



# Designing a Database

*Hands on in Access and on paper*



# Athletes and Teams

- “Business Rules”
  - What the database is about
  - What things are important
  - How things relate



# Athletes and Teams

- A Database for an athletics department at a high school
- Storing details of:
  - Teams with
    - division,
    - gender,
    - coach
  - Student Athletes
- Individuals are selected for a team.
- Keep track of the points awarded to each student for participating in a sport for the awarding of school letters.
- The Database has to keep track of student Athletes over five years with any given Athlete participating in multiple sports in a given year.



# Athletes and Teams

- THINGS of Interest, include :
  - Athletes
  - Events
  - Points earned for success
  - Teams
- These THINGS are **related** as follows:
  - A Student Athlete can participate in zero, one or many TEAMS.



# Athletes and Teams

student\_id  
student\_result\_at\_event  
student\_points\_to\_date  
student\_points\_at\_event  
student\_first\_name  
letters\_sport\_code  
student\_middle\_name  
letters\_awarded\_date  
student\_last\_name  
team\_gender  
student\_date\_of\_birth  
event\_location  
team\_name  
student\_gender  
team\_description  
student\_address  
coach\_name  
student\_other\_details  
team\_other\_details  
division\_description  
sport\_description  
event\_name  
event\_start\_date  
event\_end\_date  
event\_other\_details



# Design the Database

- Divide into teams of three or four:
  - Design the Students and Teams database:
    - Decide what tables you would build.
    - Decide what fields you would put in each table.
    - List table names and attributes.
    - Choose primary keys.
    - List foreign keys in the foreign table.
- You have 15 minutes