

Teamwork Agreement: KneeVision

Project: AI-Driven Knee Osteoarthritis Analysis Platform

1. Project Mission

KneeVision is dedicated to developing a high-accuracy, efficient, and user-friendly AI platform for Knee OA analysis. Our team goal is to deliver a production-ready MVP that serves clinical, research, and educational needs while maintaining high academic and technical standards.

2. Team Roles & Responsibilities

- **Scrum Manager:** Schedules meetings, manages the product backlog and Jira tracker, and ensures milestone deadlines are met.
- **Technical Lead:** Oversees system architecture, ResNet50 model integration, and technical conflict resolution.
- **Frontend Lead:** Responsible for the React UI/UX, accessibility, and frontend-backend integration.
- **Backend & Cloud Lead:** Manages the Flask API, PostgreSQL database, and data security/audits.

3. Communication & Collaboration

- **Channels:** Discord/Outlook (Technical discussion), WhatsApp (Quick updates/Alerts), Zoom (Meetings), GitHub (Code), and GitHub Wiki (Documentation).
- **Respect & Inclusion:** Every member's opinion is respected. Major diversions from planned activities must be proposed via WhatsApp and approved by the team.
- **Conflict Resolution:** For opinion-based conflicts, both parties will present researched solutions. The team will then vote, with the majority decision being final.

4. Meeting Schedule & Pattern

- **Recurring Meetings:** Scheduled twice weekly.
- **Agenda:** Every meeting will have a fixed Agenda document to allow for preparation.
- **Absences:** Members must inform the group chat in advance. Meetings may be recorded for absent members to catch up.
- **Sprints:** A Sprint Plan is devised in the first meeting after a sprint completion. The last meeting of each sprint includes a **Retrospective Analysis**.

5. Team Dynamics & Principles

- **Workload:** Tasks are distributed evenly. Heavy workloads are broken into smaller chunks.
- **Blockers:** Members are encouraged to attempt self-resolution and document tried solutions before approaching the team to speed up resolution.
- **Accountability:** Members must update the **Jira tracker** regularly, linking work to GitHub commit IDs or shared documents.
- **Kindness:** All interactions are grounded in respect and patience.

6. GitHub Workflow

- **Alerts:** Members must update the WhatsApp group when pushing code to avoid merge conflicts.
- **Conflicts:** Conflicts affecting code outside a member's own block must be discussed with the team before resolution.
- **Branching:** No direct pushes to main. Features are developed on branches and merged via Pull Requests (PRs) requiring at least one peer approval.

7. Checklist for Task Completion (Definition of Done)

A task is marked as "Completed" only when:

- ☐ Code runs without syntactical or runtime errors.
- ☐ Code is thoroughly reviewed and tested by the assigned member.
- ☐ All code is pushed to GitHub with an appropriate Pull Request raised.
- ☐ Necessary documentation is updated and tagged with the code push.
- ☐ Work is reviewed by multiple team members and verified on their systems.
- ☐ All pre-defined test scenarios have passed.

Team Members:

- Daniel Fox
- Manohar Killamsetti
- Siming Li
- Sarvesh Shah
- Swatej Mella
- Deep Patel