Online Animal Care

Group – 3

Timeline Charts

Weeks Task : Person	1	2	3	4	5	6	7	8	9
A : Anik	▓	▓							
B : Nafiz		▓	▓						
C : Raiyan, Sharna			▓	▓	▓				
D : Anik, Nafiz						▓	▓		
E : Nafiz, Raiyan								▓	
F: Anik, Sharna								▓	▓
G: Nafiz, Raiyan									▓

Activity key:

A: Requirement analysis

B: Designing/Modeling
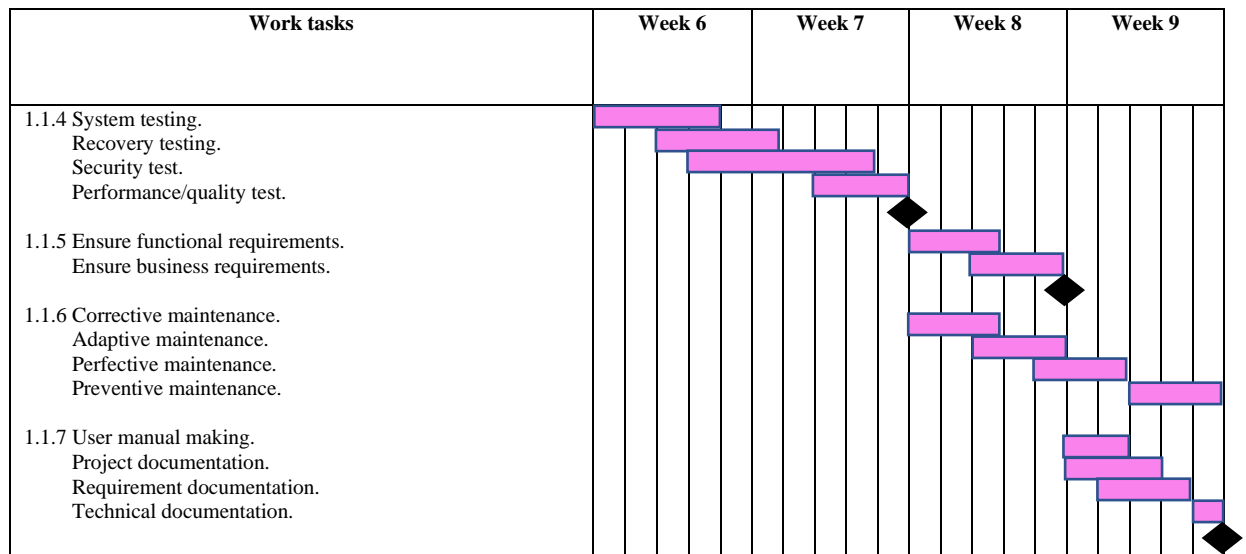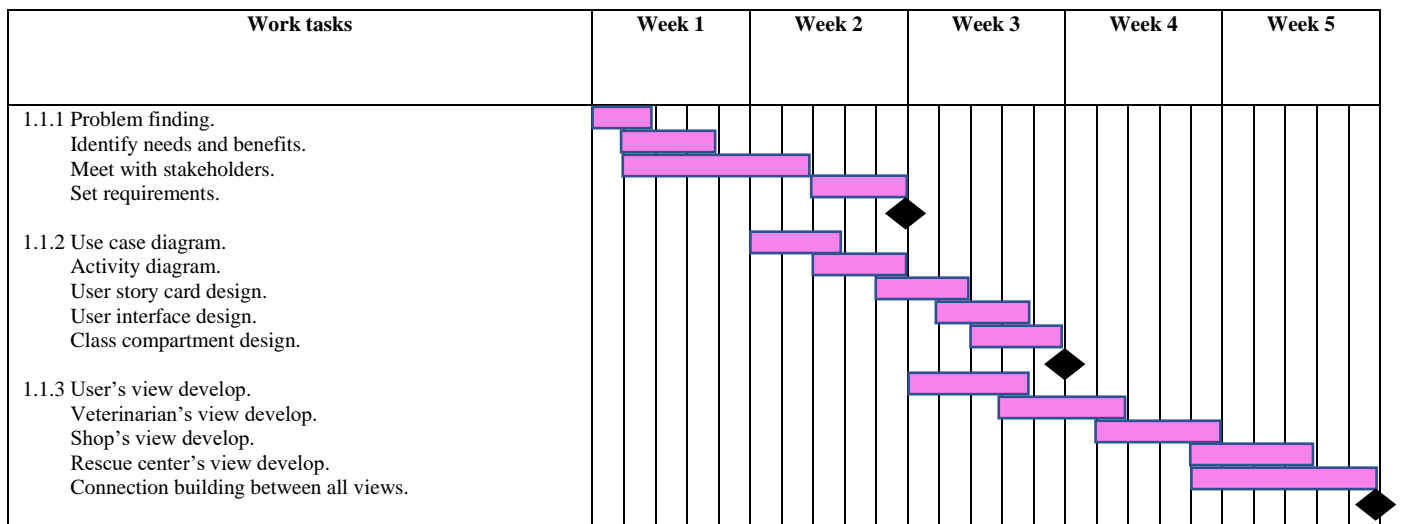
C: Coding/Development

