## IFB299 Release Two Marking Criteria and Submission Guide

	Marks					
Davidanment	Design implement worify and	deliver a conhicticated comm	uting system which mosts avo	luing stelseholder needs		
Development Process	Design, implement, verify and	10 - 9	8 - 7	6 - 5	< 5	
12 marks	■ Clear evidence that the team has very closely adhered to the principles of Scrum.	■ Clear evidence that the team has closely adhered to the principles of Scrum.	■ Evidence that the team has adhered to most of the principles of Scrum.	■ Evidence that the team has generally adhered to most of the principles of Scrum.	Little evidence that the team has adhered to the principles of Scrum.	
	<ul> <li>Very good balanced use of team members' skills while maintain- ing shared knowledge of system.</li> <li>Clear evidence of exemplary</li> </ul>	■ Good balanced use of team members' skills while maintaining shared knowledge of system.	■ Reasonably balanced use of team members' skills while maintaining shared knowledge of system.	■ Reasonably balanced use of team members' skills while maintaining some shared knowledge of system.	Over reliance on team members' specialist skills thus not maintaining shared knowledge of system.	
	tracking at the task level throughout the project, including recording time taken on tasks.	Consistent tracking at the task level, including recording time taken on tasks.	<ul> <li>Tracking most tasks, including recording time taken on some tasks.</li> </ul>	<ul> <li>Tracking most tasks, but little is recorded about time taken on tasks.</li> </ul>	<ul> <li>Some tracking has been undertaken, but its use has been inconsistent.</li> </ul>	
	<ul> <li>Velocity and sprint &amp; release burndown charts are always up- to-date and team has informative comments about them.</li> </ul>	<ul> <li>Velocity and sprint &amp; release burndown charts are always up- to-date and team can discuss them with little prompting.</li> </ul>	<ul> <li>Velocity and sprint &amp; release burndown charts are up-to-date by the end of the sprint and team can comment on them.</li> </ul>	■ Velocity and sprint & release burndown charts are up-to-date by the end of the release and team can comment on them.	<ul> <li>Velocity and sprint &amp; release burndown charts may not all be up-to-date by the end of the release.</li> </ul>	
	<ul> <li>Clear evidence of exemplary tracking at the task level throughout the project, including recording time taken on tasks.</li> </ul>	Clear evidence of tracking at the task level throughout the project, including recording time taken on tasks.	■ Evidence of tracking most tasks throughout the project, including recording time taken on some tasks.	■ Evidence of tracking at the story level throughout the project, but task level tracking is a bit weak.	<ul> <li>Some tracking has been undertaken, but its use has been inconsistent.</li> <li>Little evidence of serious</li> </ul>	
	<ul> <li>Evidence of critical reflection on team effectiveness and well planned adaptation of the process.</li> </ul>	■ Evidence of critical reflection on team effectiveness and planned adaptation of the process.	Evidence of reflection on team effectiveness and planned adaptation of the process.	Evidence of reflection on team effectiveness and ideas about possible actions.	reflection on team effectiveness and/or poorly considered ideas about possible actions.	
	<ul> <li>The process has been adapted to improve several important outcomes.</li> <li>Extensive customer involvement at</li> </ul>	<ul> <li>The process has been adapted to improve a few of the most importan outcomes.</li> <li>Strong customer involvement at most stages of the process – especially during story processing, but has slipped a little during the iterations when contact would have been appropriate.</li> </ul>	<ul> <li>There has been an attempt to adapt the process to improve some important outcomes.</li> <li>Strong customer involvement at most stages of the process, but has slipped a little at a couple of stages when more contact would have been appropriate.</li> </ul>	There has been an attempt to adapt the process to improve a	There has been little attempt to adapt the process to improve outcomes.	
	all stages of the process; in generation and selection of user stories, in prioritisation, release and iteration planning and in revisions to scope as dictated by team progress.			few important outcomes.  Good customer involvement during story processing but has slipped a little subsequently.	<ul> <li>Sporadic interactions with the customer at various stages of the process. The team has acted independently, at times, without consulting the customer when required.</li> </ul>	
Design	12 - 11	10 - 9	8 - 7	6 - 5	< 5	
12 marks	<ul> <li>Team has a clear, consistent, shared understanding of the overall design.</li> </ul>	■ Team has a consistent, shared understanding of the overall design.	■ Team has a fairly consistent, shared understanding of the overall design.	■ Team has a reasonable shared understanding of the overall design.	Team has little shared understanding of the overall design.	
	<ul> <li>Overall system design is of very high quality exhibiting low coupling, high cohesion and good use of design patterns, across the entire system.</li> </ul>	Overall system design is of very good quality exhibiting low coupling, high cohesion and some use of design patterns, across most of the system.	Overall system design is of good quality generally exhibiting low coupling, reasonably high cohesion and some use of design patterns.	Overall system design is of fairly good quality generally exhibiting reasonably low coupling, moderately high cohesion but little use of design patterns.	<ul> <li>Overall system design is of poor quality exhibiting a little too much coupling and moderate cohesion, and little use of design patterns.</li> </ul>	

