Gravity++: An Alternative Graph-based Approach for Creating Interactive Visualisation Narratives

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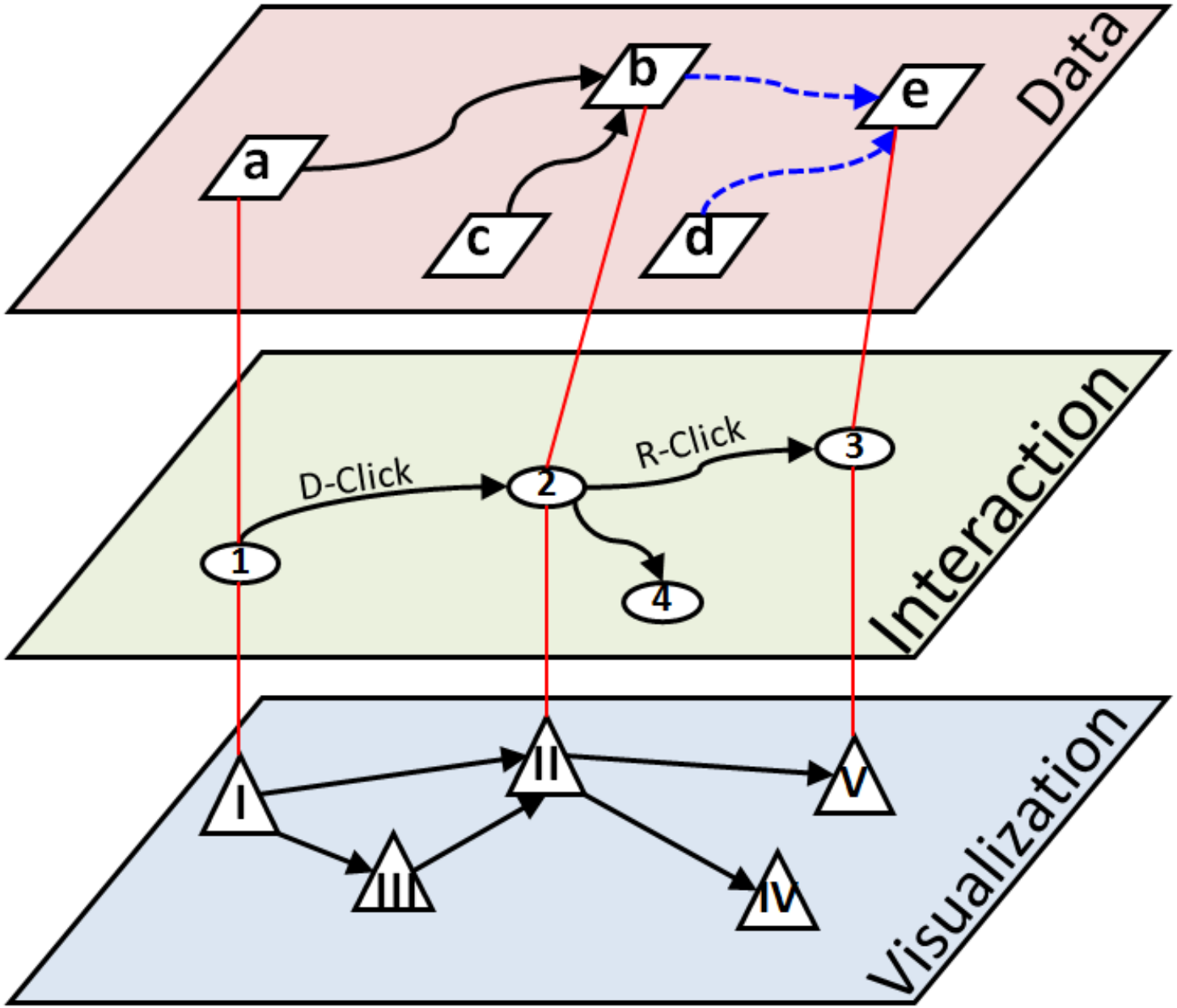
