

18/07/24

Analytical

1) Given

Analytical phase:-

a) person day = 80, Team members: 5, Hourly Rate: \$50,

Lost of analysis phase =

$$\begin{aligned}\text{Cost} &= 30 * 8 * 80 * 5 \\ &= 60,000\end{aligned}$$

b) Design phase

$$\begin{aligned}\text{Cost} &= 40 * 8 * 50 \\ &= 80,000\end{aligned}$$

c) Implementation phase

$$\begin{aligned}\text{Cost} &= 70 * 8 * 50 * 5 \\ &= 140,000\end{aligned}$$

d) Testing phase

$$\begin{aligned}\text{Cost} &= 35 * 8 * 50 * 5 \\ &= 70,000\end{aligned}$$

Maintenance phase

$$\begin{aligned}\text{Cost} &= 25 * 8 * 50 * 5 * 12 \\ &= 6,00,000\end{aligned}$$

b) cost = sum of all phase * cost

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: \$50,

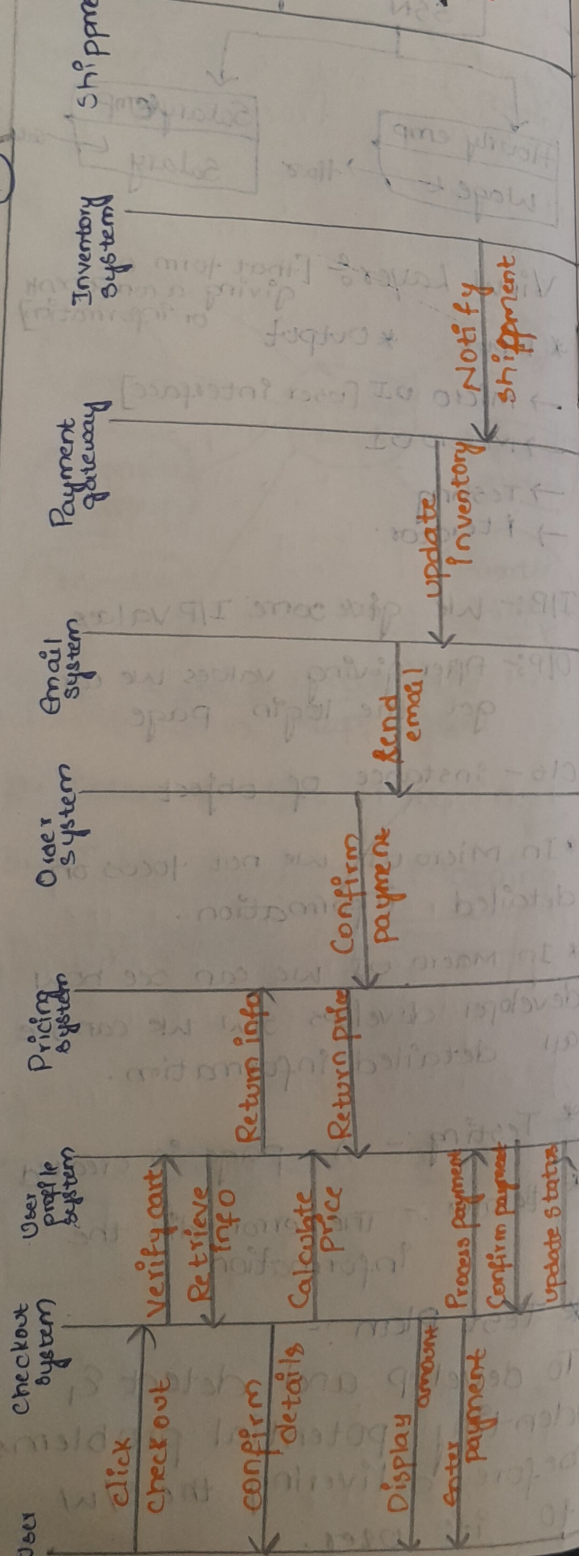
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$$\text{Cost} = 2 * 20 * 8 * 50 * 5$$
$$= 80,000$$

$$d) \text{Cost} = (12-6) + 25 * 8 * 50 * 5$$
$$= 3,00,000$$

Sequence Diagram



3. Let's assume that

- * 1 Complexity point corresponds to 1 hour of implementation
- * 1 scenario corresponds to 1 hour of testing

Step-1:-

Calculate the total estimated time (in hours) required to implement to all the use case.

The total implementation time is calculated by summing up the complexity points of each use case

Use case	Complexity point
Brows product	8
Add to cart	13
Checkout	20
Manage Account	4
View order history	17

Step-2:- Calculate the total estimated time (in hours) required to test all scenarios

Use case	No. of scenarios
Browse product	5
Add to cart	3
Checkout	15
Manage account	6
view order history	5

Total
Testing
time = 34
hrs

Step-3:- Determine the overall project time by combining the implementation and testing times.

$$\begin{aligned}\text{Overall project time} &= \text{Total implementation time} + \text{Total testing time} \\ &= 62 + 34 = 96 \text{ hrs}\end{aligned}$$

∴ The total estimated time required to implement and test all the usecase is 96 hours.