



Πανεπιστήμιο Κύπρου  
Τμήμα Πληροφορικής

# EPL425- INTERNET TECHNOLOGIES

GROUP PROJECT-INTERACT

Marianna Hatzidemetriou,  
Anastasia Yiannaki, Sotia  
Gregoriou, Agathe Duboue  
D.1.2 – D.1.3

## **D.1.2: Project Brief**

### **Goal:**

Create a web-based application that will be used by students and professors. This application will give the ability to teachers to interact easier and efficiently with students during the lecture and vice versa.

### **Approach:**

We will design a website according to the mock-up, following below. First of all, every teacher using his/her username and password will connect to the website, to upload/edit/delete questions with possible answers for every course that he/she teaches. Also, every question must have a limited time to be answered, that it will be assigned by the teacher.

During the lecture, students will log in using the course code and select the lecture of the day so they will have the opportunity to answer the questions. After the time for each question passes, students will not be able to answer anymore, and real time statistics will appear on the screen. The teacher will decide if he/she wants to save the statistics or not.

## D.1.3: Technology Assessment

### Technologies:

- Apache HTTP Server                      Web server
- MySQL (or REST API)                      Database
- PHP (PHP Hypertext Preprocessor)                      dynamic programming language for websites
- JavaScript                      scripting programming language
- HTML (HyperText Markup Language)                      Markup Language for web development
- CSS (Cascading Style Sheets)                      Language for web design
- Bootstrap framework                      open source tools (HTML, CSS JavaScript)

### Database tables:

Teacher

<u>ID</u>	Username	Password	Name
-----------	----------	----------	------

Student

<u>ID</u>	Name	Department
-----------	------	------------

Course (Foreign key: Teacher's username)

<u>Key</u>	Code	Title	Teacher's ID
------------	------	-------	--------------

Lecture (Foreign key: Course's key)

<u>Code</u>	Title	Course's key
-------------	-------	--------------

Question (Foreign key: Lecture's code + Teacher's username)

<u>Code</u>	Question	AnswerNo	Lecture's code	Type	Time	Statistics	Teacher's ID
-------------	----------	----------	----------------	------	------	------------	--------------

Possible Answer

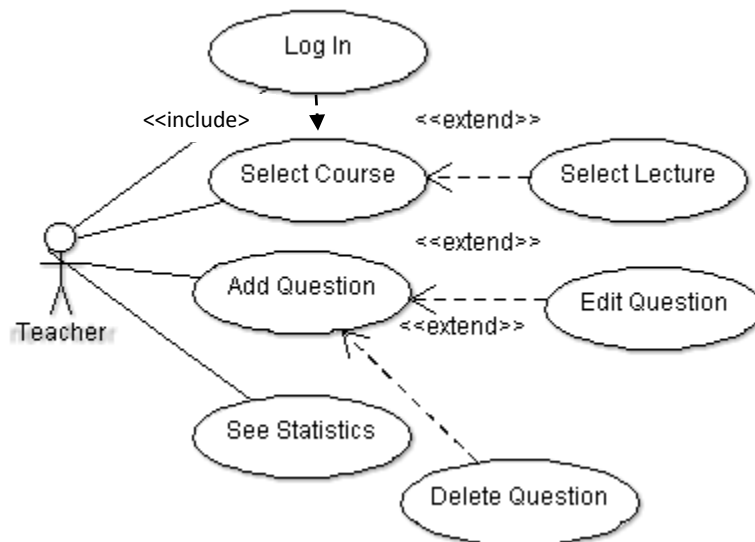
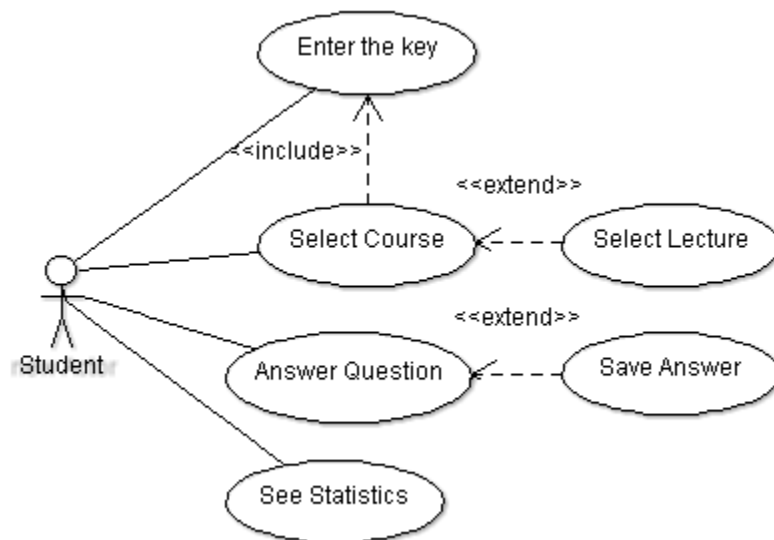
TeacherID	QuestionNo	AnswerNo	Description	Correct (T/F)
-----------	------------	----------	-------------	---------------

