

## Overview

The purpose of the application is to create, update and show statistics for token information

### Required Features:

#### PART 1

1. Create **ASP.NET web form** contains input form, pie chart and table  
(**SINGLE PAGE APPLICATION**)

Output:

Etherscan

Save / Update Token

Name

Name

Symbol

Symbol

Contract Address

Contract Address

Total Supply

Total Supply

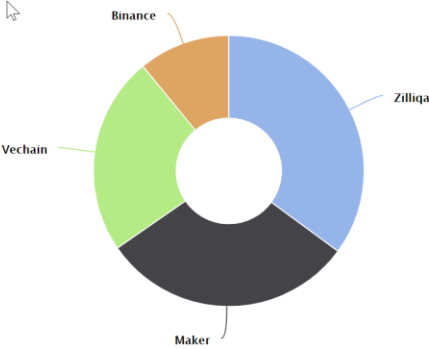
Total Holders

Total Holders

Save

Reset

Token Statistics by Total Supply



Rank	Symbol	Name	Contract Address	Total Holders	Total Supply	Total Supply %	
1	ZIR	Zilliqa	0x05f4a42e251f2d52b8ed15e9fedaaccef1fad27	54	53272942	35.08799%	<a href="#">Edit</a>
2	MKR	Maker	0x9f8f72aa9304c8b593d555f12ef6589cc3a579a2	567	45987133	30.28922%	<a href="#">Edit</a>
3	VEN	Vechain	0xd850942ef8811f2a866692a623011bde52a462c1	65	35987133	23.70277%	<a href="#">Edit</a>
4	BNB	Binance	0xB8c77482e45F1F44dE1745F52C74426C631bDD52	4234234	16579517	10.92003%	<a href="#">Edit</a>

2. Required input field
  - a. name = string
  - b. symbol = string
  - c. contract address = string
  - d. total supply = **integer**
  - e. total holders = **integer**
  - f. **total supply % = percentage for each token / overall total supply**
3. Table should list all the tokens and able to edit (Please allow pagination and limit page size to 10)
4. Symbol column should able to navigate to **detail page (see below PART 2)**
5. Save button should able to save new data or update existing data.

6. Show pie chart group by **Name and total supply only**.
7. Pie Chart should show latest data after save or update.
8. **Add button to export the list to CSV format**
9. Make any additions to enhanced the stability / functionality of this application
10. Keep the code clean, well-organized and well commented.

## PART 2

1. Create detail page (parameter id. Eg. /detail.aspx?id=BNB)

Etherscan

0xB8c77482e45F1F44dE1745F52C74426C631bDD52

Price:	\$ 0.00
Total Supply:	16579517 BNB
Total Holders:	4234234
Name:	Binance

2. Price should updated from **window services (PART 3)** every 5 mins.
3. Keep the code clean, well-organized and well commented.

## PART 3

1. Create simple window console app to pull token price from API and update to database
2. Process should run every 5 mins and pull for all token from database
3. Sample API : <https://min-api.cryptocompare.com/data/price?fsym=BNB&tsyms=USD>

GET <https://min-api.cryptocompare.com/data/price?fsym=BNB&tsyms=USD>

Params ● Authorization Headers (6) Body Pre-request Script Tests

Query Params

KEY	VALUE
<input checked="" type="checkbox"/> fsym	BNB
<input checked="" type="checkbox"/> tsyms	USD

Body Cookies Headers (15) Test Results

Pretty Raw Preview Visualize JSON

```

1 {
2   "USD": 306.78
3 }
```

4. Set price to 0 if price not available from API / invalid symbol

## Database Structure

```
CREATE TABLE `token` (  
  `id` INT(11) NOT NULL AUTO_INCREMENT,  
  `symbol` VARCHAR(5) NOT NULL COLLATE 'utf8_general_ci',  
  `name` VARCHAR(50) NOT NULL COLLATE 'utf8_general_ci',  
  `total_supply` BIGINT(20) NOT NULL,  
  `contract_address` VARCHAR(66) NOT NULL COLLATE 'utf8_general_ci',  
  `total_holders` INT(11) NOT NULL,  
  `price` DECIMAL(65,2) NULL DEFAULT '0.00',  
  PRIMARY KEY (`id`) USING BTREE  
)  
COLLATE='utf8_general_ci'  
ENGINE=InnoDB  
ROW_FORMAT=DYNAMIC  
AUTO_INCREMENT=8  
;
```

## Sample Data

```
INSERT INTO `token` (`symbol`, `name`, `total_supply`, `contract_address`,  
  `total_holders`, `price`) VALUES ('VEN', 'Vechain', 35987133,  
  '0xd850942ef8811f2a866692a623011bde52a462c1', 65, 0.00);  
INSERT INTO `token` (`symbol`, `name`, `total_supply`, `contract_address`,  
  `total_holders`, `price`) VALUES ('ZIR', 'Zilliqa', 53272942,  
  '0x05f4a42e251f2d52b8ed15e9fedaacfceflfad27', 54, 0.00);  
INSERT INTO `token` (`symbol`, `name`, `total_supply`, `contract_address`,  
  `total_holders`, `price`) VALUES ('MKR', 'Maker', 45987133,  
  '0x9f8f72aa9304c8b593d555f12ef6589cc3a579a2', 567, 0.00);  
INSERT INTO `token` (`symbol`, `name`, `total_supply`, `contract_address`,  
  `total_holders`, `price`) VALUES ('BNB', 'Binance', 16579517,  
  '0xB8c77482e45F1F44dE1745F52C74426C631bDD52', 4234234, 0.00);
```