

# Scenario 3

## Dead Prime Minister High School

Dead Prime Minister High School (DPMHS) is a new facility under construction in Porquis Junction, ON. Jesse Strictman, who will become the new school's first principal, has been given a great deal of freedom to configure the school's information systems. Mr. Strictman therefore called a meeting of his teaching and administrative staff to discuss what they need in the basic database that will support the operation of the school. The result of the meeting was the outline that appears below:

### I. Student data

- a. Name
- b. Address
- c. Birthdate
- d. Gender
- e. Legal guardian(s)
- f. Date enrolled
- g. Date unenrolled (date graduated, date transferred to another school, or date dropped out)

### II. Legal guardian data

- a. Name
- b. Address
- c. Birthdate
- d. Gender
- e. Children responsible for
- f. Home phone

### III. Enrollments

- a. Academic year
- b. Homeroom teacher
- c. Homeroom location
- d. Courses enrolled in
- e. Location of each course
- f. Grades for each course (four grading periods per academic year)
- g. GPA for each grading period
- h. GPA for each academic year
- i. Overall GPA

### IV. Disciplinary actions

- a. Name of student
  - b. Date of incident
  - c. Type of incident
  - d. Disciplinary action taken
- ### V. Standardized testing results
- a. Name of student

- b. Date of test
- c. Name of test
- d. Result of test

VI. Extracurricular activities

- a. Name of student
- b. Academic year
- c. Name of clubs/sports teams participating in/office held, etc.
- d. Offices/positions held

VII. Post high school plans

- a. Colleges/post-secondary education applied to
- b. Date of applications
- c. Result of applications (accept/reject/wait list)
- d. College/post-secondary education chosen

Your job, as a database developer, is to design a set of third normal form relations that will accommodate the data required by DPMHS's teachers and staff. Keep in mind that the people who prepared the preceding outline know very little about database design, which means that the way in which they organized their data requirements may have little relationship to the actual design of the database.