Óbudai Egyetem Neumann János Informatikai Kar			Szoftvertechnológia Intézet	
Tantárgy neve és kódja: ASP.NET MVC web application development using the Orchard content management framework **Kreditérték*: 2***				
Mérnök Informatikus BSc szak *Nappali tagozat 2013/14 tanév I. félév*				
Tantárgy oktató(i): Dr. Erdélyi Krisztina, Lehoczky Zoltán				
Előtanulmányi feltételek: (kóddal)	Matematika szigorlat, Szoftver szigorlat			
Heti óraszámok:	Előadás: 0	Tantermi gyak.: 0	Laborgyakorlat: 2	Konzultáció: 0
Számonkérés módja:	Évközi jegy			
A tananyag				
Oktatási cél: Participants of the course will get to know the basics of the modern, open source Orchard content management framework and through it the concepts and usage of the ASP.NET MVC framework. After acquiring some general fundamental knowledge students will learn how to develop modules and themes for Orchard. Meanwhile students will get to know the modern software development concepts employed by Orchard like the usage of an inversion of control container (and dependency injection), loose coupling and modularization, composition over inheritance, LINQ to ORM or the carefully used dynamic types. During the course participants will gain insight into other state of the art web technologies like HTML 5, CSS 3, the jQuery framework or the C# Razor Syntax. Apart from that through Orchard students will be able to learn about the nature of open source software projects.				
Tematika: Lab topics: ASP.NET MVC; the Orchard ecosystem; the Orchard content model: flexible, mixin-like structures; dashboard: managing content types and content items, extensions, user management, navigation, search and indexing, media management, workflows, tokens, custom forms, importing and exporting content, content querying, command line; theme development: basic concepts, static resources, getting to know Orchard's layout management, shapes, shape templates and views; module development and Orchard APIs: data storage (abstracted file storage, database-access through and ORM layer with LINQ queries), ad-hoc shapes, routes, navigation providers, content part development, filters, the Orchard event bus, permission handling, recipes; publishing and optimization				

Féléves ütemezés:	
Oktatási hét (konzultáció)	Témakör
1.	*ASP.NET basics, Orchard ecosystem, basic concepts and usage of Orchard, content model, installation, managing content types and content items, user management*
2.	*Admin UI: theme and module installation, widgets, navigation, search and indexing*
3.	*Admin UI: media management, custom forms, workflows, tokens, importing and exporting content*
4.	*Admin UI: listing contents, command line, localization, troubleshooting*
5	*Theme development: structure, static resources, shapes, shape templates and views*
6.	*Module development: structure, command line scaffolding, dependency injection and basic services*
7.	*Module development: data storage*
8.	*Module development: ad-hoc shapes, routes, navigation providers*
9.	*Module development: content part development*
10.	*Module development: filters, Orchard event bus and event handlers*
11.	*Holiday*
12.	*Module development: permission handling, recipes, publishing to the Orchard Gallery*
13.	*Optimization and web deployment*
14.	*Student presentations*
Félévközi követelmények	
Submission of the solution of the obtained project (deadline week 13).	
Zárthelyi dolgozatok	

Oktatási hét (konzultáció)	Témakör
1	Szöveg beírásához kattintson ide.

A *félévzáró érdemjegy* (é) kialakításának módszere

Students should create an arbitrarily chosen Orchard-based web application (individually or in group) that includes a custom-made theme and module. The project should be completed by the 13th week and presented on the last lecture by one person from every group to the whole class. Other group members are asked to individually present an arbitrarily selected part of the code base. This project work serves as the basis of the semester grade, where the overall quality of the software is graded (including but not limited to functionality and UI, structural cleanliness, error handling and inline documentation); students are graded individually.

Those participants who were unable to complete the project work on time have the option to implement an individual mini-project at the time of the student presentations. Such students are eligible only for a highest grade of maximum 3.

Pótlás módja

Students with a failing grade are eligible for presenting their project (again, if already presented) on the first week of the examination period. Such students are eligible only for a highest grade of maximum 3.

Vizsga módja

Szöveg beírásához kattintson ide.

Vizsgajegy kialakítása

90%-100%: excellent(5)
80%-90%: good (4)
70%-80%: average (3)
60%-70%: satisfactory (2)
0% -60%: unsatisfactory (1)

Irodalom

Kötelező:

Orchard documentation (http://docs.orchardproject.net/)
Orchard Training Demo module (https://orchardtrainingdemo.codeplex.com/)

Ajánlott:

Orchard Dojo Library (http://orcharddojo.net/orchard-resources/Library/)
Jon Galloway, Phil Haack, Brad Wilson, K. Scott Allen, Scott Hanselman (prologue): Professional ASP.NET MVC 4, Wrox, USA, 2012

Egyéb segédletek:

Szöveg beírásához kattintson ide.