Process Model

Agile-Scrum Framework

For this project, we have adopted the Agile methodology, specifically the Scrum framework, as the most suitable model. Scrum emphasizes iterative development, flexibility, and constant feedback—all critical for building an interactive, real-time gesture recognition system.

Justification for Scrum:

• **Sprints:** Development is organized into 1-2 week sprints, allowing the system to evolve incrementally—from basic cursor movement to full drawing functionality.

• **Scrum Roles:**

o Product Owner: Defines features and prioritizes the backlog (fulfilled by the student).

o Scrum Master: Removes development barriers (self-managed in this case).

o Development Team: Implements and tests features during each sprint.

• **Sprint Reviews & Retrospectives:** Ensure ongoing feedback and continuous refinement of hand tracking accuracy and UI usability.

Evidence Supporting Scrum:

• Real-time testing and improvement are core to hand gesture applications.

• System goals may shift based on real-world feedback (e.g., usability under different lighting).

• Easy to incorporate user testing between sprints