



OCC 2.0



The Project

- Improving E-Learning at An-Najah National University Through Adaption of SCORM.



Online Course Container (OCC)

- Project Started in 2005
- 3 Part-time programmers start the coding of the project, after that one fulltime programmer continue the coding.
- OCC development was funded internally by An-Najah National University.



Ease of Use “The Goal”

- The goal of developing OCC was to create an easy to use E-Learning management system that does not need professional skills of using such a web application.



Problems

- Short timeline of the development cycle.
- OCC was designed to be a “specific” application, there are no abstraction in the system design, and so, it is very hard and time consuming to add new features to it.
- OCC was published with out enough testing, and no feedback could be collected from teachers.
- OCC was not implemented to be a SCORM compliant platform.



OCC 2.0

- OCC 2.0 development is being funded by the International Bank.
- The main goal of this project is to upgrade the current system to be a SCORM compliant system.
- Other goals are:
 - re-implementing the system with some abstraction level.
 - Fixing already exist tools in OCC through the feedback that have been collected during the last 3 years.
 - Adding new Tools to OCC.

Feedback

- Homework Tool: Changing Start Date and Deadline fields to be filled using calendar through JavaScript.

Edit Assignment

Mark

Date

dd-mm-yyyy

Deadline

dd-mm-yyyy

Instructions

File#1

database.txt19 Kb

Remove

Add File

BrowseAdd

Select Date

February, 2009

Fri	Sat	Sun	Mon	Tue	Wed	Thu
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

Feedback

- Calendar: The calendar now is displayed as a block that will be visible in each page of the system.


Calendar

10 February 2009

« February, 2009 »

Fri	Sat	Sun	Mon	Tue	Wed	Thu
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

Courses

 C++

Add Event

First select the Date & the Course:

Date

10-2-2009

>> Choose

Course

C++

Enter the Data about the Event

Title

Text

Feedback

- Glossary: adding Multilanguage support to the glossary tool.

A B C D E F G H I J K L
M N O P Q R S T U V W X Y Z

ا ب ت ث ج ح خ د ذ ر ز س ش
ص ض ط ظ ع غ ف ق ك ل م ن و ي

Feedback

- Monitoring: Improving the monitoring system feedback.

Note	
Send To	hazom
Title	About Project
Text	Good Job

The student open the note...

Feedback

- Quizzes: Adding new types of questions to the quiz tool.

Add new question to database

Question Type	single Choice ▾
Question Grade	single Choice
Question ?	Multiple Choice
	Matching
	True/False



Feedback

- Course Content Tool: This tool will be renamed to Attachment tool, and the design of this tool will be completely re implemented.



Feedback

- Adding new types of Tools:
 - Score Board tool: Using this tool, the teacher can create rules for course scoring, the teacher can give any specific task a percentage score, for an example, the teacher can give an assignment 20%, another assignment 50% and a quiz 30%, whenever a student submits a Quiz, his mark will be filled automatically, for assignments, the teacher can fill the mark manually.
 - Appointment tool: This tool can be used by teachers to fill there office hours, students then can use this tool to request an appointment in a certain time based of teacher's office hours. Teacher can approve or reject students requests.

Feedback

Appointment

Enter Your Office Hour's:

Day	Sunday	
Time	from 08.00	to 08.00
<input type="button" value="Save"/> <input type="button" value="Remove"/>		

Office Hour's

Sunday	8-10, 12-3
Monday	8:30-9
Tuesday	no office hour
Wednesday	9:30-10:30
Thursday	no office hour

Scheduled Appointment

No.	Time	Date	Std. Name	Std. Mobile No.	Std. Note	Accept/Reject	Delete
1	8:30	8-1-2009	hazom	059494955	Can i see u...	Accept/Reject	Remove
2	10:30	9-1-2009	hazom	059494955	About quiz...	Accept/Reject	Remove

Feedback

AppointmentSelect Your Teacher Teacher name...

Take a Appointment :

Select Date

« February, 2009 »

Fri Sat Sun Mon Tue Wed Thu

25 26 27 28 29 30 31

1 2 3 4 5 6 7

8 9 10 11 12 13 14

15 16 17 18 19 20 21

22 23 24 25 26 27 28

Teacher name

hazal Alsayyed

Your name

hazom

Appointment time

08:00 to

Mobile no.

Notes

Teacher Office Hour's

Sunday 8-10 , 12-3

Monday 8:30 -9

Tuesday no office hour

Wednesday 9:30 -10:30

Thursday no office hour

Send



Feedback

- Removing some useless tools:
 - Email tool: we discovered from the feedback that most teachers use discussions and notes to communicate with students, and there is no need to a virtual email tool because it just added some complexity to OCC.



