## Multi-stage pipelines

**Concept.** Building a toy model simulation of a rugby match whose outcome can be manipulated through correctly-timed player substitutions and game management decisions. The state manipulation framework we have built around the stochadex can meet these requirements, and a dashboard can be created for user interaction. All this combines together to make a simple dashboard game, which we call: 'trywizard'. For the mathematically-inclined, this chapter will motivate the construction of a specific modeling framework for rugby match simulation. For the programmers, the public Git repository for the code described in this chapter can be found here: https://github.com/umbralcalc/trywizard.

This multi-stage pipeline archetype would make sense in simulations of logistics problems or data processing pipelines.

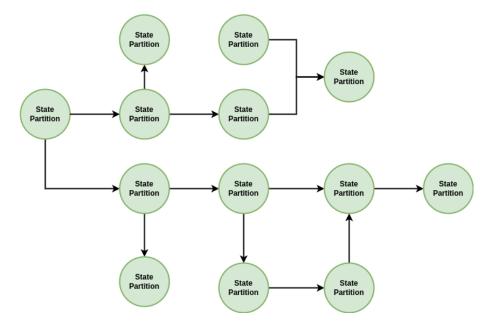


Figure 9.1: State partition graph topology for multi-stage pipeline archetypes.

## **Bibliography**