



## CHALLENGE

### Context

SushiSwap is a decentralized exchange (DEX) protocol based off Uniswap.

To compete with its predecessor, SushiSwap launched a liquidity mining program that rewards liquidity providers that decide to deposit their tokens on their DEX.

In order to participate for the liquidity program, you have to follow the following steps

- Approve the SushiSwap router to use your tokens.
- Provide liquidity on SushiSwap by entering a pool using that is incentivized by Sushi (<https://app.sushi.com/pool>).
- Approve the MasterChef smart contract to use your tokens
- Deposit the liquidity token (SLP) you received after supplying liquidity into a yield farm managed by MasterChef smart contract (<https://app.sushi.com/yield>), and earn SUSHI.

### Challenge

The usual process for joining the liquidity mining program consist of 4 steps. This can be tiresome and consume a lot of time and extra gas.

Develop a smart contract that acts as a wallet, that encapsulates all the actions required to join SushiSwap's liquidity mining program into a single, handy transaction.

This should work with MasterChefV1 and MasterChefV2 and with any pair of tokens.

## Evaluation

- Senseful project structure
- Gas-optimized Solidity code
- Easy to run in Windows and Uni
- Code quality (very important)
- Use Hardhat, not Truffle
- Use Solidity, not Vyper
- Tests covering all the functionalities of the wallet contract
- Instructions on the readme file to run and test the solution

## Hints & Links

- [SushiSwap Docs](#)
- [Preferred dev framework](#)

## Upon completion

Submit your solution to **private** github repositories. Keep the organization of branches and commits as if you were working in a team. Give access to user:

- **Ffarall**
- **Rvignolo**
- **Scucchiero**