Enroll

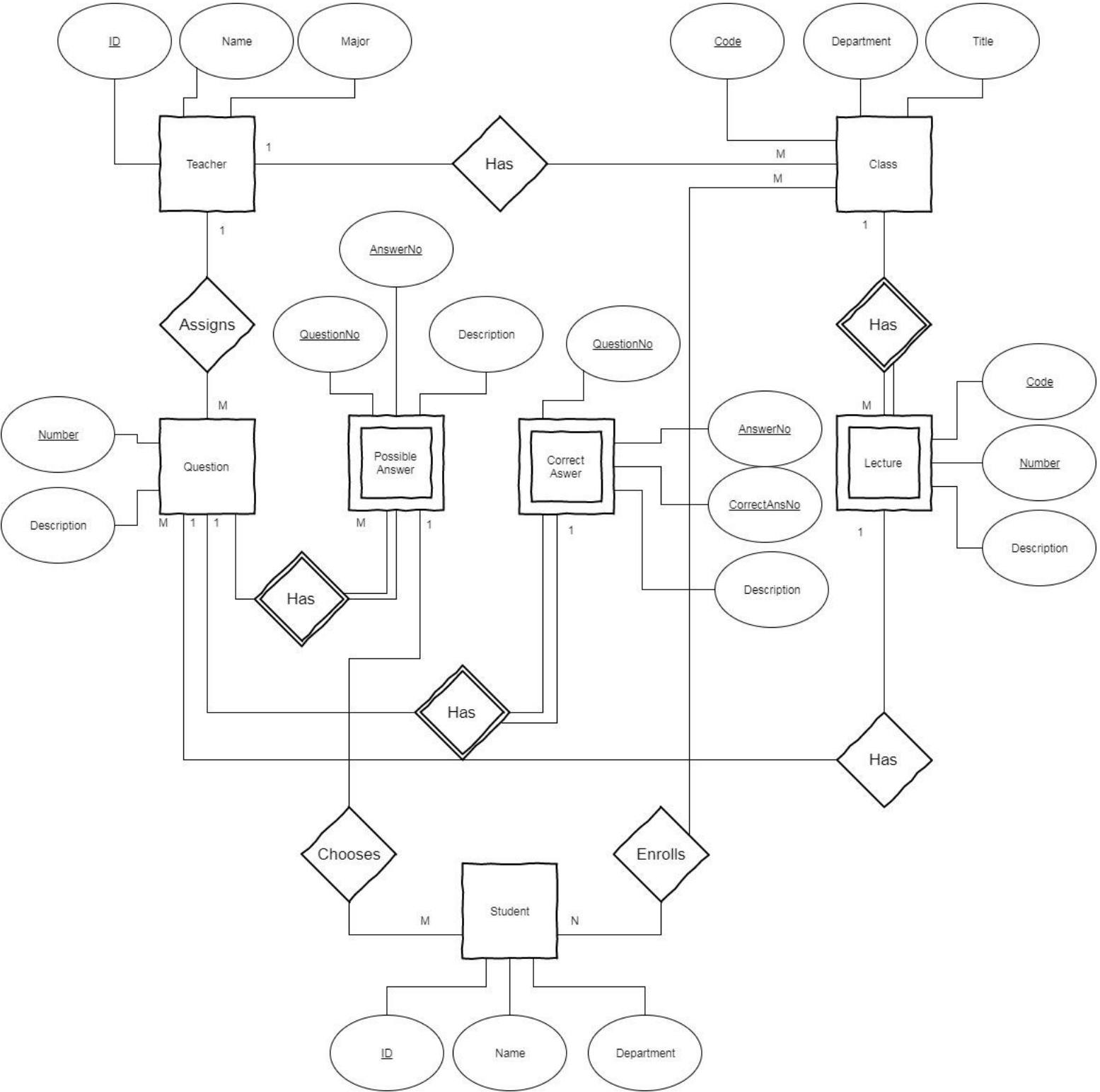
KeyCourse

StudentID

Use Cases:



ER-Diagram:





INTERACT

ENTER THE WEBSITE



# What are you ?

Student

Teacher

NEXT

INTERACT



[Home](#)[Back](#)

# Select a course

CODE	NAME
CS446	Advanced topic in databases
CS445	Digital Image Processing
CS448	Data mining on the web
▶ CS425	Internet Technologies
CS412	Logic in Computer Sciences

ENTER





Home

Internet Technologies

Back

Enter the course key

• • • • •

NEXT

INTERACT



[Home](#)

Internet Technologies

[Back](#)

# Select a lecture

CODE	NAME
L1	Internet Introduction
L2	Internet Architecture
L3	World-Wide Web
► L4	Client-Server Web
L5	Web Infrastructure

START





Home

Internet Technologies ► Client-Server Web

Exit

Wait for next question





Which tier is necessary for the operation of a Web site?

