TEST 2 - Exam Rich Internet Applications

31.01.2011



Name:

Matriculation Number:

Time: -

No	Question	Points	
1.	Name three possible Layers within a business layer.	8	
	Draw a sketch of an architecture where the business layer is		
	part of a MVC application that is connected to a database.		
2.	Write an abstract about the topic "Dependency Injection"	20	
	(with the help of a dedicated framework).		
	For which cases do we need that pattern?		
	Discuss the pros and cons of writing software in that way.		
	Name one alternative pattern.		
3.	Plan and create a simple contacts manager.	+ 10	
	The business layer should have only one table / one repository.		
	You can use pseudo-code (C-style, please!), as long as it clear		
	what you want to express.		
	a) Plan the table with its data types. (8)		
	b) Plan the POCO / POJO (data holding object). (4)		
	c) Create a repository with all CRUD operations. (10)		
	d) Create a controller. (5)		
	e) Explain what you have done and why you have done it that		
	way. (5)		
	f) NEW:		
	Extend your Repository Layer with paging support!		
4.	Draw a sketch (prototype) of your simple contacts manager,	8 + 8	
	with at least 4 screens.		
	a) Name 4 RIA patterns (also known as AJAX patterns) that you		
	could use in the software. (Naming style: $I \rightarrow O \rightarrow P$)		
	b) Describe when and where you would use them with the		
	help of the sketch.		
5.	Write in HTML + JavaScript (both can be "pseudo-code") a code	14	
	snipped, that loads and displays data from a " REST ful web API"		
	in the moment where the user hovers an element with the		
	mouse. (jQuery event handler ".mouseenter()")		
	TOTAL:	70	