Minutes of the Meeting: Chapter 1 Finalization

Group 5 - Research Methodology

February 7, 2026

Meeting Overview

- **Project Title:** Edge-Based Vision System for Rapid Person Detection in Disaster-Induced Flood Scenarios
- **Date / Time:** February 7, 2026 | 8:00 PM – 9:30 PM
- **Venue:** Zoom Video Conferencing

1 Attendees

- **Rogelio Q. Sebua Jr.** – Group Leader / DECE
- **Gavino Rafael B. Fuerte** – Member / DECE
- **Ezekiel John R. Libao** – Member / DECE
- **Jared Joshua A. Lofamia** – Member / DECE

2 Agenda

1. Discussion of the Research Problem and ”Gap in Knowledge.”
2. Formulation of General and Specific Technical Objectives.
3. Definition of Scope, Delimitations, and Significance.
4. Allocation of Chapter 1 Sections (1.1 to 1.9).

3 Key Discussion Points

3.1 Problem Statement & Rationale

The team identified the core problem as the delay in search-and-rescue due to infrastructure failure. In alignment with Lecture 5, the ”gap in knowledge” is the lack of real-time, high-computation person detection that does not rely on cloud connectivity.

3.2 Technical Objectives & Criteria

The objectives must be quantitative and output-oriented. We will focus on:

- **Hardware:** NVIDIA Jetson module for local processing.
- **Algorithm:** YOLO architecture for real-time person detection.
- **Communication:** LoRa radio technology for long-range alerts.

3.3 Operational Definitions

The group agreed to provide operational definitions for technical acronyms (YOLO, LoRa, Edge Computing) based on specific testing criteria rather than simple dictionary definitions.

4 Action Items: Chapter 1 Assignments

The following assignments were made based on the DLSU Chapter 1 structure:

Section	Responsible Person	Key Responsibilities
1.1 & 1.2	**Rogelio Sebua Jr.**	Background of the Study and Statement of the Problem.
1.3 & 1.5	**Ezekiel Libao**	Formulating Technical Objectives and Significance.
1.4 & 1.9	**Gavino Fuerte**	Scope, Delimitations, and Project Budgeting.
1.6 & 1.7	**Jared Lofamia**	Project Description (Block Diagrams) and Methodology.
1.8 & 2.0	**Rogelio Sebua Jr.**	Gantt Chart and Definition of Terms.

5 Conclusion & Next Steps

- **Deadline for First Draft:** February 14, 2026.
- **Review Session:** All members to review methodology for technical feasibility before the PRO1 submission.
- **Visuals:** Jared to draft the system process flow diagram showing the interaction between the camera, Jetson, and LoRa transmitter.

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