This guide shows you how to produce a Task 1 submission that should at least guarantee you a merit by marking guide standards. It is written to be reused for any scenario. Only the client details change. The structure, depth, and reasoning stay the same.

Used feedback gotten from Kundai as well as analysis from AI and my own marked work I submitted

Use the 2023 Health Advice Group scenario as the worked example after each section.

========== ACTIVITY Aii. PROPOSAL ==========

1. Brief Summary

Purpose: Demonstrate a clear understanding of the brief before proposing any solution.

What to include

• The client and what they do.

• The target users.

• The overall purpose of the system.

• The core problems to be solved.

Rules

• Write problems, not features.

• Keep it concise but precise.

Example (Health Advice Group): The Health Advice Group is a charity that provides advice on extreme weather conditions, air quality, and home environmental risks. The solution must support members of the public who require clear and accessible health guidance, as well as staff who monitor environmental conditions. The key problems are providing accurate environmental information, delivering safe health advice, protecting user privacy, and maintaining system reliability during periods of high demand.

2. Business Context (In Depth)

Purpose: Explain the organisation, its environment, and the constraints that shape the solution.

Structure

• One short overview paragraph.

• Bullet points grouped under clear headings.

Headings to use

- Users
- Business needs
- Operational constraints
- Legal and regulatory context
- Peak usage and reliability

Example (Health Advice Group)

Users

• Members of the public are seeking weather and health advice.

• Vulnerable users such as elderly people and carers.

• Internal staff monitoring air quality and trends.

Business needs

• Provide trusted and accurate advice to protect public health.

• Maintain credibility as a health focused charity.

• Monitor environmental data through a dashboard.

Operational constraints

• Limited technical resources.

• Reliance on third party weather and air quality data sources.

Legal and regulatory context

• Must comply with UK GDPR due to the handling of health-related data.

Peak usage and reliability

• Increased traffic during heatwaves and cold spells.

• Service must remain stable during weekends and holidays.

3. User Stories and User Journey

Purpose: Translate business needs into user focused system behaviour.

User stories: Write 3 to 5 stories using the format: As a [user], I want [goal], so that [benefit].

Example user stories

• As a member of the public, I want to check air quality for my location, so that I can decide if it is safe to go outside.

• As a vulnerable user, I want clear advice during extreme heat, so that I can reduce health risks.

• As a staff member, I want to view trends on a dashboard, so that I can monitor environmental conditions.

User journey Describe one high value journey step by step.

Example user journey

Users enter their location ---- System validates the input. ---- System retrieves weather and air quality data. ----- System displays information with relevant health advice. ---- User reads the advice and acts.

4. Functional Requirements

Purpose: Define exactly what the system must do.

Rules

• One requirement per row.

• Each requirement describes one behaviour.

• Requirements must be clear and testable.

Table structure

Example **(FR1 JUST MEANS FUNCTIONAL REQUIREMENT 1 AND SO ON)**

ID	Functional requirements	Priority
FR1	The system shall allow users to enter a location and retrieve current weather data	High.
FR2	The system shall display health advice based on current weather conditions	High.

5. Non-Functional Requirements

Purpose:

Define quality expectations for the system.

Rules

• Do not combine requirements.

• Avoid vague terms.

• Write so they can later be measured.

Example **(NFR1 JUST MEANS NON-FUNCTIONAL REQUIREMENT 1 AND SO ON)**

Table structure

ID	Nonfunctional requirement	Quality focus
NFR1	The system shall load all public facing pages quickly under normal conditions	Performance.
NFR2	The system shall protect personal and health related	Security and privacy.

	data	

6. Problem Decomposition

Purpose:

Break down key functional requirements into logical components.

Selection: Choose five high value functional requirements.

For each requirement include

Input

Processes

Output

Example

Feature

1. Location based weather Search.

   Inputs: User location.

   Processes: Validate input, request data from API, process response.

   Outputs: Weather data and advisory messages.

7. Key Performance Indicators (KPIs)

Purpose: Define how success of the solution will be measured.

Rules

• KPIs must link back to business needs.

• Keep them clear and realistic.

Example KPIs

• System availability during peak periods is 90%.

• Load page time is 3 seconds.

• User engagement with health advice pages is above 85%.

8. Description of the Proposed Solution

Purpose: Explain how the solution works as a complete system.

Including

• Overall system design.

• Main system components.

• Data flow overview.

• High level technology choices.

Example The proposed solution is a web-based system with a front end for users and an administrative dashboard for staff. The system retrieves environmental data from external APIs, processes it on the server, and presents clear health guidance to users. Data summaries are stored to support monitoring and reporting. **But add more depth to complete this this is just an example could be longer**

9. Justification of the Proposed Solution

Purpose:

Explain why the proposed solution meets the requirements.

Method: Map requirements to solution features.

Example: The weather lookup feature meets the requirement for location-based information by using reliable third-party data sources. This supports the organisation's goal of providing accurate and timely advice while avoiding unnecessary storage of personal data. **This is just for one functional requirement but in your main work it should include maybe 2 to 3 or 4 requirements**

10. Risks, Wider Issues, and Regulations

Purpose Demonstrate awareness of real-world risks and responsibilities.

Risks

Identify technical, legal, and user related risks and add mitigations.

Example risks

- Incorrect health advice leading to harm.
- Third party data outages.
- Data protection breaches.

Wider issues

- Accessibility.
- Ethical responsibility when providing health advice.
- User trust.

Regulations

- UK GDPR for personal and health related data.
- Accessibility guidelines such as WCAG.

11. Research Appendix

Purpose Provide evidence that decisions are informed by research.

Including

- Summary of research carried out.
- Key findings.
- How each finding influenced the proposal.

Example Research into weather APIs highlighted differences in update frequency and reliability. This informed the decision to display update timestamps and avoid overreliance on a single source.

========== ACTIVITY B. DESIGN DOCUMENTS ==========

NOTE: THE DIAGRAMS IN THE SECTION SHOULD BE BASED ON THE FEATURES YOU DECOMPOSED IN THE PROBLEM DECOMPOSITION SO A DIAGRAM FOR EACH PROBLEM DECOMPOSED IN YOUR PROBLEM DECOMOSITION

12. **Interface and Visual Designs Include site maps, wireframes, and annotations explaining layout, navigation, and accessibility.**
13. **Data Requirements Include an entity relationship diagram, data dictionary, and data flow diagram.**
14. **Algorithm Designs Provide up to five key algorithms using flowcharts and Pearson approved pseudocode, with explanations.**
15. **Use Case and Sequence Diagrams Include a use case diagram and sequence diagrams for key system interactions.**
16. **Test Strategy Outline the order and types of testing for all system components.**

========== EXAMINER CHECKLIST ==========

- **Clear understanding of the brief.**
- **Detailed business context.**
- **User stories and journey included.**
- **Functional and non-functional requirements are clearly defined.**
- **Logical problem decomposition.**
- **KPIs aligned to business needs.**
- **Solution clearly described and justified.**
- **Risks, wider issues, and regulations addressed.**
- **Research evidence included.**
- **Design documents support buildability.**
- **Test strategy covers all components.**

========== USAGE NOTE ==========

Replace the Health Advice Group example text with the details from your own scenario. You can keep the structure, the depth and the reasoning the same, but you

can also change it up to fit how you already wrote your own proposal while using this as the reference just for direction ALL UP TO YOU