PawPal

Your Pet's Digital Companion

Presented By

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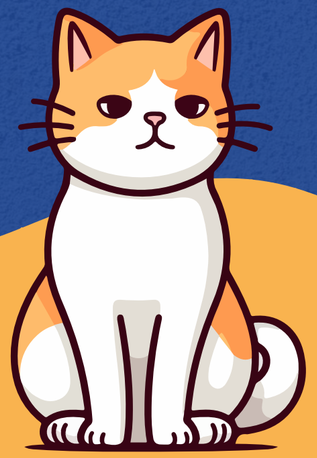


PMG 4101

Our Mission

To deliver a trusted, unified, and accessible digital platform that simplifies pet care by integrating veterinary services, pet products, and community support tailored for the people of Bangladesh

MISSION | VISION | PURPOSE

Mission

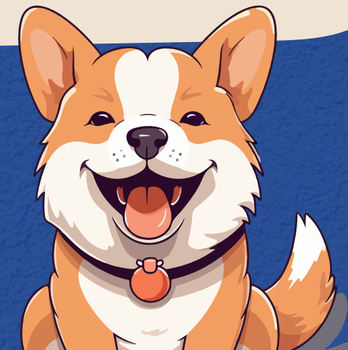
To redefine pet care in Bangladesh by building a smart, compassionate, and connected platform where every paw finds care, every owner finds ease, and every service feels just a click away.

Vision

A future where pet care is no longer scattered or stressful. PawPal envisions a digitally united pet ecosystem where technology meets empathy, empowering owners to provide love, health, and happiness to every pet – anytime, anywhere

Purpose

To make pet care simple, accessible, and compassionate by uniting services, empowering communities, and ensuring no pet or owner is left behind.



METHODOLIOGES

- Waterfall: Too rigid for evolving user needs.
- Spiral: Too complex/resource-intensive for academic project budgets.
- XP (Extreme Programming): Requires highly experienced agile teams and rigorous communication.

SELECTED METHODOLOGY

Agile Software Development Lifecycle (SDLC)

- Allows quick adaptation to evolving user needs and technical challenges
- Encourages team collaboration, transparency, and continuous improvement
- Continuous feedback from pet owners

Work Breakdown Structure

Project Breakdown – Major Modules

User Authentication & Profile Management
MediPaws – AI E-Pharmacy
PawCessories – Pet Accessory Store
VetConnect – Vet Appointment Booking
PawMeet Live – Video Consultations
PawSitter – Pet Sitting & Walking Services
PawTalk Forum – Community Platform
VetPulse – Health Reminder System
PawAlert – Emergency Map Locator
PayPaws – Payment Gateway Integration

WBS Table

Task	Task Owner	Duration
User Management	Zawed,Ishrak,Mahrab,Lipu	6 days
MediPaw	Abrar,Lipu,Mahrab,Zawed	12 days
PawCessories	Ishrak,Mahrab,Zawed,Lipu	8 days
VetConnect	Zawed,Abrar,Lipu,Mahrab	9 days
PawMeet	Abrar,Mahrab,Ishrak	10 days
PawSitter	Ishrak,Mahrab,Abrar,Lipu,Zawed	12 days
PawTalk	Abrar,Mahrab,Zawed	8 days
VetPulse	Lipu,Mahrab,Abrar,Zawed	16 days
PawCart	Ishrak,Mahrab,Lipu,Zawed	25 days
PawAlert	Zawed,Mahrab,Abrar	5 days
PayPaws	Lipu,Abrar,Zawed	7 days

DELPHI WIDEBAND

COCOMO Calculation for PawPal

PawPal is a web-based application, the codebase is written in JavaScript. According to the Quantitative Software Management (QSM), the lines of code per function point is 47 (Software Estimation Resources | QSM). So, for PawPal,

Project Type	a	b	c	d
Organic	2.40	1.05	2.50	.38
Semi-detached	3.00	1.12	2.50	.35
Embedded	3.60	1.20	2.50	.32

- LOC = 47 × 444.28 = 20881.16 or 20.88116 KLOC

Technical Complexity Factor (TCF)

Technical Factors	Factor points
F1 Reliable backup and recovery	4
F2 Data communications	5
F3 Distributed functions	2
F4 Performance	3
F5 Heavily used configuration	4
F6 Online data entry	3
F7 Operational ease	4
F8 Online update	3
F9 Complex interface	3
F10 Complex processing	4
F11 Reusability	3
F12 Installation ease	4
F13 Multiple sites	4
F14 Facilitate	5
∑F	51

In COCOMO, the technical complexity factor TCF is a concept present in the Intermediate COCOMO model, not the Basic COCOMO which uses unadjusted function points UFP. The TCF refines the UFP count by considering additional factors that influence the inherent complexity of the software being developed. These factors go beyond the basic functionality and delve into technical characteristics that can make the project more challenging to build.

Effort Calculation

In basic COCOMO, Effort (E) is calculated using the equation:

- Effort, E = a × (KLOC)^b

  E = 2.40 × (20.88116)^1.05 = 58.338

Where,

a=2.40
b=1.05
KLOC=20.88116

For PawPal, the effort required is 58.338 Person/Months.

Development Time

In basic COCOMO, Development Time (D) is calculated using the equation:

- Development Time, $D = c \times (E)^d$

  D = 2.50 × (58.338)^0.38 = 11.722

Where,

c=2.50
d=0.38
E=58.338

For PawPal, the development time is 11.722 Months

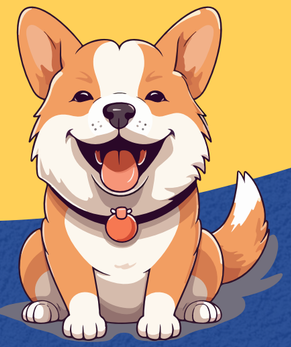
Gantt Chart

Duration: February 2 – May 15, 2025
Total Phases: 12 Key Milestones

Task / Date->	2/2	16/2	2/3	8/3	16/3	23/3	1/4	15/4	22/4	24/4	1/5	2/5	7/5	8/5	15/5
Requirements Analysis	x	x													
System Design		x	x												
User/Admin & Profiles			x	x											
MediPaws & PawCessories				x	x										
VetConnect & Appointments					x	x									
PawMeet Live						x	x								
PawSitter Service							x	x							
PawTalk Forum								x	x						
VetPulse & Notifications									x	x					
PawAlert (Emergencies)										x	x				
Testing & QA												x	x		
Deployment														x	x

Conclusion

PawPal began with a simple question: What if pet care was as loyal as the pets themselves? From that idea, we built a connected, compassionate digital world for pets and their people.By blending technology, empathy, and local insight, PawPal became more than just a platform – it became a movement to ensure that no paw goes unseen, no bark unheard, and no pet parent unsupported.
From AI health checks to emergency maps, from playful toys to trusted sitters, we've crafted a solution that speaks your pet's language – and your own.
And we're just getting started.
PawPal isn't just a project. It's a promise that pet care in Bangladesh will never be the same again – it'll be better, smarter, and full of heart.



Any Question ??

PawPal

Thank You!