Object-Oriented Programming
Semester 2025-I
Workshop No. 1 — Object-Oriented Design

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Welcome to the first workshop of the *Object-Oriented Programming* course! This session focuses on creating a **conceptual design** for a *simple transactional application* you will develop during the semester. By applying object-oriented principles, you will structure your project's requirements, user interactions, and core classes in a clear, well-organized way.

Workshop Scope and Objectives:

- **Object-Oriented Concepts:** Introduce the main entities, operations, and data flows shaping your transactional application.

- **Requirements Gathering:** Specify both *functional* and *non-functional* requirements aligned with end-user needs.

- **User-Centric Design:** Create user stories that capture how end-users will interact with the proposed system.

- **CRC Cards & Mockups:** Develop preliminary *Class-Responsibility-Collaborator* (CRC) cards and *UI mockups* to define roles, relationships, and visual layouts.

Methodology and Deliverables:

1. **Requirements Documentation:**

   - *Functional Requirements:* Detail critical actions and system behaviors (e.g., user login, transaction handling).
   - *Non-Functional Requirements:* Include performance criteria, usability guidelines, and security considerations.

2. **User Stories:**

   - Write concise stories for different user roles (e.g., customer, admin).
   - Emphasize acceptance criteria to guide future development and testing.

3. **Mockups:**

   - Provide simple sketches or wireframes for key screens (e.g., main dashboard, transaction form).
   - Briefly explain the rationale behind each design choice.

4. **CRC Cards:**

   - Identify main classes, list responsibilities, and define collaborations.
   - Ensure classes remain cohesive, with well-defined roles in the application's domain.

5. **Delivery Format:**

   - Compile all documentation (requirements, user stories, CRC cards, mockups) into a single PDF.
   - Organize your files in a folder named `Workshop-1` in your course project repository, with a `README.md` referencing each section.

Deadline: Friday, April 11th, 2025, 16:00. Late submissions may affect your grading according to course policies.

Notes:

- All documents must be in **English**.
- Cite any references (articles, tutorials) that influenced your design choices.
- Focus on clarity over complexity. This foundation will evolve as you progress through subsequent workshops and refine your transactional application.

Good luck with your initial designs! Establishing solid requirements, user flows, and class responsibilities now will set you up for a successful implementation phase.