

Course: COD 208 Creative Coding II

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1. Project Title: Focus Tracker: An Interactive Attention Monitoring Tool

2. Project Type

Select the category that best describes your project. If your project fits into multiple categories or doesn't fit neatly into one, choose the primary type or select "Other".

- ☐ Generative Art (e.g., digital images, prints, plotter drawings, etc.)
- ☐ Computational Data Visualization
- ☐ Augmented Reality (AR) Application
- ☒ **Machine Learning (ML) Application**
- ☐ Game
- ☐ Advergame (Game designed for advertising)
- ☐ Other: _____

3. Mood board

Include your project's mood board here. This visual collection should convey the aesthetic, style, and overall feeling you aim to achieve.



4. Project Description

Focus Tracker is an interactive tool designed to avoid distractions while working/studying from the computer. Its aim is to increase productivity. Focus Tracker tracks user behavior through the webcam and delivers audio and visual alerts when distraction is detected (such as looking away, leaving the frame or looking at your phone). It also has a feature where the user types in the focus time they want to achieve and a duration bar appears on the screen with the amount of time the user has typed in, letting them know how much time is left to reach their focus goal. In this project, teachable machine is used to train a custom ML model that classifies head positions and specific objects (looking right/left/up/down, leaving the frame, when the phone enters the frame). OpenProcessing (p5.js) is used for rendering visuals, tracking time, triggering animations, and implementing the interaction logic. P5.sound is used for audio alerts and reward sounds. Timers and logic in JavaScript is used to calculate focused time, reward intervals, and track user progress. This project combines design, interaction, and technology. It connects with course themes such as machine learning, user interaction, and generative design thinking.

5. Submission Checklist

Before submitting your final project, ensure you have prepared the following items:

[] Video Documentation:

1. Create a screen recording or video showing your project in action, including user interaction if applicable.
2. Your name and surname should appear at the beginning of the video.
3. Include either an English voice-over or English subtitles explaining the project's concept, functionality, and key features. (Recommended length: 1-3 minutes).

[] Source Code:

1. Submit all necessary source code files, neatly organized.
2. Compress the code folder into a single .zip file.

[] Sketch Link:

Provide a working link to your project hosted online (e.g., p5.js Web Editor, OpenProcessing, Glitch, personal website). Please test the link thoroughly.

