

Project Updates & Requirements Specification

1. UI/UX Interface Updates

- **Logo Integration:**
 - **Source File:** assets/logo BW, 4x.PNG (ITU Racing Logo).
 - **Placement:** Top Left of the Main Menu.
 - **Styling:** The logo must be placed inside a **white rectangular container** with rounded corners (border radius) to ensure visibility and contrast.
- **Settings Menu:**
 - **Issue:** The Settings button is currently missing or invisible.
 - **Action:** Locate and fix the Settings button immediately so it is accessible from the main interface.

2. Mechanical Module Overhaul

- **Core Logic Change:** The mechanical calculation logic must **not** be hardcoded in the source code.
- **Dynamic Parsing:** The tool must read and execute logic dynamically from the following external files located in updates/feed/:
 1. 01 formulas.txt
 2. 02 named ranges.txt
 3. 03 dependencies.txt
- **Requirement:** Ensure the tool parses these files on startup so updates to formulas do not require code recompilation.

3. New Feature: Adaptive Unit Calculator

- **Functionality:** Implement a context-aware unit conversion tool.
- **Behavior:** The calculator should adapt its default units based on the active tab (e.g., show Torque/Force units when in the Mechanical tab) and allow for easy, quick conversions.

4. Deployment, Documentation & Licensing

- **Open Source Prep:** Prepare the repository for GitHub.
- **License:** Apply the **MIT License** to the project (include LICENSE file and headers).
- **Cross-Platform Installation (Non-Technical):**
 - Create a requirements.txt file.
 - Create **"One-Click" installation scripts** so users do not need to use the terminal:
 - install_windows.bat (for Windows)
 - run_app.bat (for Windows)
 - install_mac_linux.sh (for macOS/Linux)

- **Documentation:** Write a `README.md` containing a full, beginner-friendly guide on how to install the software using the scripts above.

5. Electronics Module

- **Status:** No changes required at this time (deferred).