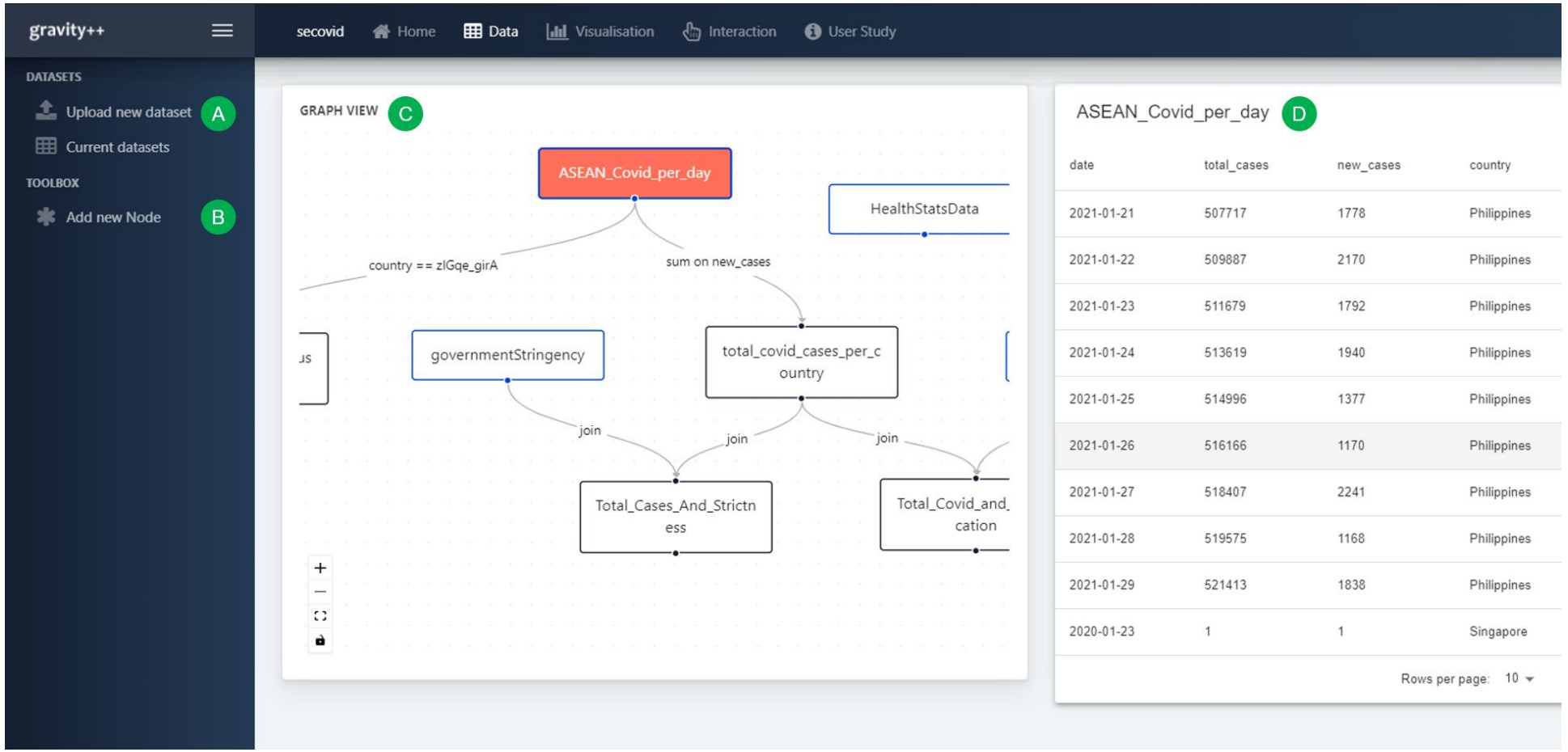
Bar Chart
Combo Chart
Timeline
Gauge
Memory
92
CPU
74
Washington
Adams
Jefferson
1800
Stepped Area Chart

