for completion prior to the next scheduled team check-in include:

- Finalizing a working draft of the **Methodology** and **Challenges** sections required for Assignment 3B.
- Collaborating on enhancements to the overall styling and color scheme to improve visual appeal and alignment with accessibility standards.
- Running internal user tests to gather preliminary feedback and identify any usability concerns.
- Debugging any persistent issues in D3.js rendering, particularly those affecting responsiveness across devices.

Section 6: Teamwork and Communication

There have been no significant issues with team collaboration or communication. All team members are fully aware of their assigned responsibilities and the deadlines associated with them. Communication remains clear and constructive.

Challenges Faced

The team encountered the following obstacles:

- **Time Constraints:** Balancing other unit deadlines resulted in minor delays in visualization enhancements.
- **Data Transformation Complexity:** Parsing and preparing the OECD dataset for D3.js required additional validation to ensure accurate outputs.

Despite these challenges, the team is progressing steadily and remains on track to meet all project milestones.

Section 7: Assignment 3C Progress – Website and Visualization

In preparation for the next team meeting, the following items are considered high priority for Assignment 3C:

- Develop and implement an interactive tooltip that displays specific values and corresponding countries when hovered over.
- Complete the draft versions of the **Methodology** and **Challenges** sections for Assignment 3B.
- Collaborate on refining the visual design, focusing on color palette harmony and style consistency.
- Conduct internal usability testing sessions and collect feedback from peers for potential improvements.
- Identify and fix any remaining issues related to D3.js rendering across multiple devices and screen resolutions.

Conclusion

In conclusion, we have made substantial progress across multiple fronts of our project, including dataset handling, team coordination, visualization structure, and visual design. Although we continue to face certain technical challenges—particularly in achieving seamless interactivity and finalizing dataset transformations—we remain confident in our trajectory. With ongoing teamwork, clear task ownership, and a shared commitment to meeting our goals, we are well-positioned to complete all deliverables in time for the final review and project presentation.