**Assignment:** Build an application is an online course registration system for the 2025 summer session at Virginia Commonwealth University.

**Relationships:** The relationships within the course registration system are:

* Courses, such as INFO 465, are offered zero to multiple times over the summer.
* Each offering of a class, referred to as a session, is identified as a section number such as 001
* Students register for a session. A student takes zero to multiple sessions in the summer
* A student cannot register for two sessions of the same course
* An instructor is assigned to each session. Instructors teach zero to multiple sessions over the summer

Facts we are interested in about courses:

* Department
* Course number (e.g., INFO 465)
* Course name (e.g., Projects in Information Systems)
* Credit hours (e.g. 3)
* REAL designation (y or n)
* Pre-requisites (which are other course numbers)

Facts we are interested in about students

* Student ID
* Student first name
* Student last name
* Student home country (e.g. Ireland, United States)
* Virginia Resident (y or n)

Facts we are interested in about sessions

* Course number
* Section number
* Instructor ID
* Modality (Asynchronous), Hybrid, Online, In-person
* Maximum students (e.g., if 10, enrollment is closed once 10 people enroll)

Facts we are interested in about Instructors

* Instructor ID
* Instructor First Name
* Instructor Last Name
* Department

Facts we are interested in about Departments

* Department ID
* Department Name (e.g. Information systems)
* Department School (e.g., School of business)

**Key** f**unctionality** (examples, teams are encouraged to add others as appropriate during sprint planning)

* Look up classes offered over the summer by department, instructor or course number
* Look up the classes a student is enrolled in
* Look up the sessions an instructor will be teaching
* Enable a student to enroll in a course
* Report the names of a student enrolled in a session

**Deliverable:**

* The team will deliver the application through two sprints
* The objective is to deploy the application at AWS
* The team is empowered to make all other architecture decisions: Examples: The programming language, the operating system, the database management system, and the run-time environment.