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SE Assignment 1

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Q1 Elaborate Task set for creating component level design in OO project.

⇒ The Task set for creating Component level design in OO projects

1) Identify all design corresponding to problem Domain

2) Identify all design classes that correspond to Infrastr. Dom.

3) Elaborate all design classes that are not aquired as reusable component.

(i) Specify message Details when classes / components collaborate

(ii) Identify appropriate interfaces for each component

(iii) Elaborate attributes & define data types & Data-Structure required to implement them.

(iv) Describe processing flow within each Operat in detail.

4) Describe present DS & identify the classes required to manage them.

5) Develop & Elaborate Behavioral Representation for a class or component.

6) Elaborate Development diagrams to provide additional implementation Details.

7) factor every component level design Representation & always consider alternatives.

2) The golden Rule of user Interface are:
   i) visibility
   ii) ~~Feed Back~~ Feed Back
   iii) consistency
   iv) Flexibility.
   v) Simplicity
   Methodology
   a) Place user in controle
   b) Reduce users Memory load
   c) Make interface concistent
   Define a Interaction modes in a way that does
   not force a user into unnecessary action.
   Provide for flexibility in action
   Streamline Interaltion with increasing Skill level &
   allow customized interaction.
   Hide technical internals from casual users
   Design for direct interaction with objects that
   appear on screen.

   d) Reduce users Memory load
   Reduce demand on short term memory
   Establish meaning full defaults.
   Define short-cut Intiutives
   Disclose information in progressive fashion
   e) Make interface concistent
   Allow user to put current task into a meaning full
   content.

(3) Transform mapping is a process used in Software Engineering to map data flow from source to destination

It is a set of design step that allow a DFD with transform flow characteristics to be mapped unto a Specified architecture Style

To map DFD unto a Software Architecture, we would initiate the following steps:

1) Review the fundamental System model.
2) Review & Refine Data flow diagram for Software
3) Determine whether DFD has transform transaction flow Characteristics.
4) Isolate the transform center by specifying incoming & outgoing flow boundries.
5) Perform first first level factoring.
6) Perform Second level factoring.
7) Refine first iteration Architecture using design heuristic for improved & software

(4) Transaction mapping involves mapping the flow of transaction within a system

It helps ensure that all necessary steps are identified & Executed correctly

Step:
→ (1) Identify logical Transactions
→ (2) Each logical transaction is mapped to a series of DB operation
→ (3) Transaction mapping Ensures automatic Transaction

(4) It involves ophmizing performance of transaction