

OCC SPEC Cut down mark scheme

Task 1 – THE PROPOSAL

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-3	4-6	7-9
Decomposing the problem	No rewardable material	<p>The proposal:</p> <ul style="list-style-type: none"> identifies some of the problems to be solved Effectively decomposes some of the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet some of the needs of the client and users mitigating some of the potential risks addressing some of the relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal:</p> <ul style="list-style-type: none"> Identifies most of the problems to be solved Effectively decomposes most of the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet most of the needs of the client and users mitigate most of the potential risks address most of the relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal:</p> <ul style="list-style-type: none"> Fully identifies the problems to be solved Effectively decomposes the problems identified <p>The proposed solution would effectively:</p> <ul style="list-style-type: none"> meet the full needs of the client and users mitigate the potential risks address relevant regulatory guidelines and legal requirements, in relation to software development and the industry.
		1-3	4-6	7-9
Appreciation of wider issues in the context	No rewardable material	<p>The proposal provides limited lines of reasoning that partially justify how:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal provides good lines of reasoning that mostly justify how:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry. 	<p>The proposal provides comprehensive lines of reasoning that fully justify how:</p> <ul style="list-style-type: none"> the recommended solution meets the needs of the client and users potential risks will be mitigated the proposed solution will address relevant regulatory guidelines and legal requirements, in relation to software development and the industry.

		1-2	3-4	5-6
Appreciation of the business context		<p>The proposal provides basic definitions of:</p> <ul style="list-style-type: none"> • functional and non-functional requirements • key performance indicators • user acceptance criteria 	<p>The proposal provides good definitions of:</p> <ul style="list-style-type: none"> • functional and non-functional requirements • key performance indicators • user acceptance criteria 	<p>The proposal provides comprehensive and perceptive definitions of:</p> <ul style="list-style-type: none"> • functional and non-functional requirements • key performance indicators • user acceptance criteria

Task 1 - THE DESIGN

Visual Designs

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Effectiveness of the design interface	No rewritable material	<p>The proposed design interface is adequate as a result of reasonably effective use of:</p> <ul style="list-style-type: none"> • layout and white space • visual hierarchies • common conventions. 	<p>The proposed design interface is good as a result of the effective use of:</p> <ul style="list-style-type: none"> • layout and white space • visual hierarchies • common conventions. 	<p>The proposed design interface is excellent as a result of the sophisticated and highly effective use of:</p> <ul style="list-style-type: none"> • layout and white space • visual hierarchies • common conventions.

Algorithm Designs

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1	2-3	4
Decomposition of problem		Basic decomposition of the identified problems that superficially cover the required: <ul style="list-style-type: none">• inputs• processes• outputs	Good decomposition of the identified problems that sufficiently cover the required: <ul style="list-style-type: none">• inputs• processes• outputs	Highly effective decomposition of the identified problems that comprehensively cover the required: <ul style="list-style-type: none">• inputs• processes• outputs
		1 - 2	3 - 4	5 - 6
Application of logical thinking and conventions	No rewardable material	Algorithms would produce some correct outcomes as a result of: <ul style="list-style-type: none">• some precise logic• some appropriate structure and sequence which is likely to be inefficient. Some effective use of accepted conventions although inconsistencies still exist.	Algorithms would produce mostly correct outcomes as a result of: <ul style="list-style-type: none">• mostly precise logic• appropriate structure and sequence but which may lack efficiency. Mostly effective use of accepted conventions though some minor inconsistencies may still exist.	Algorithms would produce consistently correct outcomes as a result of: <ul style="list-style-type: none">• precise logic• efficient structure and sequence. Effective and consistent use of accepted conventions

Data Requirements

Assessment Focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
The design of the data requirements	No rewritable material	<p>Data requirements for the proposed solution are somewhat appropriate, including (as required):</p> <ul style="list-style-type: none"> • variables • data structures • data types <p>Naming conventions used are mostly appropriate but are inconsistent.</p> <p>Effective error handling procedures are identified for some inputs/processes that require them.</p>	<p>Data requirements for the proposed solution are mostly appropriate, including (as required):</p> <ul style="list-style-type: none"> • variables • data structures • data types <p>Naming conventions used are appropriate and mostly consistent.</p> <p>Effective error handling procedures are identified for most inputs/processes that require them.</p>	<p>Data requirements for the proposed solution are fully appropriate, including (as required):</p> <ul style="list-style-type: none"> • variables • data structures • data types <p>Thoroughly appropriate and consistent naming conventions are used throughout.</p> <p>Thoroughly effective error handling procedures are identified for the inputs/processes that require them.</p>

The Test Strategy

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Test strategy	No rewritable material	<p>The test strategy demonstrates a basic understanding of:</p> <ul style="list-style-type: none"> • how components interrelate • the order in which components should be tested • the types of test that are required. 	<p>The test strategy demonstrates a good understanding of:</p> <ul style="list-style-type: none"> • how components interrelate • the order in which components should be tested • the types of test that are required. 	<p>The test strategy demonstrates a thorough and detailed understanding of:</p> <ul style="list-style-type: none"> • how components interrelate • the order in which components should be tested • the types of test that are required.

