CFY.finance High-Level Documentation

Our code will be open-sourced on Github under an MIT licence. A brief overview of the smart contract functionality follows.

I. <u>LoansNFT.sol</u> - Defines the following functions to enable NFT-collateralised loans:

a. `CreateLoanRequest` : Allows borrower to lock NFT as collateral and request a loan against it. The borrower can define the following terms:
  - loanAmount - defined in ONE tokens
  - Interest amount - interest to be paid in each interest period; defined in ONE.
  - Interest period - length of each interest period, defined in days.
  - Maximum Interest periods - maximum duration of loan, defined as a multiple of interest period.
  <u>*Note:*</u> By default a loan will be created with 1 interest period. It may be extended upto the maximum interest periods by calling the 'extend loan' function after loan acceptance. The total interest payable will be (interest amount * no. of interest periods).

b. `acceptLoanRequest` : Allows a lender to accept a loan request by transferring the requested loan amount to the borrower, and begining the loan timer for computing interest/enabling lender to claim NFT in case of default. 2.5% market fees are charged at this step. CFY tokens are also minted at this step during the bonus period.

c. `extendLoanRequest` : Allows a borrower to extend a loan by one interest period at a time, upto the maximum interest periods. Can be called only after a loan has been accepted. The total interest payable will be interest amount * no. of interest periods.

d. `endLoanRequest` : enables borrower to repay loan before loan end time by repaying principal amount + Interest. Upon repayment the NFT collateral is returned to the borrower, by marking the loan as 'completed'. Alternatively, this function also enables the lender to claim the NFT collateral in case loan end time has been crossed - by marking status of loan as 'defaulted'. 2.5% market fees are charged at this step. CFY tokens are also minted at this step during the bonus period.

e. `cancelLoanRequest` : can only be called by borrower after creating a loan request, but before anyone has accepted the loan request. Results in NFT being returned to the borrower.