Capstone Letter of Intent (LOI)

I. Personal Information

- **Name:** Mahelika
- **Email:** imahelika@gmail.com
- **GitHub:** https://github.com/mahelika
- **Discord:** #mahelikaa2328
- **X (Twitter):** https://x.com/mahelikaaX
- **Background:** Web3 developer focused on Solana, with a strong interest in building tools that empower individual productivity, habit formation, and on-chain utility. Currently learning Rust, Anchor, and building full-stack dApps on Solana.

II. Project Overview

Capstone Project Name/Idea: F0x01 – A Decentralized Pomodoro Protocol

- **Brief Project Description:**
  Fox-zero-one is a Solana-based productivity protocol that gamifies deep work using the Pomodoro technique. Users commit to focused work sessions by locking up $FOCUS tokens for a predefined time (e.g., 25 minutes). If they complete the session, they earn their tokens back- possibly with bonuses. If they quit early, they lose access to them temporarily. The goal is to help people build a habit of consistency through skin-in-the-game incentives. Future versions may integrate with Wakatime or GitHub for proof-of-work.
- **Reason for Choosing this Project:**
  I believe productivity is deeply personal, but current tools don't hold us accountable. F0x01 leverages Web3's programmable incentives to nudge people toward consistency, without needing a manager or algorithm. I want to build this for myself and others who struggle with distractions and crave a meaningful system of self-discipline and reward.

III. Go-to-Market Strategy

- **Target Audience:**
  - **Students & Self-Learners:** Especially devs in bootcamps, online cohorts, and those doing deep solo study.
  - **Remote Workers & Freelancers:** Who rely on time discipline and want accountability.
  - **Web3 Builders:** Who love the idea of using smart contracts to enforce personal productivity.

- **Value Proposition:**
  - Lock tokens -> focus -> get them back = accountability on-chain.
  - Completely self-driven. No external policing, no surveillance.

- ○ Token-based motivation to build better habits.
- ○ Simple, effective interface built for actual usage.

- ● **Marketing and Distribution:**
  - ○ Share progress and open dev logs on Twitter, GitHub, and Superteam.
  - ○ Run a closed alpha with productivity-focused Web3 communities.
  - ○ Partner with digital wellness DAOs and student DAOs to test behavior loops.
  - ○ Consider launching a limited early access beta with NFT badges and on-chain streaks.

- ● **Competitive Landscape:**

  - ○ Existing Pomodoro timers (like Forest, Focusmate) are web2 and centralized.
  - ○ Habit/NFT tools (e.g., Habitica, Stepn) gamify behavior, but not focus time.
  - ○ FocusFlow is unique because:
    - ■ It's minimal, self-sovereign, and token-based.
    - ■ Users *stake* their intent to focus—directly.
    - ■ It's open-source and composable (future integrations with GitHub, Wakatime, etc.)

IV. Technical Details

- ● **Tech Stack:**
  - ○ **Blockchain Platform:** Solana
  - ○ **Smart Contract Framework:** Anchor (Rust)
  - ○ **Frontend:** React + Tailwind CSS
  - ○ **Wallet Integration:** Solana Wallet Adapter (Phantom, Backpack)
  - ○ **Timer Logic:** On-chain timestamps validated by client-side action (simple until trustless PoW added)
  - ○ **Optional DB:** Helius or Supabase (for session logs, non-critical analytics)
- ● **Smart Contract Design:**
  - ○ Stake token for a Pomodoro session
  - ○ Timestamp recorded on-chain
  - ○ If session completes successfully → tokens returned
  - ○ If abandoned early → tokens locked/frozen or burned (based on logic)
  - ○ Room for future NFT rewards or streak bonuses
- ● **Testing & Security:**
  - ○ Unit tests for staking, claiming, and timeout logic
  - ○ Integration testing on Solana devnet
  - ○ Clear, deterministic flows with minimal complexity
  - ○ Follow Solana security best practices with Anchor

V. Conclusion

- **Project Timeline (2-Week Plan):**

  Week 1: Programs + Logic

    - Finalize staking and timing mechanism
    - Write Anchor contracts: staking, result validation, token return/penalty
    - Setup local + devnet deployments
    - Unit tests for each contract function

- **Week 2: Frontend + Integration**
    - Build minimal timer UI (React + Tailwind)
    - Wallet connect and staking form
    - Show timer countdown and session validation
    - On-chain session history and token claim
    - Final polish, demo recording, and submission

- **Commitment:**
  I am fully committed to building a working MVP of F0x01in the 2-week capstone window. The concept of self-staking productivity is one I genuinely believe in and plan to use myself. This is not just an experiment, it's a foundational tool I hope to grow and evolve for Web3 learners and builders like me.

- **Initials:** M