

## Smart Contract for the dApp

### Table of Content

S. No	Topic
1	Creating the Solidity Smart Contract
2	Deploying the Smart Contract
3	Testing the Contract Functions

### Build the smart contract

Now it is time to write a simple Solidity smart contract. You can use any editor you like, but for now we recommend using Remix.

Inside Remix, create a new contract file named Mood.sol and write the following code:

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.19;

contract MoodDiary {
    string mood;

    function setMood(string memory _mood) public {
        mood = _mood;
    }

    function getMood() public view returns (string memory) {
        return mood;
    }
}
```

Now, let's deploy the contract on the Sepolia testnet

**IMPORTANT:** Following the previous topics, we assume you have already created a **new wallet for development purposes with no funds on Ethereum Mainnet**. It is essential you use a development wallet with **NO REAL MONEY** in it when learning, practicing, and testing your contracts.

1. Make sure your MetaMask is set to the Sepolia Test Network
2. In Remix's Compile Tab, select the right compiler version to match your Solidity Code (0.8.19 right now)
3. Compile the code using the Compiler tab
4. Deploy the contract under the "Deploy and Run Transactions" tab
5. Under the Deployed Contracts section, you should now see your contract and be able to test out its functions

***Be sure to deploy on Sepolia via Remix under the Injected Provider - MetaMask environment and confirm the deployment transaction in MetaMask.***

Now, take note of the address and ABI of the contract you just deployed - we will need this on our frontend. You can copy the contract address by clicking the Copy button next to the

deployed contracts pulldown in Remix. You can copy the ABI under the contract in Remix's Compile tab.