**Database Systems (22C:144)**

**Part 1: Project Description**

**Due: 2/8/2017**

**Group 5**

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**All group members contributed equally to this deliverable**

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**- Description of project:**

Coursera Database: The primary objective of our database will be to keep track of different types of courses offered and to keep track of which institutions are offering said courses. Our coursera application will also keep track of users enrolled in certain learning tracks. The database would be able to track which courses are popular as well as grouping courses by their subject area.

**- Requirements of the project:**

What is the business purpose or need?

The business need is for personal and professional development through universal online learning by courses developed with universities. Tracking: courses offered, different users, popular courses, and specializations. Offer recognition for completing courses.

What is the problem you are trying to solve?

Learning outside the classroom, help people develop in demand skills, organizing courses and the institutions offering them, and tracking users.

What questions you will be answering?

What courses are popular? What specialty areas are hottest? What skilled professions need more capable employees? Which institutions offer the most useful courses? Who has completed certain learning tracks?

**- Assumptions of the project:**

We assume that there is only one account per user, and each user has their own individual account. We assume each institution offering courses has only one account as well. We allow duplicate courses through differing institutions.

**- Scope of the project:**

Things that are in scope include user and institution data, course data, and also learning specialty data; for example, courses offered, courses being taken, popular courses, specialization areas. We will track which courses are popular, areas of specialization, institution offering the course, and user data.

For us, the following materials are out of scope and will not be tracked—[ADD OUT OF SCOPE ITEMS HERE]

- **Project Design Approach:**

The following groups of data will make up many of our tables.

Institution

Holds institution information, and the different courses they offer. Institutions are identified by a unique institutionID.

User

This relation holds information on a user. Users are identified by their unique userID.

Courses

Keeps track of all things directly pertaining to an course: popularity, subject area, and length. Events also has attribute courseID, to identify each course uniquely.

[ADD MORE DATA OBJECTS HERE]