CODE	ANSWER
R1	Application Tier
▶ R2	Persistence Tier
R3	Presentation Tier
R4	Presentation and Application Tiers
R5	Persistence and Presentation Tiers

SAVE ANSWER

00:24





Which tier is necessary for the operation of a Web site?

CODE	ANSWER	STATISTICS
R1	Application Tier	25%
✗ R2	Persistence Tier	5%
✓ R3	Presentation Tier	65%
R4	Presentation and Application Tiers	5%
R5	Persistence and Presentation Tiers	0%

[NEXT](#)[INTERACT](#)



Home

Internet Technologies ► Client-Server Web

Exit

Wait for next question





Home

Internet Technologies ▶ Client-Server Web ▶ Question 2

Exit

How many tiers does a  
Web site has ?

Type your answer

3

SAVE ANSWER

00:24

INTERACT



Home

Internet Technologies ▶ Client-Server Web ▶ Question 2

Exit

How many tiers does a  
Web site has ?

Your answer

3

Correct answer

3

Success rate: 90%

NEXT

INTERACT



# What are you ?

Student

Teacher

NEXT

INTERACT



# Identify yourself

id

dikaiakos

key

• • • • •

NEXT

INTERACT



[Home](#)[Log out](#)

# Select a course

CODE	NAME
CS324	Communications and Networks
▶ CS425	Internet Technologies

ENTER

INTERACT



[Home](#)

Internet Technologies

[Back](#)[Log out](#)

# Select a lecture

CODE	NAME
L1	Internet Introduction
L2	Internet Architecture
L3	World-Wide Web
► L4	Client-Server Web
L5	Web Infrastructure

[EDIT](#)[START](#)  
INTERACT



[Home](#)[Internet Technologies](#) ▶ [Client-Server Web](#)[Back](#)[Log out](#)

# Edit the set of questions

CODE	QUESTION
▶ Q1	Which tier is necessary for the operation of a Web site ?
Q2	How many tiers does a Web site has ?

[ADD](#)[DEL](#)[EDIT](#)[INTERACT](#)



[Home](#)[Internet Technologies](#) ▶ [Client-Server Web](#) ▶ [Question 1](#)[Back](#)[Save](#)[Log out](#)

Which tier is necessary for the operation of a Web site? [EDIT](#)

CODE	ANSWER
R1	Application Tier
R2	Persistence Tier
R3	Presentation Tier
R4	Presentation and Application Tiers
▶ R5	Persistence and Presentation Tiers

[ADD](#)[DEL](#)[EDIT](#)



[Home](#)[Internet Technologies](#) ▶ [Client-Server Web](#)[Back](#)[Log out](#)

# Edit the set of questions

CODE	QUESTION
Q1	Which tier is necessary for the operation of a Web site ?
Q2	How many tiers does a Web site has ?

[ADD](#)[DEL](#)[EDIT](#)[INTERACT](#)



[Home](#)[Internet Technologies](#) ▶ [Client-Server Web](#) ▶ [Question 3](#)[Back](#)[Save](#)[Log out](#)

# Create a new question

Question

Type

☐ Multiple choices☐ Given value

Correct answer

Time to answer  minutes  seconds

  
INTERACT



[Home](#)

Internet Technologies

[Back](#)[Log out](#)

# Select the lecture

CODE	NAME
L1	Internet Introduction
L2	Internet Architecture
L3	World-Wide Web
► L4	Client-Server Web
L5	Web Infrastructure

[EDIT](#)[START](#)  
INTERACT



Which tier is necessary for the operation of a Web site?

CODE	ANSWER
R1	Application Tier
R2	Persistence Tier
R3	Presentation Tier
R4	Presentation and Application Tiers
R5	Persistence and Presentation Tiers

00:24





Which tier is necessary for the operation of a Web site?

CODE	ANSWER	STATISTICS
R1	Application Tier	25%
R2	Persistence Tier	5%
✓ R3	Presentation Tier	65%
R4	Presentation and Application Tiers	5%
R5	Persistence and Presentation Tiers	0%

[NEXT](#)[INTERACT](#)