D: Testing

E: Implementation/Integration phase

F: Operation/Maintenance

G: Documentation

Work tasks	Week 1	Week 2	Week 3	Week 4	Week 5
1.1.1 Problem finding.					
Identify needs and benefits.					
Meet with stakeholders.					
Set requirements.					
1.1.2 Use case diagram.					
Activity diagram.					
User story card design.					
User interface design.					
Class compartment design.					
1.1.3 User's view develop.					
Veterinarian's view develop.					
Shop's view develop.					
Rescue center's view develop.					
Connection building between all views.					

Work tasks	Week 6	Week 7	Week 8	Week 9
1.1.4 System testing.				
Recovery testing.				
Security test.				
Performance/quality test.				
1.1.5 Ensure functional requirements.				
Ensure business requirements.				
1.1.6 Corrective maintenance.				
Adaptive maintenance.				
Perfective maintenance.				
Preventive maintenance.				
1.1.7 User manual making.				
Project documentation.				
Requirement documentation.				
Technical documentation.				

Constructive Cost Model

Software project type: Organic

Coefficient_{<Effort Factor>} = 2.4

So, **P** = 1.05 and **T** = 0.38

SLOC = 10000 Lines

Persons-months, PM = Coefficient_{<Effort Factor>} * (SLOC/1000)^P

$$= 2.4 * (10000/1000)^{1.05}$$

$$= 26.93$$

Development time, DM = 2.50 * (PM)^T

$$= 2.50 * (26.93)^{0.38}$$

$$= 8.74 = 9 \text{ months} = 1584 \text{ Working hour}$$

Required number of people, ST = PM/DM

$$= 26.93/9$$

$$= 2.99 = 3 \text{ people}$$

Budgeting

Developer salary of 9 months:
> Per developer salary per working hour = 700 Taka
> Total developer salary = 700 * 1584 = **11,08,800 Taka**

Requirement analysis:
> Required time = 1 month = 22 working days = 176 working hour
> Requirement analysis person's per hour salary = 200 Taka
> Total requirement analysis salary = 200 * 176 = **35,200 Taka**

Transportation cost: 10,000 Taka (Approximate)

Hardware expense: 1,00,000 Taka (Approximate)

Rent expenses:
> Room per month = 12,000 Taka
> Total in 9 months = **1,08,000 Taka**

Total utilities in 9 months: 15,000 Taka (Approximate)

Maintenance (Till 3 months after delivery):
> Cost per hour = 1,200 Taka
> Total estimated time needed for maintenance = 30 hours
> Total estimated maintenance cost = 1,200 * 30 = **36,000 Taka**

Project manager's salary of 9 months:
> Per month salary = 30,000 Taka
> Total salary = 30,000 * 9 = **2,70,000 Taka**

Accountant's salary of 9 months:
> Per month salary = 5,000 Taka
> Total salary = 5,000 * 9 = **45,000 Taka**

Total expense: 11,08,800 + 35,200 + 10,000 + 1,00,000 + 1,08,000 + 15,000 + 36,000 + 2,70,000 + 45,000 = **17,28,000 Taka**

Profit:
> 25% of total expense = 17,28,000 * 25% = **4,32,000 Taka**

Total budget: 17,28,000 + 4,32,000 = 21,60,000 Taka