Task 1(A) - The Proposal			
	1-3	**4-6**	**7-9**
Decompose Problem	• Identifies **some** problems to be solved • Decomposes **some** of the problems to be solved • Meets **some** client/user needs • Mitigates **some** potential risks • addresses **some** relevant regulatory guidelines & legal requirements	• Identifies **most** problems to be solved • Decomposes **most** of the problems to be solved Proposed solution effectively: • Meets **most** client/user needs • Mitigates **most** potential risks • addresses **most** relevant regulatory guidelines & legal requirements	Proposal: • Fully Identifies problems to be solved • Effectively decomposes the problems to be solved Proposed solution effectively: • Meets **full** needs of client/users • Mitigates **all** potential risks • addresses **all** relevant regulatory guidelines & legal requirements
Wider Issues	**Limited** lines of reasoning that **partially** justify how: • Solution meets the needs of the client and users • Potential risks will be mitigated • Solution will address relevant regulatory guidelines and legal requirements	**Good** lines of reasoning that **mostly** justify how: • Solution meets the needs of the client and users • Potential risks will be mitigated • Solution will address relevant regulatory guidelines and legal requirements	**Comprehensive** lines of reasoning that **fully** justify how: • Solution meets the needs of the client and users • Potential risks will be mitigated • Solution will address relevant regulatory guidelines and legal requirements
Business Context	**Basic** definitions of: • functional and non-functional requirements • key performance indicators • user acceptance criteria	**Good** definitions of: • functional and non-functional requirements • key performance indicators • user acceptance criteria	**Comprehensive** & **perceptive** definitions of: • functional and non-functional requirements • key performance indicators • user acceptance criteria

Task 1(B) - The Design			
	1-3	**4-6**	**7-9**
Effectiveness of Interface	Interface is **adequate** as a result of **reasonably effective** use of: ● layout and white space ● visual hierarchies ● common conventions	Interface is **good** as a result of **effective** use of: ● layout and white space ● visual hierarchies ● common conventions	Interface is **excellent** as a result of **sophisticated** and **highly effective** use of: ● layout and white space ● visual hierarchies ● common conventions
Decompose problem	**Basic** decomposition of problems that superficially cover: • inputs • processes • outputs	**Good** decomposition of problems that superficially cover: • inputs • processes • outputs	**Highly effective** decomposition of the problems that superficially cover: • inputs • processes • outputs
Logical thinking & conventions	Algorithms produce some correct outcomes as a result of: • **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 produce mostly correct outcomes as a result of: • **mostly** precise logic • appropriate structure and sequence but **may lack efficiency** Mostly effective use of accepted conventions though some minor inconsistencies **may still exist**.	Algorithms produce **consistently** correct outcomes as a result of: • **precise** logic • **efficient** structure and sequence **Effective** and **consistent** use of accepted conventions
Data Requirements	**Somewhat** appropriate, including (as required): • variables • data structures • data types Naming conventions **mostly** appropriate but **inconsistent**. Effective error handling identified for **some** inputs/processes.	**Mostly** appropriate, including (as required): • variables • data structures • data types Naming conventions **appropriate** and **mostly** consistent. Effective error handling identified for **most** inputs/processes.	**Fully** appropriate, including (as required): • variables • data structures • data types **Thoroughly** appropriate and consistent naming conventions are used throughout. **Thoroughly** effective error handling identified for inputs/processes.
Test Strategy	**Basic** understanding of: • how components interrelate • the order in which components should be tested • the types of test that are required.	**Good** understanding of: • how components interrelate • the order in which components should be tested • the types of test that are required.	**Thorough & detailed** understanding of: • how components interrelate • the order in which components should be tested • the types of test that are required.

Quality of Communication	**Some** effective communication as a result of: • **some** appropriate techniques, methods & formats • **some** technical language, **appropriate** for intended audience	**Mostly** effective communication as a result of: • **mostly** appropriate techniques, methods & formats • technical language, **mostly** appropriate for intended audience	Communication **consistently** effective as a result of: • **consistently** appropriate techniques, methods & formats • technical language, **consistently** appropriate for intended audience

Task 2 – Developing the Solution (The Solution)				
	1-2	**3-4**	**3-5?**	**6-8**
Functionality	Implemented in a **single** language with **some** functionality. Code **lacks efficiency** with **some major errors**. **Some** precise logic and structures which result in **some** correct outcomes.	Implemented with **some** functionality in at least two languages. Code **lacks efficiency** with **some major errors**. **Sufficient** precise logic and structures which result in **adequate** correct outcomes.	**Functional** code in at least two languages. **Mostly efficient** with Some **minor errors**. Uses **mostly** precise logic and structures which result in **mostly** correct outcomes.	**Functional** code in at least two languages. Code is c**onsistently efficient.** **Precise** logic and structures throughout which result in **consistently** correct outcomes.
Code Organisation	Maintainable by a third party, but with **significant** difficulties due to: • **inconsistent** naming conventions. • **limited** logical organisation • **limited** informative commenting.	Maintainable by a third party, but with **some** difficulties due to: • **somewhat** appropriate naming conventions. • **some** logical organisation • **some** informative commenting.	Maintainable by a third party, with only a few minor difficulties due to: • **mostly** appropriate naming conventions. • **mostly** logical organisation • **mostly** informative commenting.	**Easily** maintainable by a third party with **consistently** appropriate: • naming conventions. • logical organisation • informative commenting.
User experience	**Basic** user experience through **limited** effective use of: • input handling • user guidance and error messages • outputs **Partially** robust and effectively handles **some** common errors.	**Adequate** user experience through **somewhat** effective use of: • input handling • user guidance and error messages • outputs **Adequately** robust and effectively handles **sufficient** common and unexpected errors	**Good** user experience through **mostly** effective use of: • input handling • user guidance and error messages • outputs **Largely** robust and effectively handles **most** common and unexpected errors	**Excellent** user experience through **consistently** effective use of: • input handling • user guidance and error messages • outputs **Fully** robust and effectively handles common and unexpected errors
Legal regulations & Standards	**Some** effective application of standards and guidelines in relation to: ● accessibility ● compatibility ● legal and ethical considerations **Some** effective procedures and security controls to ensure confidentiality, integrity & availability.	**Mostly** effective application of standards and guidelines in relation to: ● accessibility ● compatibility ● legal and ethical considerations **Mostly** effective procedures and security controls to ensure confidentiality, integrity and availability.	**Consistent** and effective application of standards and guidelines in relation to: ● accessibility ● compatibility ● legal and ethical considerations Thoroughly effective procedures and security controls to ensure confidentiality, integrity and availability.	

