The above diagram shows how data is processed and stored from the raw CSV files. The Preprocessor object calls the IOUtility class to read lines of the input CSV, store them as processed records, and then add them to the list of records. It also shows the process for saving the processed records into a new CSV file for later use, hence avoiding extra processing. (Note: Processed Record refers to a type of processed record object, ie ProcessedGrantsAndFundingRecord, ProcessedTeachingRecord, etc).

This design was chosen as it prevents redundant processing of data: with this design, an input file only needs to be read and processed once, rather than needing to read and process and reprocess data over the course of usage.