Software Engineering Seminar
Semester 2025-III
Workshop No. 2 — Application Design and UI Progress

Eng. Carlos Andrés Sierra, M.Sc.
Full-time Adjunct Professor
Computer Engineering Program
School of Engineering
Universidad Distrital Francisco José de Caldas

Welcome to Workshop 2! This session focuses on the *design phase* of your *Software Engineering Seminar* course project. You will produce the main *design artifacts* and demonstrate progress in your *Web UI implementation*. The goal is to clarify your system's structure and prepare for development.

Scope and Objectives

- **Class Diagrams:** Create *UML class diagrams* for your system. See: `https://www.uml-diagrams.org/class-diagrams-overview.html`

- **Architecture Diagram:** Draw the overall *software architecture*, showing main components and their interactions. Example: `https://www.lucidchart.com/blog/how-to-draw-architectural-diagrams`

- **Deployment Architecture:** Provide a *deployment diagram* showing how components will be deployed (e.g., `servers`, `containers`, `cloud`).

- **Business Model Processes:** Document key *business processes* using appropriate diagrams (e.g., `activity diagrams`, BPMN). See: `https://www.visual-paradigm.com/guide/bpmn/what-is-bpmn/`

- **Web UI Progress:** Present *mockups* and/or *screenshots* showing significant progress in your *web user interface*. You may use tools like `Figma`, `Balsamiq`, or hand-drawn sketches.

Carlos Andrés Sierra, Computer Engineer, M.Sc. in Computer Engineering, Lecturer at Universidad Distrital Francisco José de Caldas. Any comment or concern regarding this workshop can be sent to Carlos A. Sierra at: *cavirguezs@udistrital.edu.co.*

Methodology and Deliverables

1. **Class Diagrams**

   - Create *UML class diagrams* for the main classes in your system.
   - Include *attributes*, *methods*, and *relationships*.

2. **Architecture and Deployment Diagrams**

   - Draw a *software architecture diagram* showing system components and their interactions.
   - Provide a *deployment diagram* indicating where and how each component will run (`server`, `container`, `cloud`).

3. **Business Process Documentation**

   - Document at least one key *business process* using an `activity diagram` or `BPMN`.
   - Briefly describe the *process* and its role in your application.

4. **Web UI Mockups/Screenshots**

   - Present *mockups* or *screenshots* showing the current state of your *web user interface.*
   - Highlight main *screens* and *user flows.*

5. **Delivery Format**

   - Compile all deliverables into a single `PDF`.
   - Organize your files in a folder named `Workshop-2` in your course project repository, with a `README.md` referencing each section.

Project Requirements Checklist

- Complete class diagrams for main classes.

- Architecture and deployment diagrams.

- Business process documentation.

- Web UI mockups/screenshots.

- Organized and referenced *documentation.*

Examples of Application Baselines

- E-commerce platform.

- Booking system.

- Social media app.

- Inventory management.

- Event registration.

Deadline

Saturday, October 18th, 2025, at 20:00. Late submissions may affect your grade according to course policies.

Notes

- All documents must be in **English**.

- Cite any references (`articles`, `tutorials`, `tools`) that influenced your design choices.

- Focus on *clarity* and *completeness*. This *design phase* will guide your implementation in future workshops.

Good luck! A clear and well-documented design will set the stage for a successful project implementation.