Task 2 – Developing the Solution (Testing & Documentation)			
	1-2	**3-4**	**5-6**
Suitability of Test data	**Basic** understanding of how to effectively test inputs, calculations, validation and processes using test data which makes **limited use** of: • normal data • erroneous data • extreme data	**Good** understanding of how to effectively test inputs, calculations, validation and processes using test data which includes: • normal data • erroneous data • extreme data	**Thorough** and **detailed** understanding of how to effectively test inputs, calculations, validation and processes using test data which includes: • normal data • erroneous data • extreme data
Iterative Testing	**Basic** understanding of how errors/problems were identified and how they were rectified for: ● inputs ● calculations ● validation and processes Testing shows evidence of a **basic** iterative development process.	**Good** understanding of how errors/problems were identified and how they were rectified for: ● inputs ● calculations ● validation and processes Testing shows evidence of a **good** iterative development process.	**Comprehensive** understanding of how errors/problems were identified and how they were rectified for: ● inputs ● calculations ● validation and processes Testing shows evidence of an **effective** iterative development process.
Iterative Process	**Basic** iterative development process, including: ● **Limited/superficial** records of changes made ● **Superficial/vague** reasons for changes made ● **Some** effective use of versioning	**Adequate** iterative development process, including: ● **Adequate** recording of changes made ● **Supported** reasons for **some** changes made ● **Mostly** effective use of versioning	**Effective** iterative development process, including: ● **Thorough & detailed** recording of changes made ● **Convincing & perceptive** reasons for changes made ● **Mostly** effective use of versioning

Task 3 (A) – <u>Gathering</u> feedback to inform future developments				
	1-3	**4-6**	**7-8**	**9-12**
Effectiveness of materials	Materials allow for **limited** quality feedback for different aspects of the prototype.	Materials allow for **adequate** quality feedback for different aspects of the prototype.	Materials allow for **good** quality feedback for different aspects of the prototype.	Materials allow for **high** quality feedback for different aspects of the prototype.
Use of tools	Resulted in feedback that provides **some** opportunity for evidence-informed further iteration.	Resulted in feedback that **mostly** provides the opportunity for evidence-informed further iteration.	Resulted in feedback that **consistently** provides the opportunity for evidence-informed further iteration.	
Effectiveness of communication	**Sometimes** effective for both technical and non-technical audiences. Limited use of appropriate techniques, methods and formats. Limited technical language appropriate for intended audience.	**Mostly** effective for both technical and non-technical audiences. Use of **mostly** appropriate techniques, methods and formats. Technical language **mostly** appropriate for intended audience.	**Effective** for both technical and non-technical audiences. **Consistent** use of **appropriate** techniques, methods and formats. Technical language **consistently** appropriate for intended audience.	

Task 3 (B) – <u>Evaluating</u> feedback to inform future developments			
	1-2	**3-4**	**5-6**
Effectiveness of assets & content	**Limited** review of the content selected. including **superficial** consideration of: ● appropriateness ● source validity/reliability ● legal and ethical implications **Sometimes** supported by **superficial** consideration, comparison and corroboration across multiple sources. -checked? Verified? Delete and just use 'comparison?'	**Good** review of the content selected. including **good** consideration of: ● appropriateness ● source validity/reliability ● legal and ethical implications **Mostly** supported by **good** consideration, comparison and corroboration across multiple sources.	**Comprehensive** review of the content selected. including **thorough** consideration of: ● appropriateness ● source validity/reliability ● legal and ethical implications **Well** supported by **effective** consideration, comparison and corroboration across multiple sources.
	1-3	**4-6**	**7-8**
Project outcomes	**Basic/superficial** evaluation of how well prototype meets: ● functional and non-functional requirements ● key performance indicators (KPIs) ● user acceptance criteria **Basic/simplistic** reasons for future iteration. Supported by **limited** relevant: ● selection of examples ● consideration of feedback.	**Good** evaluation of how well prototype meets: ● functional and non-functional requirements ● key performance indicators (KPIs) ● user acceptance criteria **Good** reasons for future iteration. Supported by **mostly** relevant: • selection of examples • consideration of feedback.	**Thorough & detailed** evaluation of how well prototype meets: ● functional and non-functional requirements ● key performance indicators (KPIs) ● user acceptance criteria **Convincing & perceptive** reasons for future iteration. Supported by **entirely relevant & perceptive**: • selection of examples • consideration of feedback.