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Programming	7 - 6	5 - 4	3 - 2	1	< 1		
7 marks	<ul> <li>Source control has been under- taken and the logs show evidence of consistent good practice.</li> </ul>	<ul> <li>Source control has been under- taken and the logs show evi- dence of mostly good practice.</li> </ul>	<ul> <li>Source control has been under- taken and the logs show evi- dence of fairly good practice.</li> </ul>	• Source control has been under- taken but the logs show that use is a little sporadic.	<ul> <li>Source control has been undertaken but use is inconsistent.</li> </ul>		
	<ul> <li>High quality code has been produced for the entire project.</li> </ul>	<ul> <li>High quality code has been produced for most of the project.</li> </ul>	<ul> <li>Good quality code has been produced for most of the project.</li> </ul>	Good quality code has been produced for large parts of the project.			
		project.	•		•		
Testing	7 - 6	5 - 4	3 - 2	1	< 1		
7 marks	<ul> <li>Evidence of probing, high quality and high coverage unit, integration, system and acceptance testing.</li> </ul>	Evidence of probing, good quality unit, integration, system and acceptance testing but there may be some concerns about coverage.	■ Evidence of unit, integration, system and acceptance testing but there are some concerns about coverage and/or suitability of tests.	■ Evidence of unit, integration, system and acceptance testing but coverage is modest and/or some tests are not very suitable.	Some evidence of unit, integration, system and accep- tance testing but coverage is modest and/or a number of tests are not very suitable.		
	• Evidence that at least 98% of unit tests and 95% of all tests pass.	Evidence that at least 95% of unit tests and 90% of all tests pass.	Evidence that at least 90% of unit tests and 85% of all tests pass.	• Evidence that at least 85% of unit tests and 80% of all tests pass.	Evidence that less than 85% of unit tests or 80% of all tests pass.		
	<ul> <li>Appropriate test automation tools have been used to good advantage, including continuous integration.</li> </ul>	<ul> <li>Appropriate test automation tools have been used, including some level of continuous inte- gration.</li> </ul>	<ul> <li>Appropriate test automation tools have been used to good advantage (e.g. JUnit &amp; Selenium).</li> </ul>	<ul> <li>Appropriate test automation tools have been used (e.g. JUnit &amp; Selenium) for the large majority of tests.</li> </ul>	■ A unit testing tool has been used effectively but little effort has been made to use an integration test automation tool.		
		Marks					
	12 - 11	10 - 9	8 - 7	6 - 5	< 5		
Functionality	Delivered functionality consis	Delivered functionality consistent with a development team of this size over four iterations.					
12 marks	The team has successfully delivered the stories agreed during the release planning process, subject to appropriate revisions agreed by the customer.	The team has successfully delivered almost all of the stories agreed during the release planning process, subject to appropriate revisions agreed by the customer.	The team has successfully delivered most of the stories agreed during the release planning process, subject to appropriate revisions agreed by the customer.	The team has successfully delivered a majority of the stories agreed during the release planning process, subject to appropriate revisions agreed by the customer.	■ The team has successfully delivered some of the stories agreed during the release planning process.		
	• The focus of the release and the coherence of the iterations have been maintained in any revisions made to the original plan.	■ The focus of the release and the coherence of the iterations have been largely maintained in any revisions made to the original plan.	■ The focus of the release and the coherence of the iterations have largely been maintained; although some compromises have been made from the initial plan.	■ The focus of the release and the coherence of the iterations are visible, but compromised.	■ The focus of the release is compromised, with little coherence remaining.		

