Assignment 4

CS 372: Software Engineering Methodology

1. Explain the purpose of iteration in the Waterfall Model. 10
2. Is it possible to combine process models? If so provide an example. 10
3. Why prototyping is important in software engineering? Briefly explain how the prototyping model serves as a mechanism for identifying software requirements? 10
4. Suppose you are involved in a large project concerning the development of a patient planning system for a hospital. You may opt for one of two strategies. The first strategy is to start with a thorough analysis of user requirements, after which the system is built according to these requirements. The second strategy starts with a less complete requirements analysis phase, after which a pilot version is developed. This pilot version is installed in a few small departments. Further development of the system is guided by the experience gained in working with the pilot version. Discuss the pros and cons of both strategies.Which strategy do you favour? 10
5. How does the spiral model subsume prototyping, incremental development, and the waterfall model? 10
6. With a diagram describe that the RAD model is a “high speed” adaptation of the waterfall mode. 10
7. Explain Software Development V-Model Validation phases. 10
8. “Code and fix model scales up well to large projects” do you (strongly) agree or (strongly) disagree, and why.? 10
9. Explain which model is best suited if user is involved in all the phases of SDLC? 10
10. Suggest the most appropriate software process model for managing the development of a university accounting system to replace an existing manual system giving reasons. 10