Common Track

Duration: 1 Day (8hrs Each)

Subject	Duration
Clean Code Best Practices	1 Day

Program and Detailed Outline:

Clean Code Best Practices: 1 Day (8hrs)

Course Outline:

Day 1:

- Developing a program
    - Qualities of good programs.
    - Trade-offs involved in software development.
    - Understanding and applying simple algorithms.
    - Introduction to Refactoring.
- Essentials of a readable program
    - Meaningful names for variables, functions, classes, etc
    - Names from problem domain, solution domain
    - Formatting: horizontal and vertical
    - Explain yourself in code vs comments.
- 'Clean' Functions
    - Writing small functions.
    - 'Do one thing' principle.
    - One level of abstraction.
    - Passing arguments to functions.
    - Command query separation.
    - Dealing with exceptions.
- Handling dependencies & instantiation in clean code
    - Separation of construction and use.
    - Dependency injection.
    - Cross cutting requirements.
- Technical Debt and Smells
    - Understanding technical debt.
    - Addressing technical debt.
    - Code smells.
    - How to deal with the code smells.
- **Lab Session: on concepts covered in the session.**

- **Assessment Exam**