



#### Assumptions For Each Relationship

##### **UserInfo -- UserInput**

1. Users must create a profile before providing user inputs
2. Users can create multiple user inputs
3. UserInput comes from one user in UserInfo

##### **Course -- SectionInfo**

1. Each course can have any amount of sections
2. Each section is related to exactly one course

##### **Professor -- SectionInfo**

1. All professors teach at least one section
2. Sections only have one primary professor

##### **UserInput -- Professor**

1. Each user input has one favorite professor
2. Each professor can be favorited by any amount of inputs

##### **UserInput -- Course**

1. Courses can be related to at any number of user inputs
2. Users can find any number of courses related to input

##### **Course -- GenEdReq**

1. One course can show up multiple times in the GenEdReq table since GenEdReq shows multiple years

#### Assumptions For Each Entity

##### **UserInfo**

1. Keeps track of all users that use the app
2. Username - keeps track of username for account
3. Password - holds the password for account

##### **UserInput**

1. Keeps track of all searches done through the app
2. ID - unique number for input
3. Interests - string with comma separated interests(words)
4. FavProfessor - string of a favorite professor's name
5. AvgGPA - the gpa the student is looking to get or has
6. CourseReg - a course requirement student wants to fulfill

##### **Professor**

1. Used to retrieve professors from courses and user input
2. ID - unique number for certain professor
3. Name - name of certain professor
4. Dept - department of certain professor

##### **Course**

1. Used to retrieve similar courses to user input and requirements
2. CourseNumber - number in the course title (ex. CS 374 just 374)
3. Dept - the department of a course
4. Description - description of course
5. Credits - credits earned from taking course

#### Assumptions For Each Entity

##### **SectionInfo**

1. Used to retrieve sections with favorite professor and/or course
2. SectionID - unique number for section
3. ProfessorID - number to relate to the primary professor
4. Professors - professors of that section of course
5. CourseNumber - number in the course title (ex. CS 374 just 374)
6. Dept - the department of a course
7. YearTerm - year and term of section
8. AvgGPA - average gpa of specific section

##### **GenEdReq**

1. Used to see what general education requirement (values in ACP - SBS are nan if not fulfilled)
2. CourseNumber - number in the course (ex. CS 374 just 374)
3. Dept - the department of a course
4. Title - name of course
5. ACP - advanced composition requirement (ACP or blank)
6. CS - cultural study requirement (NW for Non-Western Cultures, WCC for Western/Comparative Cultures, US for US Minority Cultures, or blank)
7. HUM - humanities & art requirement (HP for Historical & Philosophical Perspectives, LA for Literature & the Arts, or blank)
8. NAT - natural sciences & technology requirement (LS for Life Sciences, PS for Physical Sciences, or blank)
9. QR - quantitative reasoning requirement (QR1 for Quantitative Reasoning 1, QR2 for Quantitative Reasoning 2, or blank)
10. SBS - social & behavioral science requirement (BS for Behavioral Sciences, SS for Social Sciences, or blank)