

## Student Performance Database Table

```
create_table "student_performance", charset: "utf8mb3", collation: "utf8mb3_unicode_ci", force: :cascade do
  |t|
    t.string "school", limit: 2, null: false
    t.string "student_id", unique: true
    t.bigint "unit_id"
    t.references :teaching_period, null: false, foreign_key: true
    t.references :task, null: false, foreign_key: true
    t.references :student, null: false, foreign_key: { to_table: :users }
    t.datetime :submission_time
    t.datetime :assessment_time
    t.integer :grade
    t.integer :contribution_pts, default: 3
    t.integer :quality_pts, default: -1
    t.integer :hours, default: 0
    t.integer :extensions, default: 0, null: false
    t.string "sex", limit: 1, null: false
    t.integer "age", null: false
    t.string "address", limit: 1, null: false
    t.integer "medu", null: false
    t.integer "fedu", null: false
    t.integer "traveltime", null: false
    t.integer "studytime", null: false
    t.integer "failures", null: false
    t.boolean "schoolsup", null: false
    t.boolean "famsup", null: false
    t.boolean "activities", null: false
    t.boolean "higher", null: false
    t.boolean "internet", null: false
    t.boolean "romantic", null: false
    t.integer "famrel", null: false
    t.integer "freetime", null: false
    t.integer "goout", null: false
    t.integer "dalc", null: false
    t.integer "walc", null: false
    t.integer "health", null: false
    t.integer "absences", null: false
    t.integer "g1", null: false      # First period grade
    t.integer "g2", null: false      # Second period grade
    t.integer "g3", null: false      # Final period grade
end
```

This schema includes only the features that are directly related to student performance such as personal characteristics, family background, school factors, and previous academic performance.

### Attribute description and Data Types

Attribute	Description	Data Type
school	Student's school	Binary
sex	Student's sex	Binary
age	Student's age	Numeric
address	Student's home address type	Binary
Medu	Mother's education	Numeric
Fedu	Father's education	Numeric
traveltime	Home to school travel time	Numeric
studytime	Weekly study time	Numeric
failures	Number of past class failures	Numeric
schoolsup	Extra educational support	Binary
famsup	Family educational support	Binary
activities	Extra-curricular activities	Binary
higher	Wants to take higher education	Binary
internet	Internet access at home	Binary
romantic	With a romantic relationship	Binary
famrel	Quality of family relationships	Numeric
freetime	Free time after school	Numeric
goout	Going out with friends	Numeric
Dalc	Workday alcohol consumption	Numeric
Walc	Weekend alcohol consumption	Numeric
health	Current health status	Numeric
absences	Number of school absences	Numeric
G1	First period grade	Numeric
G2	Second period grade	Numeric
G3	Final grade	Numeric