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CSE 404

Final Exam

Answer to the ques no-01

Generic software product	Custom software product
① In Generic software product, the product develo -per owns the specification	① In Custom software product, the customer owns the specification and controlled by the customer.
② Stand-alone system that are marketed and sold to any customer who wish to buy them	② Software that is commi -ssioned by a specific customer to meet their own needs
③ ~~The devel~~ The generic product user cannot control the evolution of the product.	③ The custom product evolution happen when the customer need to change
④ The user can get the application immediate -ly.	④ The application will take some time to development.
⑤ Less expensive	⑤ More expensive
⑥ More reliable	⑥ Less reliable

Softwaare cost more to maintain than it does to develop. For system with a long life maintaence cost may be several times development cost. If we need a effecieant system we need to alwayes ~~cee~~ cheuk and change for better result. And every time we do that it cost lots of time avad money. So software cost more to maintain than it does to develop.

Answer to the ques no-02

Limitations of the Linear sequential Model:

① The requirments of the system can be frozen before the degines.

② Freezing the requirments usually requires choosing the hardware. A large project might take afew years to complete.

③ It is difficult for the customers to state that the requirements clearly at the beginning.

V-Model

V-Model is an SDLC model where execution of processes happens in a sequential manner in a V-Shape. It is also known as Verification and validation model. This is highly-disciplined model and the next phase starts only after completion of the previous phase.

~~In V Model,~~

This works well for smaller projects ~~there~~ where requirements are very well understood. Easy to manage due to the ~~right~~ rigidity of the model. Each phase has specific deliverables and a review prosess.

Q.

Purpose of the Daily Scrum Event:

The purpose of the daily scrum event is to inspect progress made towards the sprint goal and progress made in the Sprint Backlog, in order to adapt the plan for the rest of the Sprint. The structure and meeting flow of the Daily Scrum is determined by the Development team, as long as it's focussed around the progress towards the Sprint Goal.

Answer to the ques no-03

Serial no	noun/noun phrase	attributes
1.	Security	
2.	Smoke detectors	
3.	motion detector	
4.	undesirable situation	5, 6, 7
5.	illegal entry	
6.	fire	
7.	flooding	
8.	window and door	
9	alarm	
10	event	
11	control panel	
12	display	
13	telephone number	
14	telephone call	
15	Services	9, 13, 14, 11, 12
16	system	2, 3, 8, 9, 10, 11, 12, 13, 14

Grenenal classificationo of safehome:

NO	Noun/Nounphase	Grenenal classificatia	Remanks
1	Security	7	✓
2	Smoke detecton	2	
3	motion detecton	2	✓
4	undesirablesitua	3, 7	✓
5	Illegal entry	3	✓
6	fire		✓
7	flooding		
8	window and doon	2	
9	alarm	2	✓
10	event		✓
11	control panel	7	
12	display	2	✓
13	telephon no.		✓
14	telephone call		
15	Services		
16	systena	7 7	✓ ✓

Yourdon yourdon's six selection criteria of Software

No	Potential class	Selection criteria	Remarks
1	Security	6	
2	Smoke detector	2, 4, 5	✓
3	Motion detector	2, 4, 5	✓
4	Undesirable situa	2, 3	
5	Illegal Entry	2	
6	window and door	2	
7	Alarm	2	
8	control panel	2, 4, 5	✓
9	Display	2, 4, 5	✓
10	Services	3, 6	
11	System	3, 6	

Answer to the ques no-04

Test case using BVC:

