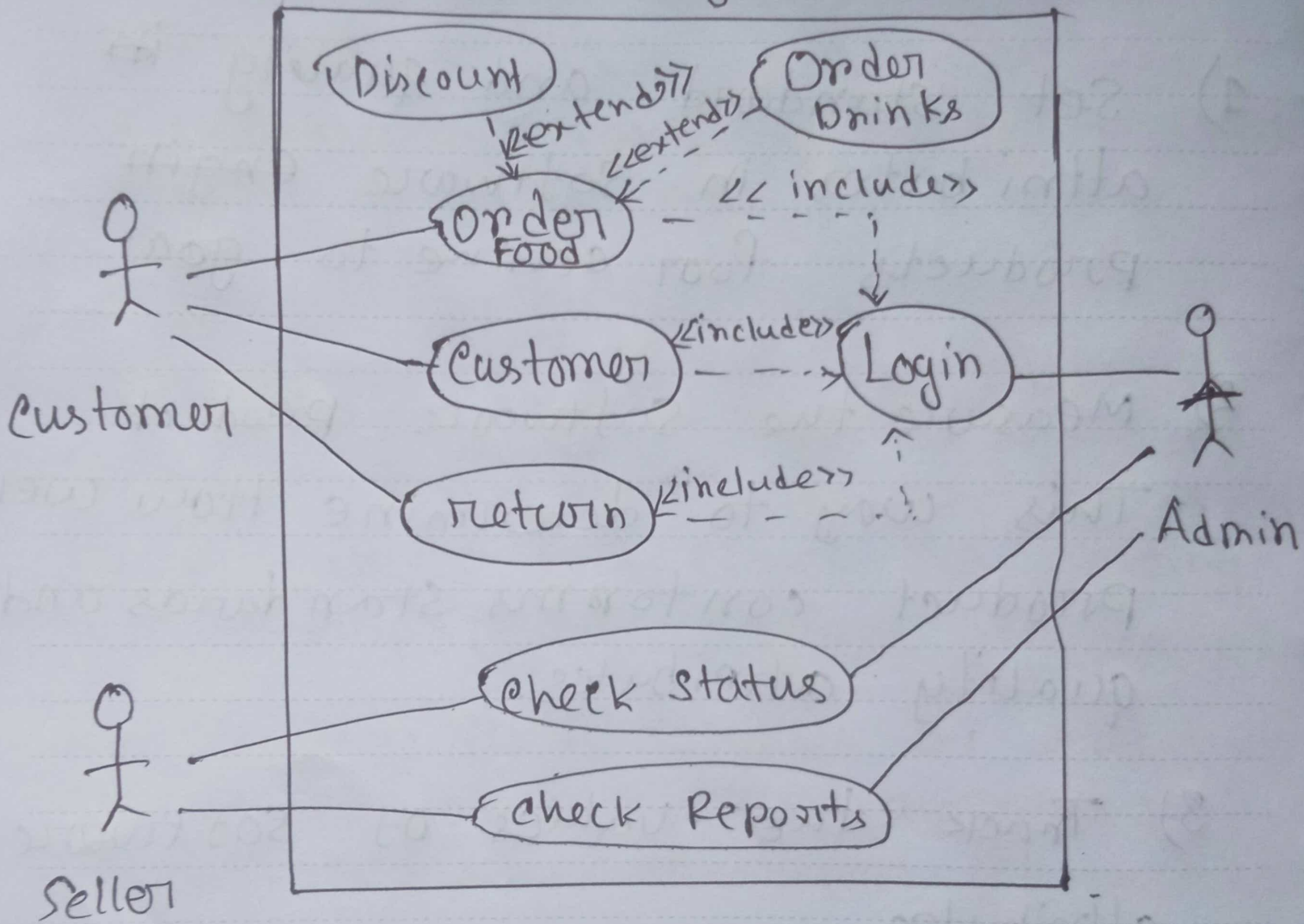


Part A

1)

Food ordering System



4. (i) Provides many Job-opportunities

(ii) Increase productivity

(iii) Improve quality of Software products

ALGICID DX

Pantonix®

iv) To increase customer satisfaction

2) Principle of SQA:

- 1) Set standard and quality attributes in software engineering products for achieve to goal.
- 2) Measure the software product.
This way to determine how well product conforms standards and quality attributes.
- 3) Track the values of software attributes.
- 4) Improve quality of software product, There is feedback system of software development process.

Black box testing: The test engineer

Perform the testing. The software how it working does not matter. The matter is can or can't full up the required action. There is no need

programming language and internal design of the code.

Alpha testing: It is conduct at developer end. It is performed in environment ^{controlled} by developer. It works before software release. It ~~en~~ involves both white and black box testing. The developer solve error and problem.

Beta testing: It is conduct at end user. It is performed in environment not controlled by developer. It works after realising. It involves only black box testing. The end user can not solve error and problem. They can only feedback to developer.

3] Requirement Engineering Tasks:

The process of collecting the software requirements and understanding, ~~and~~ analyzing, documenting. It is a

List of Requirement Engineering Tasks:

1. Inception. 2. Elicitation 3. Elaboration
4. Negotiation 5. Specification
6. Validation 7. Requirement Management.

1. Inception:

- i) It is the first analysing or starting process of project
- ii) They understand basic details aim, goal of the project and find the solution.
- iii) They identify stakeholders and who want to the solution.

(iv) They understand nature in solution.

(v) Collaboration between customer and developer.

2) Elicitation:

(i) Gathering all requirements from stake holder.

(ii) The right people must be involved in the phase, no space for mistake.

