Project 10

Jiangyi Lin
Ni Ke
Wandong Wu
YinXiang Wang

Project Motivation

- Trainly.io is an App store used to serve the field of all kinds of training

- Faculty can create courses and securely post study materials

- Students can enroll in and complete useful courses they interested

- Trainly.io only charges 30% of any course-enrollment fees

System Description

a) Register a new user

b) Administrator can authenticate a faculty user

c) Provide a categorized list of a student's courses

d) Enroll a student in a course

System Description

e) List course materials for a student

f) Mark course material as having been completed by a student

g) Provide a certificate of completion for a student

h) Provide an account history for a user

System Description

1. Find all faculties who teach at least more than 100 students course, which are not free and have rate higher than 90 points.

2. Show all the questions that has likes from students, and show the student ID and email of whom asked the question, as well as the total likes that a question has.

System Description

3. For all the playlists that users created, count the material order that is included most among the playlists

4. Calculate the total cost of every students.

5. Calculate all the main topics that is included for all the questions that are asked by students.

System Architecture

- RDBMS MySQL

- Front-end: HTML

- Back-end: Python, Django framework

Why use Django

- Build a website fast

- Easy to manage the hyper links

- MVC model is very clear and easy to use

Database Design

- Source of the data for each table: random generation

- Physical design :

  UserId, CID(Course ID), CMID(CourseMaterial ID)

  TID(Topic ID), QID(Question ID) is primary key and the cluster index

- ERD

- relational model

PlayList
- UserID
- Name

Contain
- UserID
- Name
- CMID

User
- UserID
- Email
- FirstName
- LastName
- PW
- ProfilePict
- Country
- City
- Street
- PostalCode

Phone
- UserID
- Phone

Faculty
- UserID
- Website
- Affiliation
- Title
- GrantAdmin
- GrantTime

Post
- CMID
- Text

Link
- CMID
- URL
- TagVedio

Admin
- UserID
- GrantAdmin
- GrantTime

AdminPosition
- UserID
- Position

Downloadable
- CMID
- Path
- Size
- Type

CourseMaterial
- CMID
- Name
- CID

Quiz
- CMID
- PassingScore

QuizQuestion
- CMID
- Number
- Text
- Indicator
- Feedback

CompeteMaterial
- UserID
- CMID
- completeDate

Course
- CID
- Name
- Description
- Icon
- Date
- Cost
- PrimaryTopic
- EnrollNumber
- AvgRate

CreateCourse
- UserID
- CID

BuyCourse
- UserID
- CID
- BuyTime
- Code
- IsComplete
- CompleteTime
- Rating
- Comment

Interested
- UserID
- CID

SecondaryTopic
- CID
- TID

Topic
- TID
- Name

Question
- QID
- Title
- Text
- Visible
- AskBy
- Date

Answer
- UserID
- QID
- Text

Related
- QID
- CMID

Like
- QID
- UserID