Sample Data

Hibernate save Student data

GenerateDatabaseData

Database

Topology Class controls the number of spouts and Bolts

Fetch the GPAScore based on the **StudentID**

Emit  
Tuples

V

Emit  
Tuples

V

Storm/Hibernate integration:

Requires:

1. MySQL database.
2. Hibernate confiugation files.

* Hibernate.cfg.xml
* Student.hbm.xml

1. Jar dependencies included in pom.xml
2. GenerateDatabaseData java class to setup / populate the STUDENT table in database by reading from a Sample csv file.
3. A Spout to read the data JSON input file containing the student details
4. A topology java class to manage the workflow and run them in the Storm environment

**Rules documentation:**

**BaseRule.java** : It is a interface. All rule classes implements it.

                Method:   Validate() : this is an abstract method  return type is RukeResult.

**ValidatorRule.java** : It is a class, which implement BaseRule.

                Method: Validate() : This method checks the admit and not admit probability and set the corresponding data to the RuleResult object and sends  back to the caller method(RuleRunner class).

**RuleValue.java** : It is a constant file which contains success and error constants.

**RuleResult.java** : It is a pojo class. Which contains rule id , rule description and rule result properties along with setters and getters.

**RuleRunner.java** : This class runs the rules and give the result.

                Method: execute () : This method executes given set of rules and returns the list of RuleResult objects.

**RuleBolt.java** : This is the storm bolt which call the RuleRunner class to execute rules and get the results.

                Method: execute () : This method  is  overridden method which call the execute method of RuleRunner class and get the result.