

**PAF – Karachi Institute of Economics and Technology**  
**Design Patterns**  
**BS CS Fall 2019**

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**INSTRUCTIONS**

- This project covers 15% of the total weightage (tentative).
- Each of the milestones mentioned below holds some weightage. Neglecting any of them will cause some deduction in marks.
- All the diagrams must be designed using a UML tool (StarUML, rational rose etc.).

**Milestone#1: till 19<sup>th</sup> September, 2019 (Available slot)**

1. Project Proposal containing:
  - a. Project's description.
  - b. Group Members (three) along with student and class Ids.
  - c. Name of six (two from each category) Gof design patterns to be leveraged. (Read book for description.)
2. Initial class diagram of the project showing every static detail of the project.

**Milestone#2: week after mid (tentative)**

Midterm Evaluation comprising:

1. Complete class diagram of the project (before applying design patterns) showing every detail of the project.
  - a. Code according to the class diagram.
2. Implementation of three (one from each category) design patterns.
  - a. Purpose of using each pattern. (i.e. the problem statements).
  - b. Class diagram(s) after applying the design patterns.
    - i. Class diagram(s) must depict the use of the chosen patterns. (i.e. the solutions through chosen patterns)
  - c. Code according to design for all three patterns.
3. Viva related to the three patterns and project.

**Milestone#3: 18<sup>th</sup> November, 2019 (tentative)**

Final Evaluation comprising:

1. Complete running project along with the improved or same class diagram.
  - a. Code must completely follow the class diagram.
2. Implementation of the remaining three design patterns.
  - a. Purpose of using each pattern. (i.e. the problem statements).
  - b. Class diagram(s) after applying the design patterns.

- i. Class diagram(s) must depict the use of the chosen patterns. (i.e. the solutions through chosen patterns)
  - c. Code according to design for all patterns.
- 3. Viva related to the whole course.