

Intro to Solidity





Agenda

- Syntax
- Data Types
- Variables, function
- The msg object
- Require & Assert
- Modifiers
- Control Statements & Loops
- Inheritance
- Homework



Syntax

- Pragma
- Imports
- Layout
- Remix



Data Types

- **Booleans**
- **Integers**
- **Address**
- **Bytes**
- **Arrays**
- **String**
- **Structs**
- **Mappings**



Variables, Functions & Events

- Variables
- Functions
- Visibility
- Events



Msg & block

- `msg.sender`
- `msg.value`
- `msg.data`
- `block.number`
- `block.timestamp`
- `now`



Require & Assert

- **Require**
- **Assert**



Modifiers

- Custom modifiers



Control Statements & Loops

- Lots of controls structures
- Don't do loops



Inheritance

- 'is' keyword
- Abstract contracts
- Interfaces



Further Reading

- Solidity Documentation:
<https://solidity.readthedocs.io/en/v0.4.24/>
- REMIX IDE :
<http://remix.ethereum.org>



Crypto Cars

- 1. Develop an application where the people may buy ownership of cars (“VW Passat”, “Ferrari Spider”, etc.). You buy the car for minimum fee and you become the owner of it (by specifying the make and model you are buying and sending eth).*
- 2. Allow for people to take over your car by paying at least twice the amount you’ve paid. You get your money back + 50% of the extra amount.*
- 3. Add a way for everyone to find out the owner of a car (and how much has been paid). Add a way for someone to see all the cars an address currently owns.*
- 4. Add a way for an admin of the contract to withdraw the profit of the contract*



Q & A



Thanks!

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