

**F21AS Stage 2 Mark Sheet**

Group: 4

Criteria	Weight	A (70-100%)	B (60-69%)	C (50-59%)	D (40-49%)	E/F (<40%)	Mark
Design (including use of threads and patterns)	30%	Well designed with appropriate use of design patterns and ambitious use of threads	A generally good design with appropriate use of design patterns and threads	A reasonable design, but limited or incomplete use of threads or patterns	Significant design issues, limited use of threads or patterns	Poor design, little indication that threads and patterns were understood and/or used	22
Functionality (including core requirements, extensions, user interface, and demo)	30%	Core requirements complete, an effective user interface, one or more complex extensions, all features working in application	Core requirements complete, a usable interface, one or more non-trivial extensions, a generally working	Some missing requirements, or limited extensions, or significant usability issues, or significant features not working	Limited functionality with missing core requirements or no extensions or major usability issues, major issues with the	Poor functionality, very little achieved, application not working	20
Implementation (including code quality, readability and comments)	20%	Clear modular well-commented code, threads and patterns correctly implemented	Generally good coding, threads and patterns correctly implemented	Some issues with coding or with how threads and patterns are implemented	Significant issues with coding or with how threads and patterns are implemented	Poor coding, poor or absent thread and pattern implementations	14
Software documentation (including technical writing, UML diagrams)	10%	Precise, concise technical writing and UML diagrams that give a clear presentation of the developed software	Generally good technical writing with readable UML diagrams that gives a fairly clear overview of the developed	Technical writing lacks clarity or conciseness, UML diagrams lack clarity, it is not clear how some aspects work	Significant issues with technical writing, poor or absent UML diagrams, it is unclear how the software works	Poor writing, incomprehensible UML diagrams, it is very unclear how the software works	7
Development report (including iterations, agile techniques, Stage 1/2 comparison)	10%	A clear, concise and complete report of the application's development and the tools and techniques	An accurate report of the application's development and the tools and techniques that were used	A reasonable report of the application's development, with some lack of clarity, details or conciseness	A poor or limited report of the application's development	Little or no reporting of the application's development	5

Total (%): 68

**Feedback:**

The program correctly implements the core specification, and has a couple of extensions, including automatic adding/removing of servers based on queue length. However, the GUI is a little basic. The code is generally easy to read, though comments are a bit inconsistent. The report is generally well-written, though the discussion of agile development is a bit waffly and lacks a clear presentation of the content of each sprint. The jar file runs okay, but produces a "File cannot be written" error at exit.

The threading implementation generally looks fine, and it's good to see you using wait/notify in addition to synchronisation. However, having the producer and consumer classes as inner classes in the same file is not ideal, since this unnecessarily couples them together within the implementation.

The singleton implementations are fine, though I'd question whether the customer list should be a singleton (see discussion of singletonitis in the antipatterns lecture).

Good implementation of the MVC and observer patterns. However, I would have included things like the worker classes within the model package, since they are a key part of the program's back-end (i.e. the model is not just data but also code that manipulates the data).

**Individual marks:**

Bo-Han, Dominic, Leah and Jiancheng - whilst there was some variance, the peer assessment suggests you're all contributing in the region I would expect for this kind of project, so I'm giving you the mark shown above.

Aina - there seems to be broad agreement that you put in extra work, so I'm increasing your marks to reflect this.