

## SPRINT RETROSPECTIVE 1

What Went Well	What Could Be Improved	Action Items / Improvements for Next Sprint
Successfully set up the <b>project environment</b> and collected the <b>gait video dataset</b> .	<b>Initial model showed signs of overfitting</b> , indicating the need for better regularization and data augmentation.	Optimize frame selection strategy (e.g., <b>uniform stride sampling</b> ) to reduce data volume.
Implemented <b>frame extraction and pose estimation</b> using <b>MediaPipe</b> , which effectively generated joint keypoints.	<b>Training time was high</b> due to unoptimized data pipeline and large frame sequences.	Use <b>cross-validation</b> and apply <b>dropout/early stopping</b> to mitigate overfitting.
Built the <b>initial LSTM-based model</b> architecture and trained it on the extracted features.	Label imbalance between Normal and KOA severity levels caused <b>biased predictions</b> .	Explore <b>data augmentation</b> techniques for increasing dataset diversity.
Achieved preliminary classification results for KOA severity with reasonable accuracy.	Limited variation in gait videos affected the <b>generalizability of the model</b> .	