Aimed Goals

User requirements (based on user studies):
1. See all dimensions at once
2. Improve analysis sequence
3. Leave scatterplots and histograms
4. Gate/Filtering feature
5. Provide better usability than commercial FlowJo

By means of:
1. Using Parallel Coordinates with Gating/Filtering
2. Implementing data clustering throughout dimensions
3. Include scatterplots and histograms in the interface
4. Make effective, convenient and interactive interface

Data Analysis Comparison (FlowJo vs FlowCytoVis)

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Strengths and Weaknesses of the FlowCytoVis

+ Can provide insights into the data
+ Convenient (less clicks to get the same result)
+ Interactive
+ Allows intuitive multidimensional filtering
+ Visually appealing
- Slow picture rendering relatively to Scatterplots
- At the moment does not provide full functionality that FlowJo provides.

Conclusions

- The FlowCytoVis proved to be a relevant solution for the Flow Cytometry data visualization and was accepted with enthusiasm
- Parallel Coordinates (PC) view is a nice addition to canonical Scatter Plots for Flow Cytometry
- Clustering works very well together with PC and can save some rendering time
- Clustering needs refinement and improvement
- Improving speed is vital for PC

Future Work

- Implement all the functionality still missing
- Integrate existing clustering made for the Flow Cytometry Data Standards Project into the FlowCytoVis
- Improve rendering speed for parallel coordinates

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Questions…