

Agile Planning for Dog Breed Prediction Project

Story Point Scale (Fibonacci): **1, 2, 3, 5**

- 1 → Very Easy Task
 - 2 → Easy Task
 - 3 → Moderate Task
 - 5 → Difficult Task
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Sprint 1

Epic 1: Data Collection

Story	Task	Story Points
USN1	Collect Dog Breed Dataset	3
USN2	Organize Images into Folders	2
USN3	Verify Image Labels	2

Epic 2: Data Preparation (Data Cleaning & Preprocessing)

Story	Task	Story Points
USN4	Resize Images (128x128)	3
USN5	Handle Corrupted/Missing Images	3
USN6	Normalize Image Pixels	2
USN7	Apply Image Augmentation	3

Total Story Points in Sprint 1

$$= 3 + 2 + 2 + 3 + 3 + 2 + 3 \\ = \mathbf{18}$$

Sprint 2

Epic 3: Model Building

Story	Task	Story Points
USN8	Load VGG19 Pre-trained Model	3
USN9	Freeze Base Layers	2
USN10	Add Dense & Output Layers	3
USN11	Compile Model	2

Epic 4: Model Training & Evaluation

Story	Task	Story Points
USN12	Train Model (Epochs)	5
USN13	Validate Model Accuracy	3
USN14	Save Model (.h5 file)	1

Epic 5: Flask Application Development

Story	Task	Story Points
USN15	Create HTML Pages	3
USN16	Build Flask Backend	5
USN17	Integrate Model with Flask	5
USN18	Display Prediction Result	2

❖ Total Story Points in Sprint 2

$$\begin{aligned} &= 3 + 2 + 3 + 2 + 5 + 3 + 1 + 3 + 5 + 5 + 2 \\ &= \mathbf{34} \end{aligned}$$

Total Story Points

Sprint 1 = 18
Sprint 2 = 34

Total Story Points = $18 + 34 = \mathbf{52}$

Number of Sprints = 2

⚡ Velocity Calculation

Velocity = Total Story Points / Number of Sprints

$$= 52 / 2$$

= **26 Story Points per Sprint**