The Design Documentation

		1-2	3-4	5-6
Quality of communication	No rewardable material	<p>Some effective communication of the design as a result of:</p> <ul style="list-style-type: none"> • some use of appropriate techniques, methods and formats • some use of technical language that is appropriate for the intended audience 	<p>Mostly effective communication of the design as a result of:</p> <ul style="list-style-type: none"> • the use of mostly appropriate techniques, methods and formats • the use of technical language that is mostly appropriate for the intended audience 	<p>Communication of the design is consistently effective as a result of:</p> <ul style="list-style-type: none"> • the use of consistently appropriate techniques, methods and formats • the use of technical language that is consistently appropriate for the intended audience

Task 2 - Developing the Solution

The Solution:

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4
	0	1-2	3-4	3-5	6-8
Functionality	No rewardable material	<p>The prototype implements code in a single language with some functionality but the code lacks efficiency and some major errors persist.</p> <p>Uses some precise logic and programming structures which would result in some correct outcomes</p>	<p>The prototype implements code with some functionality in at least two different languages but the code lacks efficiency and some major errors persist.</p> <p>Uses sufficient precise logic and programming structures which would result in adequate correct outcomes.</p>	<p>The prototype implements mostly efficient functional code in at least two different languages, but some minor errors still persist.</p> <p>Uses mostly precise logic and programming structures which would result in mostly correct outcomes.</p>	<p>The prototype implements consistently efficient functional code in at least two different languages.</p> <p>Uses precise logic and programming structures throughout which would result in consistently correct outcomes.</p>

		1-2	3-4	3-5	6-8
Code organisation		<p>Code is maintainable by a third party, but would present significant difficulties through the use of:</p> <ul style="list-style-type: none"> • inconsistent naming conventions. • limited logical organisation • limited informative commenting. 	<p>Code is maintainable by a third party, but would present some difficulties through the use of:</p> <ul style="list-style-type: none"> • somewhat appropriate naming conventions. • Some logical organisation • some informative commenting. 	<p>Code is maintainable by a third party, and would present only a few minor difficulties through the use of:</p> <ul style="list-style-type: none"> • mostly appropriate naming conventions. • mostly logical organisation • mostly informative commenting. 	<p>Code is easily maintainable by a third party through the use of consistently appropriate:</p> <ul style="list-style-type: none"> • naming conventions. • logical organisation • informative commenting.

		1-2	3-4	5-6	
Legal and regulatory guidelines and Standards		<p>Some effective application of standards and guidelines in relation to:</p> <ul style="list-style-type: none"> • accessibility • compatibility • legal and ethical considerations <p>Some effective application of procedures and security controls to ensure confidentiality, integrity and availability.</p>	<p>Mostly effective application of standards and guidelines in relation to:</p> <ul style="list-style-type: none"> • accessibility • compatibility • legal and ethical considerations <p>A mostly effective application of procedures and security controls to ensure confidentiality, integrity and availability.</p>	<p>Consistent and effective application of standards and guidelines in relation to:</p> <ul style="list-style-type: none"> • accessibility • compatibility • legal and ethical considerations <p>Thoroughly effective application of procedures and security controls to ensure confidentiality, integrity and availability.</p>	

Task 2 - Developing the Solution

Testing

Assessment focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Suitability of test data	No rewardable material	Tests selected show a basic understanding of how to effectively test inputs, calculations, validation and processes using test data which makes limited use of: <ul style="list-style-type: none"> • normal data • erroneous data • extreme data 	Tests selected show a good understanding of how to effectively test inputs, calculations, validation and processes using test data which includes: <ul style="list-style-type: none"> • normal data • erroneous data • extreme data 	Tests selected show a thorough and detailed understanding of how to effectively test inputs, calculations, validation and processes using test data which includes: <ul style="list-style-type: none"> • normal data • erroneous data • extreme data
Use of testing to inform the iterative development process		Comments show a basic understanding of how errors/problems were identified and how they were rectified (as appropriate) for: <ul style="list-style-type: none"> • inputs • calculations • validation and processes Testing shows evidence of a basic iterative development process	Comments show a good understanding of how errors/problems were identified and how they were rectified (as appropriate) for: <ul style="list-style-type: none"> • inputs • calculations • validation and processes Testing shows evidence of a good iterative development process	Comments show a comprehensive understanding of how errors/problems were identified and how they were rectified (as appropriate) for: <ul style="list-style-type: none"> • inputs • calculations • validation and processes Testing shows evidence of an effective iterative development process