Note: Important information about the submission requirements and other guidance is on the next page.

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SUBMISSION: Unlike almost all assignments, there is no formal set of submission requirements for the Release. Rather, this will be a mix of demo, access, exploration and discussion.

- You should provide your tutor with access to your project repository, including source code (both application and test), unit test and integration test results, and all documentation for the project. Our recommendation here is that you place documentation in a directory called doc, but this can be agreed with your tutor.
- Zipped all the above information into a file, and upload it on the Blackboard using the link provided for your workshop.
- At your final release workshop meeting, you should present an extended demo of your system to your tutor, and allow her/him to access and explore the system. You should arrange between you how best to facilitate this exploration. Mostly, the tutors will be happy not to have to install the project on their own machines.
- You should make team members available for any subsequent questions your tutor may have, or any further demonstrations that may be required.
- Finally, it is our expectation that most systems will be buggy. It is not your job to have the system fail during a demo, so there are no ethical problems in choosing to demonstrate the best implemented stories for this. But there *are* ethical problems in claiming bug free systems when they are not. Not to mention credibility problems. To paraphrase a line from the political satire "Yes Prime Minister", you should always tell your tutor freely and frankly something that they can easily find out some other way.

**DEMO:** You are required to demonstrate your project to your tutor as part of this final release in Workshop 13. This demonstration is really an internal report to a manager. The demo to the teaching staff in Workshop 13 is very formal and intended to mimic public release demos which are a critical – and nerve wracking – aspect of our profession. **Attendance of each team member is required as usual.** 

Team N	Name:
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**Team Members:** 

Comments:

## Some guidance:

The final release assessment is similar in most respects to that for the first release. The changes in the criteria are in respect of code and design quality, and process reflection and adaptation. As with the first submission, you should provide your tutor with whatever supplementary material that you feel will assist them to assess your product and the process maturity of the team. This should be short, and may be based on the progress report PowerPoint template, or may simply be a couple of pages of bullet points. Please inform your tutor via email of your intended format and content areas – see below for ideas – and your tutor can make any adjustments or comments necessary.

Once again, the assessment of the project release will not revisit the assessment of the original stories. We assume here that the stories have been submitted and that they were of at least reasonable quality. The functionality criterion is thus not about the user stories, but about the functionality that was actually built. Most teams should expect to get from 12 to 7 marks on this. If you went even close to implementing what you said you would, then these standards are appropriate. However, some teams will have over-promised, and will deliver far less than specified in the user stories. Here the tutor must judge – with reference to the performance of other groups – whether they have done enough for the higher performance levels.

Alignment with the process is a very broad criterion. Tutors will mark carefully and comment aggressively, but for the final release will hold the students far more to account than in the first release. This will still involve a lot of feedback, but the marking will be sharper. There is no excuse by this point for a lack of familiarity with the requirements of the process. There should be clear evidence of all of the process elements to get a 7 standard result. As before, we are requiring attention to two things which have been stressed as part of the development process: (a) process adherence and quality, and (b) customer engagement, but there is increased focus on process maturity, the reflection on aspects of the process which work and those which do not. Teams striving to achieve a high result have implemented changes to how they are implementing SCRUM – what is known as local adaptation. Teams should justify these changes and outline their thought processes. As in release one, this may be simple stuff like the decision to pair or not pair, or the way you managed stand up meetings. Adaptation itself is not critical – careful consideration of process is, and by now we should have seen some informal SCRUM retrospectives. Again, it will be helpful for you to guide your tutor with a short set of bullet points, and perhaps through some discussion when you submit. This should be in the brief report mentioned above.

For release one, we were pretty gentle on item (b), customer engagement. This time, we expect clear evidence for both (a) and (b). But as before, a page of bullet points summarising your customer engagement – revisions of User Stories, agreement on UATs, customer decisions in prioritisation and release planning will be sufficient – it is just that we will expect more substance to it.