

CISC 7540X Final Exam

- Answers must be emailed in plain text (no formatting, no attachments).
- Email must arrive before 9am on 2021-12-16.
- Email *must* have your *full name* at the *top*.
- Email subject must be “CISC 7540X Final Exam”.
- Email to: `alex@theparticle.com`.
- Answers to questions must be clearly marked (question number before each answer), and be in sequence (question 1 should come before question 2, etc.).

Short-answer questions. Each question is worth 5-points. Leaving an answer blank earns 1-point (writing a wrong answer earns 0-points).

1. Project Management 4Ps: People, Product, Process, Project. Briefly elaborate on what aspects of People dimension the project manager needs to be concerned with.
2. Continuing from above, briefly elaborate on what aspects of Product dimension the project manager needs to be concerned with.
3. Continuing from above, briefly elaborate on what aspects of Process dimension the project manager needs to be concerned with.
4. Continuing from above, briefly elaborate on what aspects of Project dimension the project manager needs to be concerned with.
5. What are OKRs?
6. What makes for a strong vs weak OKR?
7. What are non-functional requirements?
8. How can NFRs be specified?
9. How can NFRs be tested for?
10. Regarding security, what is threat modeling?
11. Regarding security, what is social engineering?
12. Quality assurance: how do we ensure the product meets the requirements?
13. Quality assurance: how do we ensure the requirements and design is complete and accurate?
14. What is a data model? What does it contain? What are the objectives of data modeling? What are some different approaches to data modeling?
15. Describe the underlying principles of SDLC.
16. Describe the underlying principles of agile systems development methodologies. Contrast with SDLC.

17. Describe how Use Cases work in documenting user requirements.
18. Describe some ways of documenting/tracking progress during software development project (e.g. how to know we are 60% complete).
19. Briefly describe Data Flow Architecture. What projects is it appropriate for?
20. Briefly describe Model-View-Controller Architecture. What projects is it appropriate for?