Task 2 - Developing the Solution

Documentation

Assessment Focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Quality of iterative development process	No rewardable material	<p>A basic iterative development process is demonstrated, including:</p> <ul style="list-style-type: none"> • Limited and/or superficial records of changes made throughout the development stage • A superficial or vague rationale for changes made. • Some effective use of versioning 	<p>An adequate iterative development process is demonstrated, including:</p> <ul style="list-style-type: none"> • Adequate recording of notable changes made throughout the development stage • a supported rationale for some notable changes made • mostly effective use of versioning 	<p>An effective iterative development process is demonstrated, including:</p> <ul style="list-style-type: none"> • Thorough and detailed recording of notable changes made throughout the development stage • Convincing and perceptive rationales for notable changes made • fully effective use of versioning

Task 3 Part A Gathering Feedback to inform future development

Assessment focus	Band 0	Band 1	Band 2	Band 3	Band 4
	0	1-3	4-6	7-8	9-12
Effectiveness of materials to support the feedback process	No rewardable material	The materials would allow for the gathering of limited quality feedback for different aspects of the developed prototype	The materials would allow for the gathering of adequate quality feedback for different aspects of the developed prototype	The materials would allow for the gathering of good-quality feedback for different aspects of the developed prototype	The materials would allow for the gathering of high-quality feedback for different aspects of the developed prototype.
Use of appropriate feedback tools to support the gathering of effective feedback	0	1-2	3-4	5-6	
	No rewardable material	The use of the tools has resulted in feedback that provides some opportunity for evidence-informed further iteration	The use of the tools has resulted in feedback that mostly provides the opportunity for evidence-informed further iteration.	The use of the tools has resulted in feedback that consistently provides the opportunity for evidence-informed further iteration.	

		1-2	3-4	5-6	
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Effectiveness of communication	No reward able material	Quality of communication is only sometimes effective for both technical and non-technical audiences as a result of limited use of appropriate techniques, methods and formats	The quality of communication is mostly effective for both technical and non-technical audiences as a result of the use of mostly appropriate techniques, methods and format	The quality of communication is effective for both technical and non-technical audiences as a result of the consistent use of appropriate techniques, methods and formats	
		Limited use of technical language that is appropriate for the intended audience	The use of technical language that is mostly appropriate for the intended audience	The use of technical language that is consistently appropriate for the intended audience	

Task 3 B – Evaluating Feedback to inform future development

Assessment Focus	Band 0	Band 1	Band 2	Band 3
	0	1-2	3-4	5-6
Effectiveness of assets and content	No rewardable material	<p>A limited review of the content selected, including superficial consideration of the:</p> <ul style="list-style-type: none"> • appropriateness of the assets selected • validity and reliability of the sources used • legal and ethical implications of using the identified assets. <p>The review is only sometimes supported by superficial consideration, comparison and corroboration across multiple sources.</p>	<p>A good review of the effectiveness of the content selected, including good consideration of the:</p> <ul style="list-style-type: none"> • appropriateness of the assets selected • validity and reliability of the sources used • legal and ethical implications of using the identified assets. <p>The review is mostly supported by good consideration, comparison and corroboration across multiple sources.</p>	<p>A comprehensive review of the effectiveness of the content selected, including thorough consideration of the:</p> <ul style="list-style-type: none"> • appropriateness of the assets selected • validity and reliability of the sources used • legal and ethical implications of using the identified assets. <p>The review is well supported by effective consideration, comparison and corroboration across multiple sources.</p>

		1-3	4-6	7-9
Evaluation of project outcomes		<p>A basic or superficial evaluation of how well the prototype meets:</p> <ul style="list-style-type: none"> • functional and non-functional requirements of the system. • key performance indicators (KPIs) • user acceptance criteria for the proposed system. <p>Basic and/or simplistic rationale for future iteration is provided.</p> <p>Points made are supported by limited relevant:</p> <ul style="list-style-type: none"> • selection of examples • consideration of feedback. 	<p>A good evaluation of how well the prototype meets:</p> <ul style="list-style-type: none"> • functional and non-functional requirements of the system. • key performance indicators (KPIs) • user acceptance criteria for the proposed system. <p>Good rationale for future iteration is provided.</p> <p>Points made are supported by mostly relevant:</p> <ul style="list-style-type: none"> • selection of examples • consideration of feedback. 	<p>A thorough and detailed evaluation of how well the prototype meets:</p> <ul style="list-style-type: none"> • functional and non-functional requirements of the system. • key performance indicators (KPIs) • user acceptance criteria for the proposed system. <p>Convincing and perceptive rationale for future iteration is provided.</p> <p>Points made are supported by an entirely relevant and perceptive:</p> <ul style="list-style-type: none"> • selection of examples • consideration of feedback.