4GT MODEL

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(SPM)
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PREPARED FOR

Engineering Students

All Engineering College

4GT- MODEL

- The full name of 4GT is from the fourth generation technique.
- It is based on NPL (non-procedural language) technology.
- Through the 4GT model, the software developer can automatically generate the source codes as per his wish.
- There are many software tools in fourth generation techniques that generate codes automatically.

4GT- MODEL

- This model has been created to reduce the time, effort and cost involved in developing the software.

- This model is very good for small projects but it is not a good approach for big projects.

4GT MODEL-TOOLS

4GT- MODEL: TOOLS

The 4GT model has the following tools for software development:-

- report generation
- database query language
- high level graphics
- code generation
- data manipulation
- web engineering tools
- screen definition and interaction

4GT MODEL-CHARACTERISTICS

4GT- MODEL: CHARACTERISTICS

Its features are as follows:-

1:- By this the developer generates codes based on his specification.

2:- It takes more time in design and testing, which increases productivity.

3:- Using the tools is a bit difficult and the codes that are generated are not efficient.

4GT MODEL-ADVANTAGES

4GT MODEL-ADVANTAGES

Its benefits are as follows:-

 1:- It simplifies the process of programming.
 2:- It uses non-procedural language so that users and programmers
can specify the product they want.
 3:- It is easy to maintain the program.
 4:- Software can be developed rapidly.
 5:- Its program is portable,
 6:- It is flexible i.e. the design of the software can be modified easily.

4GT MODEL-DISADVANTAGES

4GT MODEL-DISADVANTAGES

1:- There is no effective approach for big projects.

2:- The CPU takes more time to execute the programs, that is the speed of these programs is slow.

4GT MODEL-PHASES

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It consists of 4 phases:-

- **Requirements Gathering**

- **Design**

- **Implementation**

- **Testing**

4GT MODEL-PHASES

Requirement gathering: -

- Like every model, the first phase requirement is to be gathered.
- Although the requirements are collected from the customer.
- But, the customer is not sure what his requirements are, so many methods are used to collect the requirements.

4GT MODEL-PHASES

Design:-

- A presentation of all the requirements we have collected is prepared.
- Which describes the data structure, algorithm procedures, and architecture.

4GT MODEL-PHASES

Implementation: -

- This is the third phase, in which the design presentation is converted into an artificial language, which is done by the whole computer.
- The computer automatically generates the codes.

4GT MODEL-PHASES

Testing:-

- This is its last phase.
- The software developed in this is tested and if any mistake is found in it then it is rectified.