

# Retrofit Learning Management System Using SCORM

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# Outline

## 1 Introduction

# Outline

1 Introduction

2 Method

# Outline

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2 Method

3 Result

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- 1 Introduction
- 2 Method
- 3 Result
- 4 Conclusion

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# Background

- Learning Management System(LMS)

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- Sharable Content Object Reference Model(SCORM)



# Background

- Learning Management System(LMS)
- Sharable Content Object Reference Model(SCORM)
- Sharable Content Object(SCO)

# Package VS SCO

## C Programming Language

- Syntax
- Pointer
- Structure
- ...

# Objectives

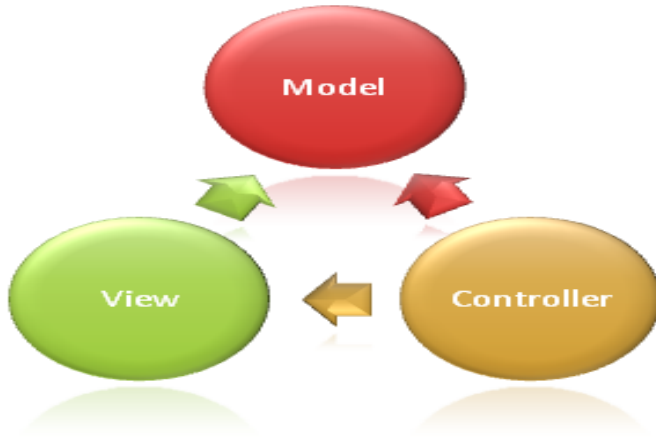
- Importing whole package
- Importing single SCOs
- Exporting whole package
- Launching single SCOs

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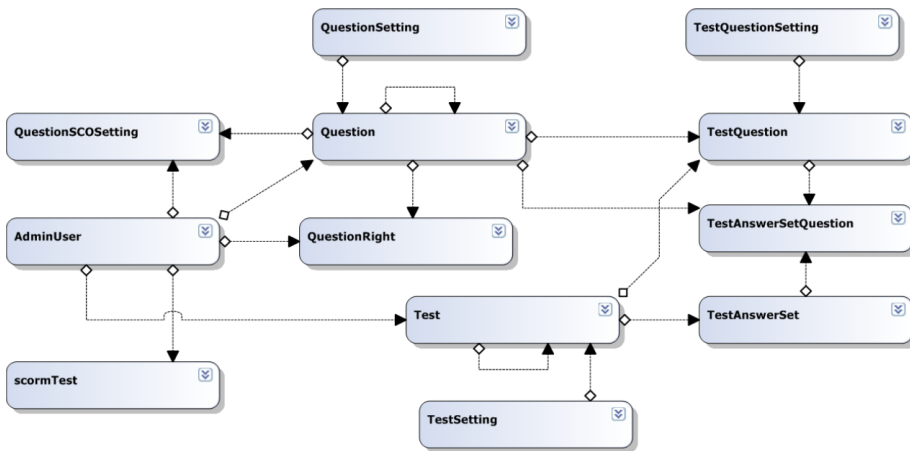
# Framework

ASP.NET MVC framework



# Database

## Database



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# User interface of LMS for importing

Kunskaps- och inlärningstest

# esTracer

Welcome albert! (Entergate AB) [ [Log out](#) ]

[Question bank](#)
[Participants](#)
[Test bank](#)
[Administration](#)

## Menu

- Question bank
  - Create question
  - Import questions
  - Create question bank

## Message

**License messages:**

2011-03-31 14:16:52  
[aaaaaooo](#)

2011-03-31 13:49:26  
[A Licmeddelande](#)

2011-03-31 13:30:21  
[andrat meddelande](#)

---

**System message:**

2011-03-31 14:18:55  
[A vilket höjdmåddalande](#)

2011-03-31 13:47:34

## Import questions

Import questions that are exported from the old nx(in xml-format).

XML-file: [Choose File](#) No file chosen

SCORMZipFile: [Choose File](#) No file chosen

Folder to import to  
[Root](#)

☒ Overwrite already imported questions  
☐ UploadSCORMZipFile

[Upload](#)

Navigation icons: back, forward, search, etc.



# Result of importing whole package

er > Local Disk (C:) > Projects > nxKTest > nxKTest > Content > Public > SCORM > PIF > adb51376-3c09-444b-8020-aad77efc6c0c >