3) Elaboration:

(i) Gathering between first two phase Inception and Elicitation.

(ii) Main task is developing prototype and model in the feature and function.

4) Negotiation:

(i) Negotiation between customer and developer about limited resource, protect cost, delivery time.

5) Specification:

- (i) construct the final ^{work}~~year~~ product
- (ii) DFD, ER, use case used in the phase
- (iii) Document submit to the customer.

6) Validation:

- (i) It checking error and debugging
- (iii) It is check missing into and want to add additional into.

7.) Requirement management:

- (i) It the process of managing changing requirement during development and deliver to the customer.

① White box: The developer can perform it. The software how it working. It is the main matter. There is need programming language and internal ~~desi~~ code.

3 ways of calculating System CC:

1. Number Regions

$$2. V(G) = E - N + 2$$

E = number of edges

N = number of Nodes

$$3. V(G) = P + 1$$

P = number of predicate nodes.

Cyclomatic complexity of

following graph:

1. Number of region = 4

$$2. V(G) = 11 - 9 - 2 = 4 \quad \left| \begin{array}{l} E = 11 \\ N = 9 \end{array} \right.$$

$$3. V(G) = 3 + 1 = 4 \quad | P = 3$$

Here number of independent roads is 4.

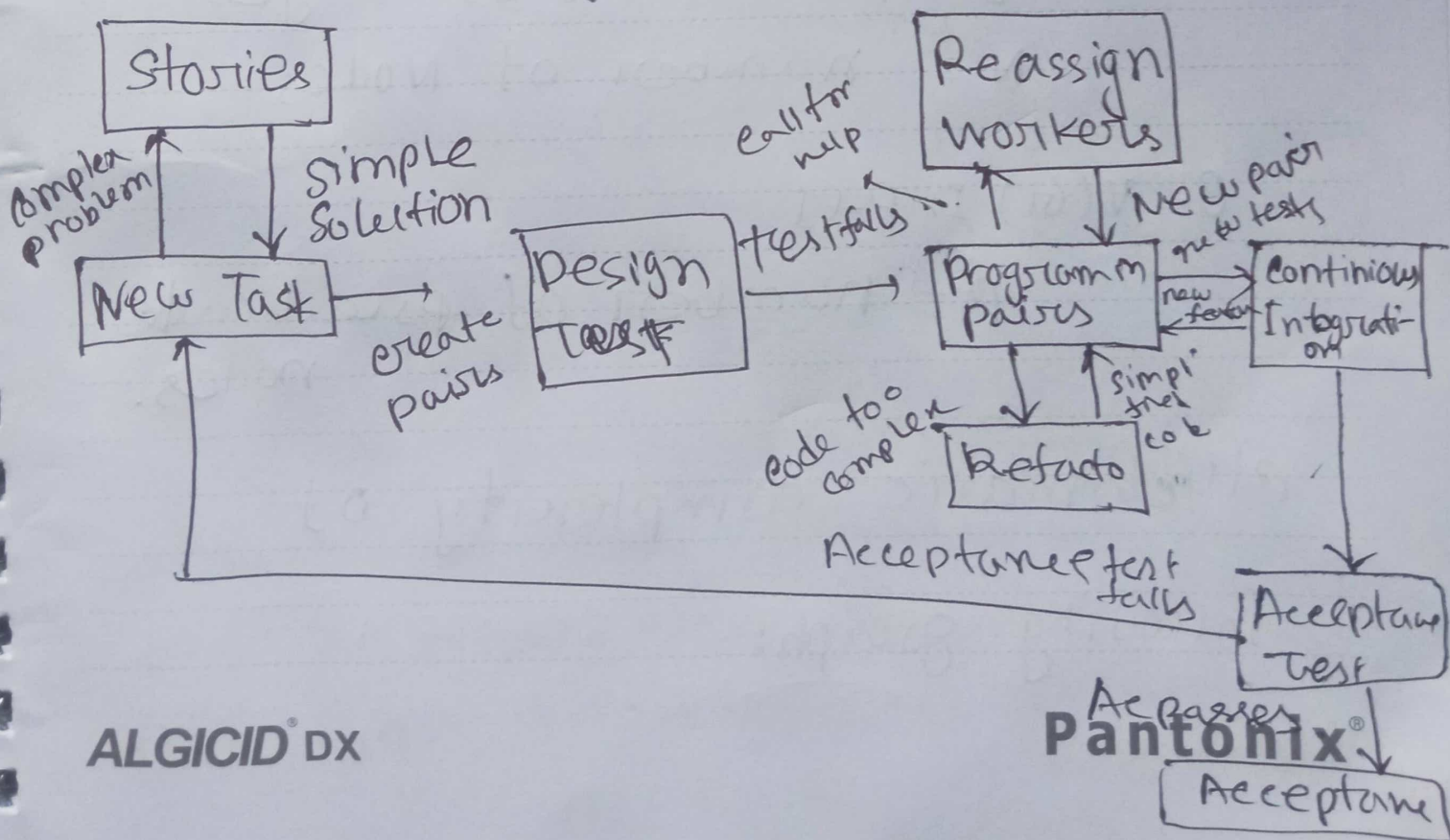
→ 1-11

→ 1-2-3-4-5-10-1-11

→ 1-2-3-6-7-9-10-1-11

→ 1-2-3-6-8-9-11-1-11

5)



Horizontal prototype: It is making a basic model of the whole system with a few feature from each part.

Vertical prototype: It is when you create simplified version of system that was all parts but only focus on a specific set of features.