Feedback

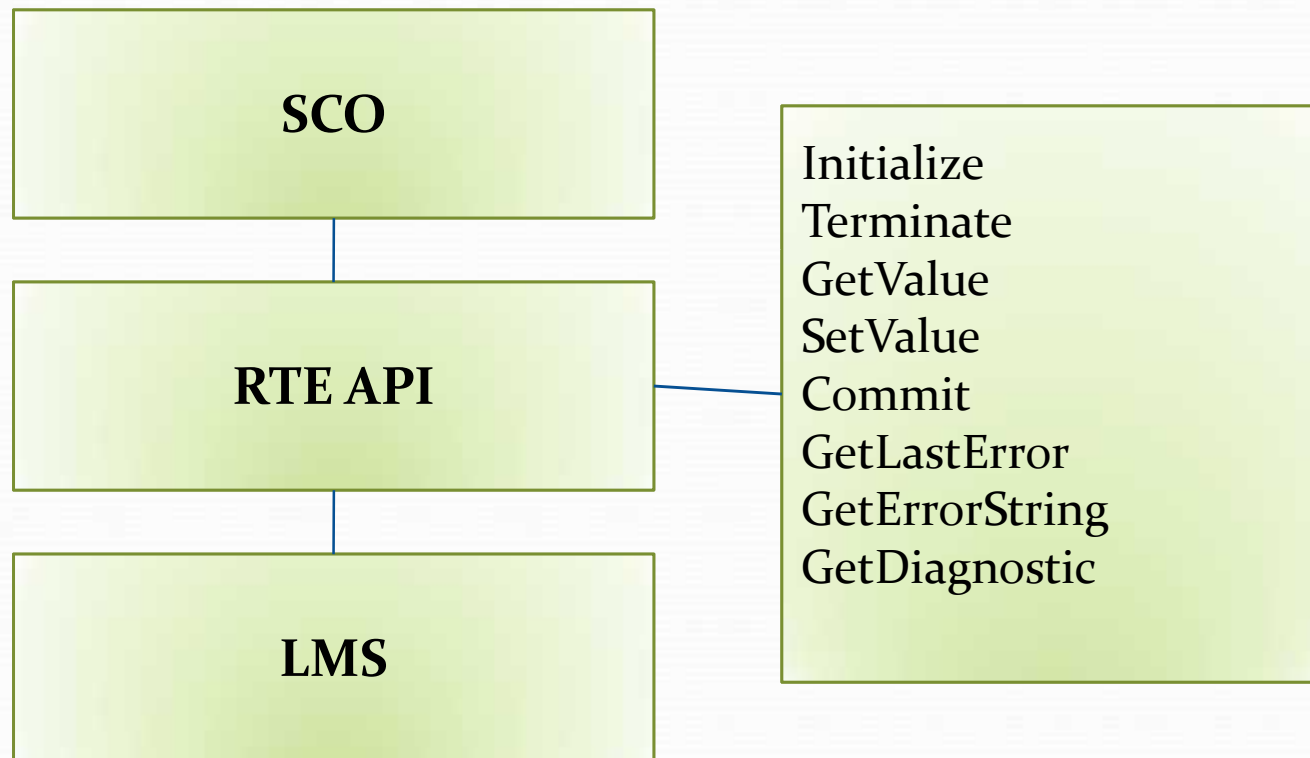
- No popup windows.
- Simpler Interface with less HTML and JavaScript coding “loads faster”.



SCORM Implementation

- Three phases:
 - Run-Time Environment (RTE): The Run-Time Environment is the communication mechanism content object and the LMS (e.g., initialized, terminated, and/or in an error condition), and is used for retrieving and storing data (e.g., score, time limits, etc.) between the LMS and the SCO. Only launched SCOs (not Assets) make use of the RTE API.

SCORM Implementation





SCORM Implementation

- Content Aggregation Model (CAM): A common method to describe the components used in a learning experience, how to package those components for exchange from system to system, how to describe those components to enable search and discovery, and how to define sequencing rules for the components.
- Sequencing and Navigation (SN): Information and behaviors that an LMS must apply in order to present a designed learning experience. The information is expressed within Content Structure and encoded in the *organization* section of Content Packaging.



To Be Done

- Completing SCORM implementation.
- Completing Some unfinished Tools.
- Localizing.
- Merging OCC with University's Database.
- Some fixes and tweaks to the User Interface.



Thank You