FOR L01:

1. Introduction about programming languages. Why the programming language was needed?

2. Explain SDLC. What are the most common SDLC models explain?

3. Explain the problem related to this specific assignment.

a. What is the problem about?

b. What is the motivation?

c. What are the ways the problem can be solved?

d. What are you planning to implement among the solutions to this specific problem?

4. What are the user requirements?

5. What are the system requirements you need to have for successful completion of the project?

6. Explain the risks that is present in the successful completion of this project.

7. What are the coding standards you are about to follow? Explain. (Indentation, commenting code, variable declaration, naming convention for package and class, camel case)

8. What are the test methods that you want to implement in order to QA the software you have designed? Define white box testing, black box testing and grey box testing.

FOR L02:

1. What are the tools used for this project? Define tools like programming languages, Software design methodology, UML diagrams, ER diagrams, database software and other frameworks you are going to utilize.

2. Compare differences between the various programming languages (Java and .net for example)

3. Define java and its properties. Include the features of OOP without missing encapsulation, classes and objects, inheritance, polymorphism, platform ,multithreading,garbage collection etc.

4. Write disadvantages of using java if any?

5. Define IDE and what IDE you are using in this project. What are the benefits of using IDE? What are the tools available in IDE? (Code editor, compiler, debugger, documentation, libraries, and automation tools). Also compare at least two IDE for this project. (NetBeans and Drjava)

6. Define MVC, web technology, http protocol, http methods like POST and GET. Explain the evolution of web technology with appropriate diagrams.

7. Define jsp servlet and explain how the views are being created in jsp. What are the other options that can be used to create views.(like JSTL,(search for other options and mention them),etc)

8. Explain the layers of your application: Explain the flow of request in your JSP servlet MVC application.

9. Justify with proper reasoning why you are using the selected programming language, selected database software.

FOR L03:

1. Include the slide screens of the business applications, problem statement, your solution on how to handle the problem and the software development methodology you have chosen.

2. Include the code screens, IDE screens of layout of your source code organization.

a. For defining basic I/O include basic input output statement and show the code section. (screenshot is okay)

b. For showing use of array/ List include the code section containing array/List and accessing it. I hope the code where you use a result set output after executing a sql statement and create an object from result set after the while(rs.next()) you can use it. (screenshot is okay)

c. For showing the use of iteration show code section that uses for or for each loop. (screenshot is okay)

d. For defining conditional checks, show code section of if else or switch statement of the code of this program. (screenshot is okay)

e. For showing inheritance or use of interface, show code section that has used inheritance or interface. (screenshot is okay)

f. For showing the use of exception handling include a code section of exception handling. (screenshot is okay)

3. Give evidence that using the selected tool as mentioned in L01 and L02 has supported your development of software.

4. What are the improvements you can bring to the existing system? Include the things that are planned to implement later like online transaction handling, etc.

FOR L04:

1. Define performance metrics of the Software program.

a. What is the user satisfaction? Is all user requirements addressed?

b. What is UX? How can you justify that the UX you have implemented here in your software gives the full user satisfaction of his/her requirement?

c. What is the average execution time?

d. What is the average data fetch time?

e. What is the average new data entry time?

f. What is the memory usage?

2. What are the reasons your software is hindering from optimal performance? What are the factors that you can look into to improve the performances?

3. Does you risks identified has affected the performance of the software? If yes please write what risk has actually hit the software performance and how you can mitigate it.

4. In conclusion you write what are the strengths and weaknesses of your application. What are the future improvements you can provide?

FOR LAST:

Provide recommendations and references.

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