

The University of Manchester

A Methodology for Using GitLab for Software Engineering Learning Analytics

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institute of

Project Goals

- To explore the way students solve tasks using collaborative development platforms, version control systems & continuous integration systems
- To find patterns and evaluation metrics that can be used to improve course content and provide insight into the most common issues the students are facing



Data Analysis Challenges

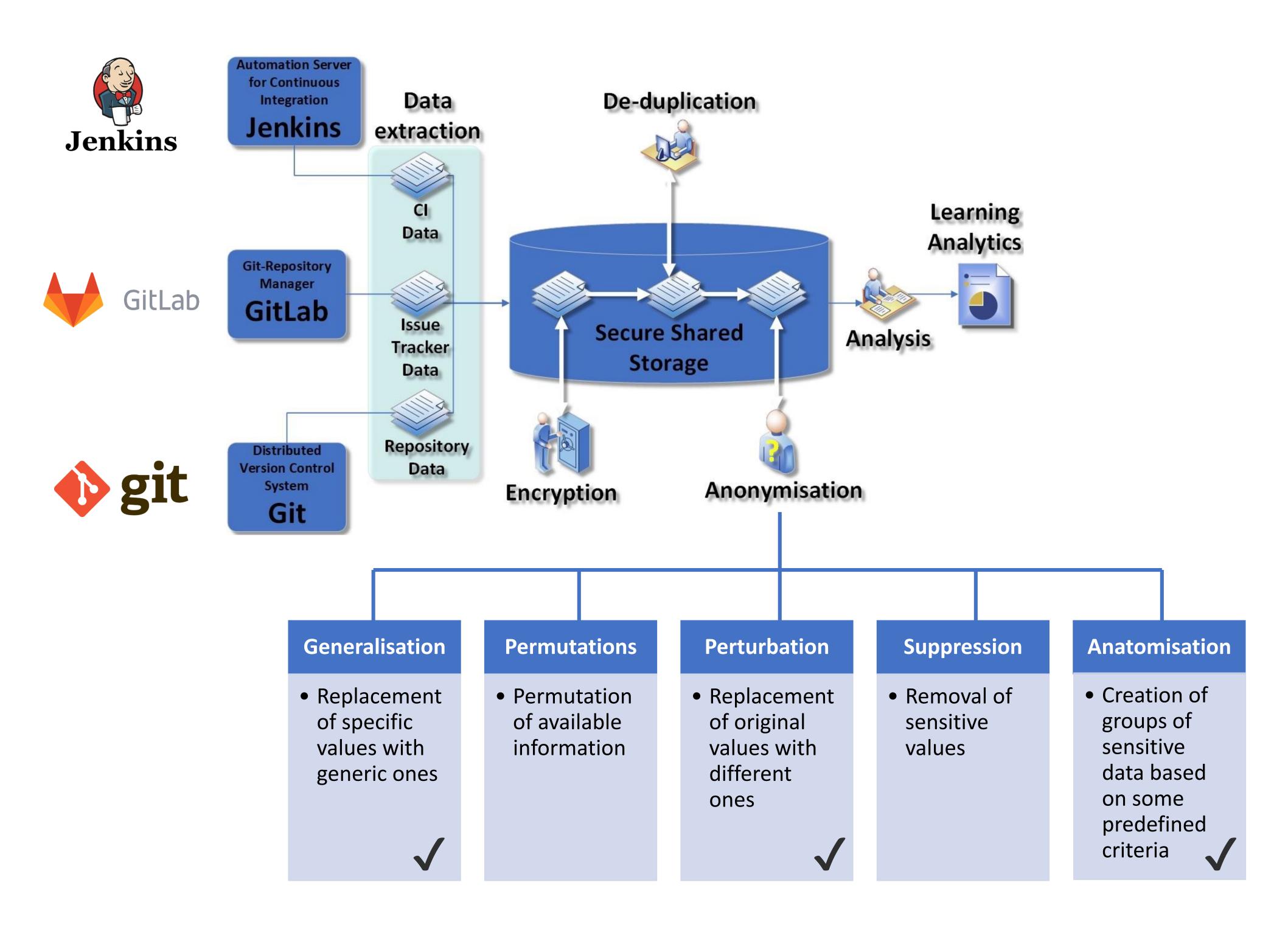
- Collecting simple usage metrics from the teaching platforms is not enough in isolation
- We need to consider the human aspects of the experience, such as gradual experimentation, learning from mistakes, and the abilities of each individual



Objective

- To construct a data processing pipeline which:
- Combines different data sources
- Ensures that data is collected and used ethically
- Satisfies data protection policies
- Minimises the risk of re-identification

Data Processing Pipeline



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