

Team Commitment Contract

Team name: NeuroDrive

Project Statement

NeuroDrive is an assistive-technology venture aiming to create a multi-modal, brain-computer-interface wheelchair control system that fuses EEG, EMG, and eye-tracking signals to give individuals with severe motor impairments greater autonomy.

Shared team values:

Values are your fundamental beliefs or ideals. It is the core of what you strive for and how your behaviour is shaped.

	Value	Practical meaning in our day-to-day work
1	Punctuality	We start and finish meetings on time and meet agreed deadlines.
2	Respect	We listen actively, give constructive feedback, and celebrate the diversity of ideas and backgrounds.
3	Responsibility	We own our deliverables, cite sources properly, and uphold academic integrity.
4	Communication	We inform each other of progress, questions, or blockers within 24 hours.
5	Companionship	We look for one another's well-being and create an inclusive, motivating atmosphere.

Target or ambition level:

We collectively aim for a final course grade of 8.5/10 or higher.

Quality:

Academic integrity:

- Every submission runs through Turnitin (or course equivalent) 4 hours before the official deadline.
- Direct quotations are placed in quotation marks; all sources are referenced in APA style.

Definition of “done”: relevance to requirements, logical structure, evidence-based argument, consistent formatting, and zero plagiarism flags.

Workload:

Person	Role
Omar	Eye tracking software and equipment
Rudrh & Ansh	Communication between the wheelchair and the laptop
Jacob & Floris	Analyzing the EMG sensor and implementing it.
Dyorno	GUI for the interface and 3d printing
Ethan	Analyzing the EEG helmet and implementing it.

Planning:

Twice-weekly meetings:

- Monday 12:45–16:30 (sprint kick-off).
- Wednesday 12:45–16:30 (progress review & peer feedback).

Internal task deadlines are set 4 hours before the official Brightspace due date.

Submission authority: Ethan has the final editorial say; Rudrh uploads the documents to Brightspace.

Behavior:

Golden Rule: Treat teammates as you wish to be treated.

Disagreement protocol:

1. Attempt resolution in a 1-on-1 conversation.
2. If unresolved, escalate to a neutral team member as mediator.
3. Persisting issues → involve the project coach or TA within 48 h.

Late arrivals: ≤ 15 min tolerated once; repeat lateness triggers a private check-in. Chronic lateness is logged and addressed with the coach.

Communication:

Purpose	Channel	Expected response time
Quick questions, daily check-ins	WhatsApp group	≤ 2 h, 10:00–22:00 CET
Longer discussions / file sharing	Github and WhatsApp	≤ 24 h
Virtual meetings	MS Teams video; backup: Zoom	As scheduled
Urgent after-hours issues	Phone call	Immediate

Decision-making:

Standard decisions: simple majority vote (≥ 4 out of 7).

Major project pivots (scope, architecture): consensus is required; if undecided after two discussions, the project lead makes the call and documents rationale.

Consequences:

First occurrence: supportive check-in; adjust workload or provide help.

Second occurrence: written warning in the minutes; action plan with deadlines.

Third occurrence: coach/lecturer notified; potential re-distribution of marks or tasks.

Success factors:

Clear shared ambition (8.5+).

Consistent, open communication.

Complementary skill sets and willingness to learn.

Mutual trust is built through peer reviews and shared ownership.

Norms or evaluation criteria

We rate each member (including ourselves) at the end of every sprint on a 1-to-5 scale against these criteria:

1. Keeps deadlines
2. Quality & rigour of contribution
3. Communication & transparency
4. Initiative & problem-solving
5. Collaboration & supportiveness

Amendment Procedure

Any section can be updated with a two-thirds majority vote in a scheduled meeting. Changes are documented, and the revised contract is re-circulated within 24 h.

Practicalities – Meeting Place & Mode

- Monday sessions – in-person at Hall H
- Wednesday sessions – In-person Hall H
- Venue or modality changes must be announced in the WhatsApp group ≥ 24 h beforehand.

Documentation Tools

- GitHub – version control, issue tracking, code reviews
- MS Teams / SharePoint – shared document repository and meeting recordings
- Overleaf – LaTeX collaboration for the final technical report.

Additional Collaboration Practices

- Bi-weekly peer-learning mini-workshops (~10 min) to share expertise.

Personal Learning Goals (to be completed):

Team Member	Individual Learning Objective
Omar	Master advanced eye-tracking calibration methods and implement a real-time gaze-gesture recognition pipeline that interfaces reliably with the wheelchair controller.
Rudrh	Design and implement a CAN bus communication interface using an Arduino to interact with the wheelchair's control system. The goal is to reliably transmit and receive messages, analyze the communication protocol, and gain a thorough understanding of the wheelchair's behavior and response to various CAN signals.
Ansh	Develop robust message-serialization and error-handling strategies for bidirectional wheelchair-to-PC communication and benchmark end-to-end latency.
Jacob	Acquire proficiency in EMG signal preprocessing and feature extraction; create reusable classification modules ready for multimodal fusion.
Floris	Implement and validate EMG hardware integration, establishing repeatable electrode-placement protocols and automated signal-quality tests.
Dyorno	Build an intuitive, accessible GUI using modern frameworks and iterate on custom 3D-printed enclosures that ensure ergonomic sensor mounting.
Ethan	Extract meaningful features from EEG helmet data, train a machine-learning intent-detection model, and coordinate its fusion with EMG and eye-tracking inputs.

Signatures:


Rudrh


Jaco

1/11/2020