UNIVERSITY OF GHANA

PROJECT PROPOSAL SPECIFICATION

(Weight 15 pts | Due Sunday, July 27, 2025, 23:59 GMT)

PURPOSE

Team must produce a concise but complete proposal that demonstrates (a) stakeholder understanding, (b) technical feasibility, and (c) an execution roadmap that fits the compressed **Sprint 0** schedule **(02 June – 18 July 2025)**.

- **Deliverable:** single PDF (≈ 8–10 pages or ≤ 4 500 words) named: `DCIT208_Proposal_ <TeamName>.pdf`
- **Attachments** (merge into the PDF or supply as annex): one-page Gantt/timeline image, GitHub board public snapshot, and any early models (DFD, ERD, use-case).
- Cite sources (Sommerville 10e, Pressman 9e, Kendall 9e) where concepts are borrowed.

Detailed Section Guide

1. Introduction & System Intent (4 pts)

- **Client Overview** – real or university-affiliated entity; include name, address, contact.
- **Problem Statement** – articulate the pain-point in ≤ 150 words.
- **System Vision** – one-sentence elevator pitch.
- **User Personas** – primary vs secondary users, context of use.

2. Requirements & Functionality (3 pts)

- **Functional Requirements** – bullet list, numbered FR-1..n.
- **Non-Functional Requirements** – performance, security, accessibility, etc.
- **Prioritisation Table** – MoSCoW.
- **Preliminary Use-Case Table** – name, brief, actors.

3. Architecture & Components (4 pts)

- **System Decomposition** – logical modules or layered architecture; justify choice.
- **Primary Model (pick one):**
  - **Data-Flow Diagram** (Kendall Ch 7-8) or
  - **C4 Context + Container** (modern alternative, though not discussed in class).
- **Data Model** – ERD or UML class diagram.
- **Interface Mock-up** – optional low-fidelity wireframe if UI heavy.

4. Scope, Deliverables & Plan (2 pts)

- **Deliverable List** – tie each to Sprints 1-3 & final demo.
- **Timeline** – mini-Gantt (Excel/Project) or GitHub Milestones.
- **Definition of Done** – how the team knows a deliverable is complete.

5. Communication, Visibility & Risk (1 pt)

- **Client Touch-points** – weekly demo, Slack/WhatsApp channel, monthly summary report.
- **Team Comms** – stand-up frequency, board link.
- **Risk Log (excerpt)** – at least three risks with probability × impact × mitigation.

6. Development Process & Compliance (1 pt)

- **Chosen Process** – Scrum with 5-day sprints, Kanban with WIP limits, etc.; justify from Pressman Ch 2-3.
- **DevSecOps Guard-rails** – branch protection, CI test coverage gate, secret scanning.
- **Gen-AI Usage Statement** – declare permissible uses (e.g., code boiler-plate) and auditing rule that every member can explain generated artifacts.

PURPOSE

- Use **APA citations** for any textbook concepts.
- Diagrams: export at 300 dpi; label figures and tables.
- Keep **passive voice** and formal tone (see Course Writing Guide).
- Compress PDF to ≤ 5 MB.

Marking Rubric *(15 pts total)*

Section	Pts	Evidence
1. Introduction & System Intent	**4**	Client profile, problem statement, user personas, business context
2. Requirements & Functionality	**3**	Draft functional + non-functional requirements, MoSCoW priority table, use-case list
3. Architecture & Components	**4**	Logical DFD **or** C4 Context + Container diagram, initial ERD/UML class model, interface sketch
4. Scope, Deliverables & Plan	**2**	Phased deliverable list, mini-Gantt or GitHub Milestone chart, sprint mapping
5. Comms, Visibility & Risk	**1**	Client engagement plan, team comms channels, weekly demo cadence, risk log excerpt

***Late penalty*:** –10 % per 24 h block after the deadline.