Intiger	Expected output
1	prime
2	prime
100	Not prime
99	Not prime
53	prime

4n+1

Min = 1

Min+ = 2

Max = 100

Max- = 99

Nominal = 53

Robust Testing

Intiger	Expected output
0	Invalid
101	Invalid

6n+1

Min- = 0

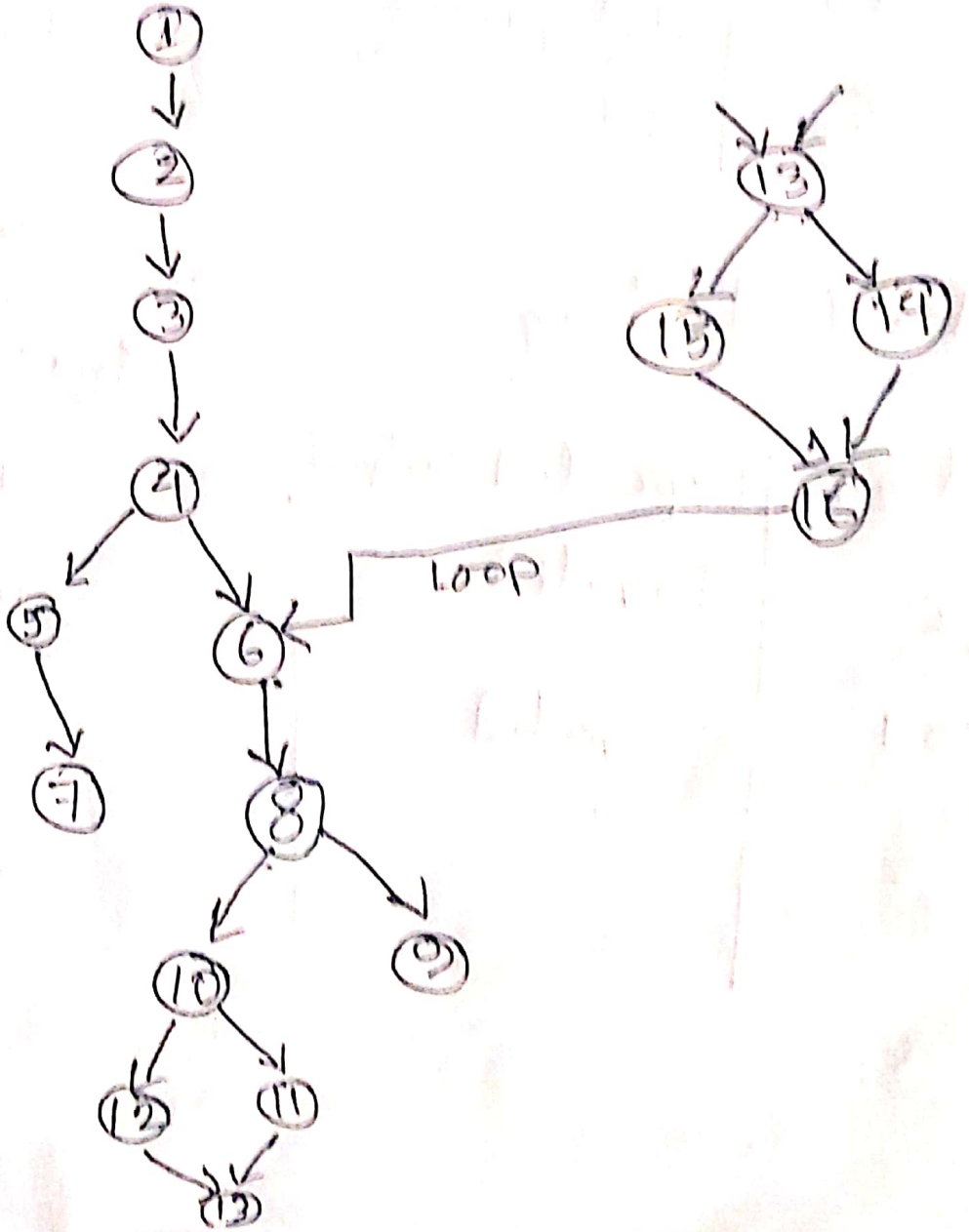
Max+ = 101

Worst case testing

For worst case $5^n = 5^1 = 5$

So, BVC and worst case test results will be same.

Control flow Graph:



~~Compl~~

Cyclomatric complexity:

We know,

$$cc = E - N + 2$$

$$= 18 - 16 + 2$$

$$= 4$$

∴ Cyclomatric complexity is 4.