

## Tasks Affecting Final Grade

It is NOT required that all functionality of the product is implemented. Instead it is important to choose which features to implement. Code what is needed to have all architectural decisions implemented, NOT MORE.

This page is a receipt list. Print it and bring it to each report meeting.

Name: .....

### 1 Grade Limits

- Grade E
  - Pass all tasks that are marked X in the Mandatory column.
- Grade D
  - Pass all tasks that are marked X in the Mandatory column and also give thorough motivations for the chosen architecture.
  - Report all tasks no later than Mars 17, 2015
- Grade C
  - Meet requirements for grade D
  - Achieve a higher grade score of at least 5 (out of 20).
- Grade B
  - Meet requirements for grade D
  - Achieve a higher grade score of at least 10 (out of 20).
- Grade A
  - Meet requirements for grade D
  - Achieve a higher grade score of at least 15 (out of 20).

Task	Mandatory	Higher Grade Score	Signature
<b>Robustness</b>			
Flexible, easily understood code, this <i>must</i> be motivated. It <i>must</i> also be motivated which patterns, code conventions and frameworks are used and how they are used. Alternatively, <i>motivate</i> why they are not used and why the code is flexible and easily understood without them.	X		
Usage of the architectural patterns Layer and MVC. <i>Motivate!</i>	X		
Javadoc comment for all public definitions.	X		
<b>Security</b>			
Authorization	X		
Authentication	X		
Logging, motivate <i>what</i> is logged, <i>how</i> it is logged and <i>where</i> the log is.		1	
<b>Transactions</b>			
Motivate <i>when</i> and <i>how</i> transactions begin and end.	X		
<b>O/R Mapping</b>			
Motivate how primary keys are created.	X		
Management of relations, that is how relations in the database are translated into relations in the program. <i>Motivate</i> why the chosen solution is appropriate.	X		
Motivate the mapping between entities in the model and the database.	X		
<b>Error Handling</b>			
Explain how the runtime errors (e.g. threw exceptions) are handled. Motivate why the chosen solution is appropriate. It should be clear where different errors are handled, if they are presented to the user (and if so, how) and whether and how they are logged.	X		

Task	Mandatory	Higher Grade Score	Signature
<b>Internationalization and localization</b>			
Internationalization and localization of web pages.		1	
Internationalization and localization of database.		1	
<b>Process</b>			
Justify the choice of functionality that has been implemented. It should be clear what requirements are solved by the written code. All existing code should solve a requirement from this list. <i>Write no code just to add more functionality.</i>	X		
Frequent integrations. Code developed by different group members should <i>often</i> be tested together and integrated in the group's shared repository.	X		
All code and documentation are stored <i>only</i> in a single repository of a version control system. This must work throughout the project.	X		
A script used to compile, deploy and execute the product.	X		
Packaging of the final product in a format suitable for delivery.	X		
Use one more development tool(s), besides a version control system. Possible examples are Maven or JaCoCo. Using Ant as a build tool does <i>not</i> give the higher grade score. The tool must be used throughout the project, it is not enough just to get it started.		1	

Task	Mandatory	Higher Grade Score	Signature
<b>Process, Continued</b>			
Automated unit testing, using for example <i>Arquillian</i> or <i>Mockito</i> . <i>The tests must be extensive, it is not enough just to get them going.</i>		3	
More automated testing, choose one of the following options.  <ul style="list-style-type: none"> <li>• Acceptance testing, for example using <i>Selenium</i>.</li> <li>• Performance testing, for example using <i>JMeter</i>.</li> </ul> <i>The tests must be extensive, it is not enough just to get them going.</i>		2	
<b>Reporting</b>			
All group members shall hand in an individual report at each of the three report meetings. It shall be about 400 words and answer the questions What have you done? What have you learned? How is the group's work organized? Any comments about the course?	X		
<b>First report</b> No later than February 13, 2015 (book reporting time in Doodle). You shall have code connecting all layers. An HTTP request shall result in execution of presentation layer, business logic and database. It shall be production quality code that can be left in the final product. You shall have a clear picture of what is done and what problems there are. <i>The solution shall be explained and motivated.</i>	X	2 Given if the report is accepted before due date.	

Task	Mandatory	Higher Grade Score	Signature
<b>Reporting, Continued</b>			
<b>Second report</b> No later than Feb 27, 2015 (book reporting time in Doodle). You shall have substantially more code than at the first report (Feb 13, 2015). It shall be production quality code that can be left in the final product. You shall have a clear picture of what is done and what problems there are. <i>The solution shall be explained and motivated.</i>	X	1 Given if the report is accepted before due date.	
<b>Final report</b> Performed no later than Mars 17, 2015 (book reporting time in Doodle). The group gives a detailed report to the supervisor. <i>The solution shall be explained and motivated.</i>	X	1 Given if the report is accepted before due date.	
<b>Architecture Document</b> You shall hand in a new version of the architecture document, reflecting the current state of the application, at each report meeting (Feb 13 and Feb 27, 2015). The final version shall be handed in at the final report meeting (Mars 17, 2015) and also emailed to Leif Lindbäck, leifl@kth.se.	X	2	
<b>Other Functionality</b>			
Validation of data entered in HTML forms. Validation shall take place both on client and in <i>all</i> layers on server.	X		
Views consist of different parts, e.g. header, footer, menu and main content.	X	1	
A standalone client communicating with the server using web services as specified in section 4.5 in the project task. Use for example JAX-RS to implement web services.		2	
PDF documents can be generated for job applications.		1	

Task	Mandatory	Higher Grade Score	Signature
<b>Other Non-Functional Requirements</b>			
<p>Meet one non-functional requirement from the following list, explanations for the different requirements are found in the lecture notes from lecture one. It must be clear how you have proved that the requirement is met.</p> <ul style="list-style-type: none"> <li>• Availability</li> <li>• Reliability</li> <li>• Response time</li> <li>• Capacity</li> <li>• Scalability</li> <li>• Non-repudiation</li> </ul>		1	