

Course: Design and Analysis of Software Systems (2023)

End-Semester Examination (50 marks)

Duration- 2 hrs

All questions to be answered based on the class discussions and the course project. Please answer within required length limits. [Penalties for long/unnecessary answers.]

Part 1: Concepts

[20 marks]

Answer any 8 questions

Word Limit: 50 Words | 2.5 marks each

1. Explain evolutionary model with iteration.
2. Explain the Spiral Model and describe any one of the four quadrants.
3. What are the major problems with the classical waterfall model?
4. Why are lifecycle models needed in software projects?
5. Briefly define agile requirements modeling.
6. Differentiate between programs and software products (2 differences).
7. List any 2 modeling challenges specific to AGILE requirements modeling.
8. List the 2 different types of software (with brief explanation).
9. List 2 different users of Product Labs' badminton shot analysis tool (discussed in guest talk).
10. What is voice in UX design? What is tone (UX)?

Part 2: Design

[15 marks]

11. Briefly explain any 5 of the 10 key principles (one paragraphs each) of UX Design using diagrams when applicable.

(15)

Part 3: Project

[15 marks]

12. For your project, explain the **sprint-wise plan** for each of the **4 active dev sprints** along with the **backlog items** for each sprint (4-6 items per sprint). (15)
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