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19160041

IT/R16 CBC Sem VI

8PM

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Q2A)

- i) 1] Aspect-oriented software development is a new approach to software development that addresses limitations inherent in other approaches, including object oriented programming
- 2] In computing, aspect oriented software development is a software development technology that seeks new modularizations of software systems in order to isolate secondary or supporting functions from the main program's business logic
- 3] AOSD allows multiple concerns to be expressed separately and automatically unified into working systems
- 4] Traditional development process leaves it to the programmer to code modules corresponding to the primary functionality and to make sure all other issues of concern are addressed
- 5] Programmers need to keep in mind all the things that are needed to be done, how to deal with them, the problems associated with the possible interactions and the execution of the right behaviour at the right time by them.

- 6] These concerns span multiple primary functional units within the application, and often result in serious problems faced during application development and maintenance
- 7] The distribution of the code for realizing a concern becomes especially critical as the req for that concern evolve -
- 8] A system maintainer must find and correctly update a variety of situations
- 9] Aspect oriented software development focuses on the identification, specification, and representation of cross-cutting concerns and their modularization into separate functional units as well as their automated composition into a working system.

Q2) A)

iii)

1) Call and return architecture is used to create a program that is easy to scale and modify.

2) Many sub-styles exist within this category. Two of them are explained below:

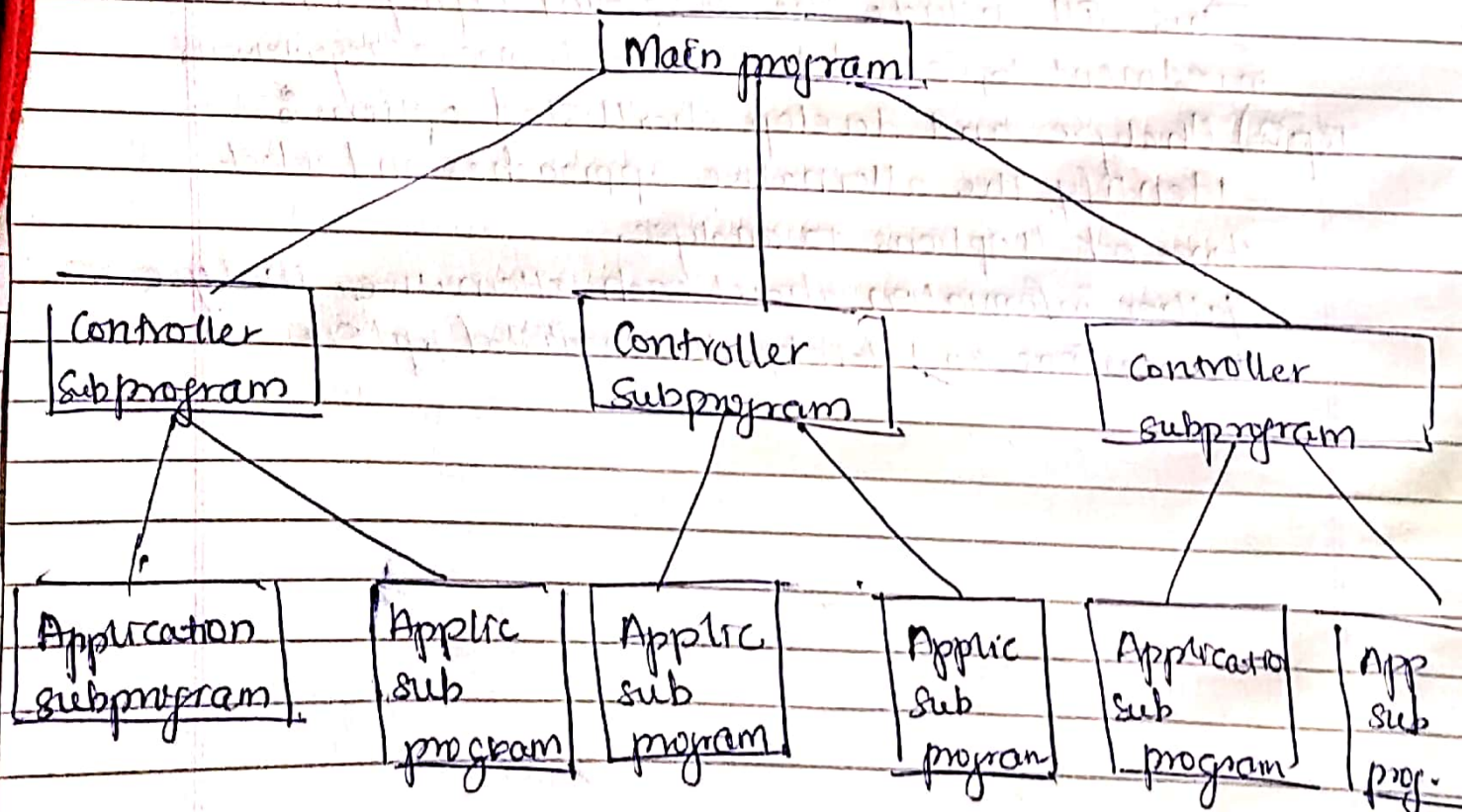
① Remote procedure call architecture:

This component is used to present in a main program or sub program architecture. distributed among multiple computers on a network.

② Main program or subprogram architecture

i) the main program structure decomposes into number of subprograms or function into a control hierarchy.

ii) main program contains number of subprograms that can invoke other components.



Q2) B) ii)

- 1] A business case captures the reasoning for initiating a project or task. It is often a well structured written document but may also sometimes come in the form of short verbal argument or presentation
- 2] Business case depends upon the business attitude and business volume.
- 3] The process of developing the business case is important, a well executed process enables you to develop a solid business case that increases the likelihood of securing support to proceed with the investment.

4] Here are the 5 key steps for creating a business case

Step 1) Confirm the opportunity:

Describe the situation and the business opportunity that your proposal will impact.

This will include the background to project, the investment type and high level business requirements

Step 2) Analyse and develop shortlisted options:

Identify the alternative approaches and select three or 4 options to analyse.

Gather information about each alternative, analyse the options and develop the shortlisted options

Step 3) Evaluate the options?

Evaluate how the alternatives will deliver on the business objectives, then select the preferred option taking into account the strategic & financial values created & the risks.

Step 4) Implementation strategy:

Create the implementation plan for the preferred option, detailing how to achieve the business objective, who will be accountable for each milestone.

Step 5) Recommendation:

Confirm the recommended option. Create the business case docs and present the business case recommendations to the board and management team for approval to proceed.