Name	Date modified	Type	Size
common	2011-05-02 09:57	File folder	
MBCE	2011-05-02 09:57	File folder	
Shared Files	2011-05-02 09:57	File folder	
unique	2011-05-02 09:57	File folder	
vocab	2011-05-02 09:57	File folder	
adlcp_v1p3	2011-05-02 09:57	XML Schema File	5 KB
adlnav_v1p3	2011-05-02 09:57	XML Schema File	3 KB
adlseq_v1p3	2011-05-02 09:57	XML Schema File	5 KB
imscp_v1p1	2011-05-02 09:57	XML Schema File	18 KB
imsmanifest	2011-05-02 09:57	XML Document	21 KB
imsss_v1p0	2011-05-02 09:57	XML Schema File	3 KB
imsss_v1p0auxresource	2011-05-02 09:57	XML Schema File	1 KB
imsss_v1p0control	2011-05-02 09:57	XML Schema File	2 KB
imsss_v1p0delivery	2011-05-02 09:57	XML Schema File	1 KB
imsss_v1p0limit	2011-05-02 09:57	XML Schema File	3 KB
imsss_v1p0objective	2011-05-02 09:57	XML Schema File	4 KB
imsss_v1p0random	2011-05-02 09:57	XML Schema File	1 KB
imsss_v1p0rollup	2011-05-02 09:57	XML Schema File	3 KB
imsss_v1p0seqrule	2011-05-02 09:57	XML Schema File	5 KB
imsss_v1p0util	2011-05-02 09:57	XML Schema File	4 KB

# Result of importing single SCOs

ter ▶ Local Disk (C:) ▶ Projects ▶ nxkTest ▶ nxkTest ▶ Content ▶ Public ▶ SCORM ▶ SCO ▶

Name	Date modified	Type	Size
0eca20fb-99d2-4b75-b70a-b942cd63efd8	2011-04-18 09:04	File folder	
3bcea125-1e01-47dc-a58d-c39428b4d7cf	2011-04-18 09:04	File folder	
4b556af8-6a40-4b41-9f73-0bde82b498aa	2011-04-18 09:04	File folder	
7a5ed99f-949e-42c3-ba36-c71482a44ee4	2011-04-18 09:04	File folder	
7b3a59e1-ca93-4b79-8dab-7a7ed5a2922c	2011-04-18 09:04	File folder	
8a61e74c-e64a-4f34-8bc6-e6574b4e8e86	2011-04-18 09:04	File folder	
9cab3bc2-373d-46fb-a3ec-1d773904d589	2011-04-18 09:04	File folder	
20f5b2c1-f0a7-4afd-b937-d672cd9418df	2011-04-18 09:04	File folder	
87f66e4a-80e6-474a-9c97-7d34e246dee7	2011-04-18 09:04	File folder	
91e2eab3-35d4-47b1-b226-f9a2c1e99183	2011-04-18 09:04	File folder	
231f23aa-73aa-465a-8726-f599effc10e7	2011-04-18 09:04	File folder	
781a55c2-53e9-4776-ac63-ff619db6b8a0	2011-04-18 09:04	File folder	
895a58e8-f270-423a-b2ae-6252358adbcd	2011-04-18 09:04	File folder	
703737d6-4545-4042-88fd-9d124247eff7	2011-04-18 09:04	File folder	
4431030d-6622-4ec7-a3f5-eb1e427a595e	2011-04-18 09:04	File folder	
5955202d-f800-4e95-a369-23686013a2de	2011-04-18 09:04	File folder	
09075120-0a51-466b-80e5-c87c591423c2	2011-04-18 09:04	File folder	
44001118-7bac-4533-81d2-586d9de7ba37	2011-04-18 09:04	File folder	
ae6effd4-438b-45ee-9bd8-b18510df505d	2011-04-18 09:04	File folder	
b7659ba6-bea5-46fe-919f-a6fd5cbd1ab1	2011-04-18 09:04	File folder	
d926f603-072c-434b-8d44-9a91b86705b	2011-04-18 09:04	File folder	
db887c95-b974-4f7b-a4e9-7e26bf9279c0	2011-04-18 09:04	File folder	
f50f8d98-b1bb-4fee-b871-25d3dc924ecf	2011-04-18 09:04	File folder	

# Result of previewing single SCOs



## *Manifest Basics*

### Introduction to Manifests

Welcome to the Manifest Basics Content Example (MBCE). This content provides the basic concepts and components of a content package manifest in the Sharable Content Object Reference Model (SCORM).

Upon completion of the content, learners will be able to:

- Define the role a manifest plays in a content package
- Identify the pieces of a content package
- Identify the components and structure of a manifest
- Recognize generally accepted practices in creating manifests that conform to requirements defined in SCORM 2004 4<sup>th</sup> Edition

This content example is based on SCORM 2004. For more information please see the:

- SCORM 2004 Content Aggregation Model (CAM)– [www.adlnet.gov](http://www.adlnet.gov)
- SCORM 2004 Conformance Requirements– [www.adlnet.gov](http://www.adlnet.gov)
- IMS Content Packaging Specification - [www.imsglobal.org](http://www.imsglobal.org)

Tillbaka

Nästa

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# Separation of concerns

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- MVC architect

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- Modularity Programming

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- MVC architect
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- $\text{\LaTeX}$



# Separation of concerns

- MVC architect
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# To be continue

- Communication between SCO and LMS

# To be continue

- Communication between SCO and LMS
- Sequencing between SCOs

# To be continue

- Communication between SCO and LMS
- Sequencing between SCOs