**Kinlend Protocol (P2P Interest Free Loan Protocol)**

**Project Name:** Kinlend Protocol

**Value Proposition:** Our protocol lets people borrow and lend crypto easily and safely, without paying interest. Borrowers can get funds by locking up their crypto as collateral. Lenders know they will get their money back because everything is controlled by smart contracts. There are no middlemen, so it's faster, cheaper, and fairer for everyone.

**Product-Market Fit:** Many people avoid using DeFi protocols because most of them involve interest, which goes against some cultures and religions. Our platform solves that problem by offering a way for anyone to borrow and lend crypto without interest. This makes DeFi accessible to more people, especially those who want to be part of the blockchain world but couldn't before. Our system is secure, transparent, and reliable, allowing people from all backgrounds to participate in decentralized finance without worrying about the issues they might face with traditional DeFi platforms.

**Target User Profiles:**

- **The Borrower**
  - **Motivation:** Needs quick, interest-free funds but doesn't want to sell existing assets.
  - **Location:** Anywhere with internet access, especially in crypto-friendly areas.
  - **Needs:** A safe platform to deposit collateral and borrow crypto assets with no interest.

- **Lender**
  - **Motivation:** Interested in earning a service fee for lending crypto without the risk of interest.
  - **Location:** Global, especially in communities that support DeFi and crypto lending.
  - **Needs:** A platform that ensures their loan is backed by collateral and that they can earn a fair service fee.

- **Kinlend Protocol**
  - **Motivation:** Wants to provide a transparent, secure, and trustless way for borrowers and lenders to interact.
  - **Service:** Manages collateral and loan terms automatically through smart contracts.
  - **Needs:** A simple system to connect borrowers and lenders, ensuring both parties are protected.

**User Stories:**

**User Story ID: KIN-001**

- **Priority:** High
- **User Persona:** Borrower (Someone who wants interest free loan)
- **Goal:** Borrow the desired amount of crypto (e.g., USDC) through an interest-free loan while keeping collateral locked in a secure smart contract.
- **User Story:** As a borrower, I want to get an interest-free crypto loan by locking up my collateral, so that I can access liquidity without paying any interest or fees.
- **Functionality:** The platform should allow me to:
    - Deposit collateral in the form of crypto assets (e.g., SOL) as security for the loan.
    - Borrow an amount in crypto (e.g., USDC) based on the collateral I provide.
    - Set the loan term (e.g., 30 days) and the amount to be borrowed.
    - Track the status of my loan and collateral in real time on the platform.
- **Attributes:** The platform should:
    - Ensure the loan amount is automatically calculated based on the value of my collateral.
    - The platform should securely lock the collateral using smart contracts, ensuring neither the borrower nor the lender can alter the terms once agreed upon.
    - The loan should be interest-free with clear instructions on how to repay the borrowed amount within the agreed term.
- **User Interaction:** I should be able to:
    - Deposit my collateral easily by connecting my wallet.
    - See how much I can borrow based on the collateral I've provided.
    - Monitor the due date and the remaining balance of my loan.

**User Story ID: KIN-002**

- **Priority:** High
- **User Persona:** Lender
- **Goal:** Lend crypto to borrowers in a safe way, with the confidence that my money is protected by collateral and there's no interest.
- **User Story:** As a lender, I want to give my crypto to borrowers who offer collateral, so I can lend my crypto safely without worrying about interest or losing my money.
- **Functionality:** The platform should allow me to:
    - See loan requests from borrowers who want to borrow crypto.
    - Check the collateral the borrower offers to make sure it's enough for the loan.
    - Choose the loan request I want to fund based on what the borrower offers.
    - Lend my crypto to the borrower through the platform, with my funds safely locked in a smart contract.
- **Attributes:** The platform should:
    - The platform should show me the value of the collateral compared to the loan

amount to make sure it's enough.
- ○ The platform should let me see all the loan details, like how much is being borrowed and when it has to be paid back.
- ○ If the borrower fails to pay back in time then I can claim locked collateral.
- ○ If the borrower repays the loan on time, I will receive 80% of the 5% service fee, which is calculated based on the borrowed amount, that the protocol earns when the borrower repays the lender.
- **User Interaction:** I should be able to:
  - ○ Browse and filter loan requests based on collateral or loan terms.
  - ○ Check the borrower's loan amount and collateral before I decide to lend.
  - ○ Lend my crypto easily and safely using the platform.

## User Story ID: KIN-003

- **Priority:** High
- **User Persona:** Kinlend Protocol
- **Goal:** connect borrowers and lenders, handle loans through smart contracts, and ensure that collateral is safely secured, so both parties can trust the system without needing manual management.
- **User Story:** connect borrowers and lenders, handle the loan process with smart contracts, and ensure collateral is safely locked, so borrowers and lenders can trust the system without relying on any central authority.
- **Functionality:** The protocol should:
  - ○ Let borrowers deposit collateral and request a loan.
  - ○ Let lenders view loan requests and fund them.
  - ○ Lock the collateral in a smart contract once the loan is agreed upon.
  - ○ Borrower pays 5% as service fee while paying back loan. 4% of it goes to Lender and 1% for the protocol.
  - ○ Allow the lender to manually claim the collateral if the borrower doesn't repay the loan.
- **Attributes:** The protocol should:
  - ○ Collateral is locked in a smart contract until the loan is repaid or the borrower defaults.
  - ○ The platform should be simple to use for both borrowers and lenders.
  - ○ No automatic transfers; everything is manual, like clicking a claim button for collateral.
- **User Interaction:** I should be able to:
  - ○ Allow borrowers and lenders to interact with each other and make their agreements.
  - ○ Let the lender claim collateral if the borrower doesn't repay.
  - ○ Keep things simple without complex features.

**Technical Notes**

- **Dependencies:**
    - Solana blockchain for smart contract deployment.
    - A basic smart contract framework for handling collateral and loans.
    - A wallet integration for borrowers and lenders to interact with the platform (e.g., Phantom).
    - A front-end interface (simple web or dApp) for users to interact with the platform.
    - A secure method to lock and release collateral, like a smart contract on Solana.
- **Considerations:**
    - Make sure the smart contract is simple and can handle only basic loan agreements and collateral locking .
    - Ensure that the platform can handle basic deposits and withdrawals.
    - The user interface should be easy to use.