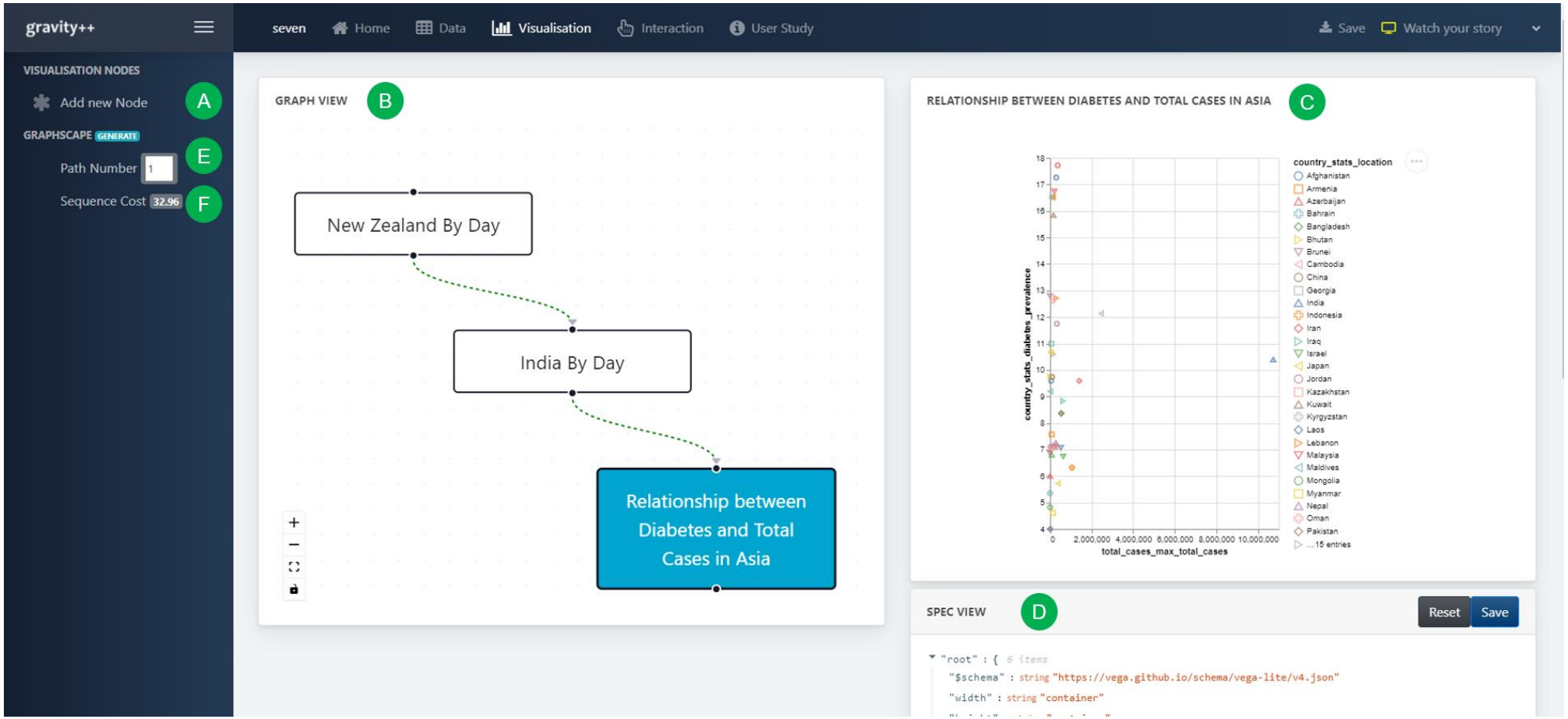
Alternative Graph-based Architecture



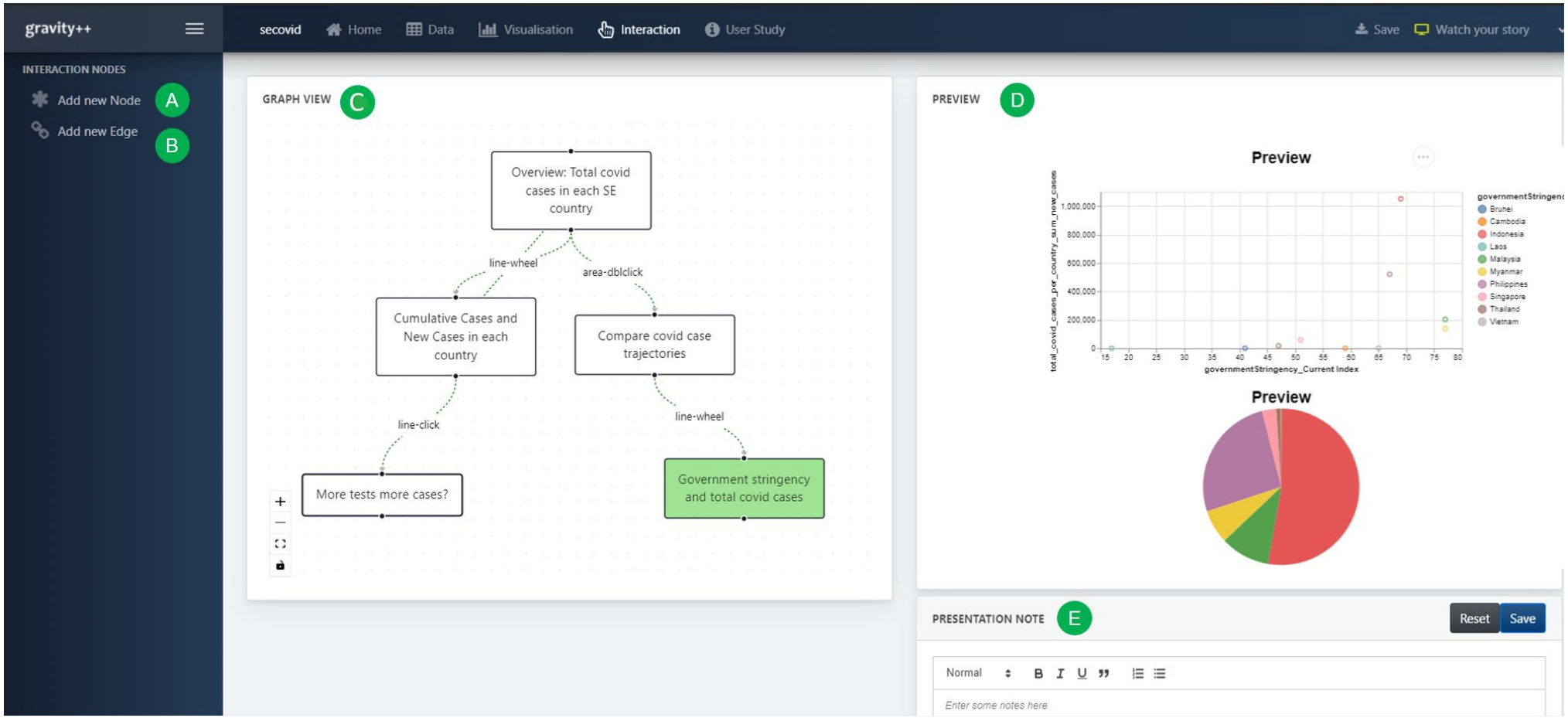
Data Domain and Interface



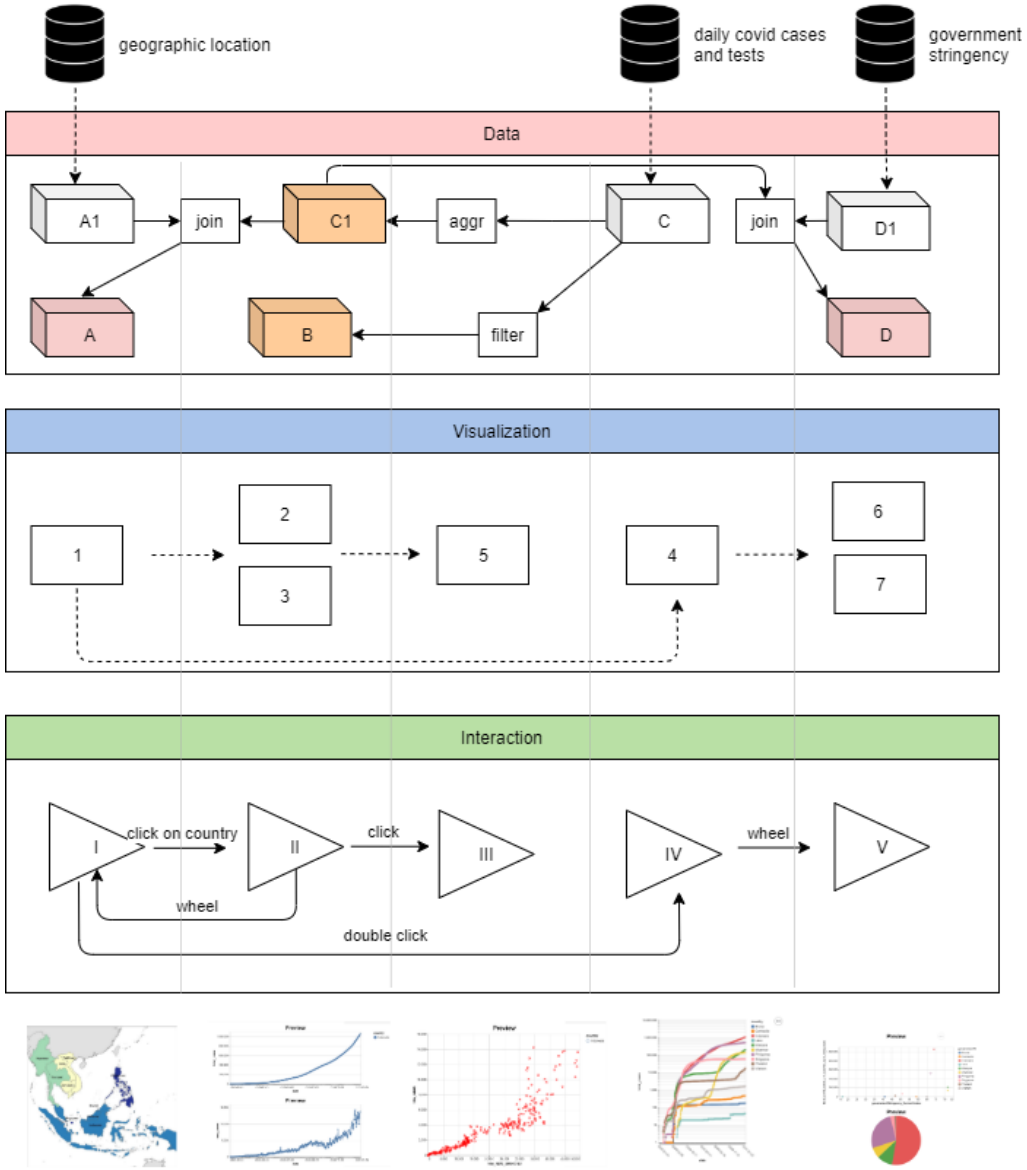
Visualisation Domain and Interface



Interaction Domain and Interface



An Example Supergraph



Advantages of a Graph-based Architecture

- Metamodel of other data models
- Recommendation of visualisation sequences
- Custom interaction modes for storytelling
- Support for non-linear narrative visualisation structure
- Data query prediction and traversal

Preliminary Evaluation of Prototype

+ Intuitive approach to constructing narrative visualisations

+ Creation of complex processing graphs

- UI needs improvement and other basic features

- Lacks integration with other tools & workflows

Thank You!

Questions?