

## User Collection

### **Schema;**

<code>_id</code>	: String, Unique. Ether address 0x094918...
<code>firstName</code>	: String.
<code>lastName</code>	: String.
<code>Password</code>	: String, Unique. Hashed password, using Bcrypt.
<code>email:</code>	: String, Unique. Require correct format, will email confirm
<code>authyID:</code>	: String. 2FA ID
<code>dateOfBirth:</code>	: Number. Epoch
<code>homeAddress:</code>	: String. Address lookup in specified country, ensure valid
<code>country:</code>	: String.
<code>idVerified:</code>	: Boolean.
<code>AccessLevel:</code>	: Number
<code>assetsFunded:</code>	: [AssetsFunded]. Array of ether asset addresses
<code>stakes:</code>	: [String]. Array of stake ether addresses

### **Functions;**

<code>updateUserAddress()</code>	
<code>updateUserFirstName()</code>	
<code>updateUserLastName()</code>	
<code>updateUserPassword()</code>	- TODO
<code>updateUserEmail()</code>	
<code>updateUserAuthyID()</code>	- TODO
<code>updateUserDateOfBirth()</code>	
<code>updateUserHomeAddress()</code>	
<code>updateUserIdVerified()</code>	
<code>updateUserAccessLevel()</code>	
<code>addUsersAssetsFunded()</code>	
<code>removeUsersAssetsFunded()</code>	
<code>deleteUser()</code>	
<code>updateUserStakes()</code>	

## **Assets Collection**

### **Schema;**

_id:	:String, Unique. Ether address 0x0f.a.....
creatorAddress:	:String. Ether address of user who created listing.
geoLocation:	:String? Co-Ordinates of location
description:	:String. Description of asset
image:	:[String]. Array of string paths to images of asset.
fundingRequired:	:Number.
fundingRecieved:	:Number.
fundingDeadline:	:Number. Epoch time.
fundingCompleted:	:Boolean
funders:	:[String]. Array of ether addresses.
FunderOwnership:	:[Number]. Associated % ownership to address
live:	:Boolean. Whether it is active.
RevenueGenerated:	:Number. -TODO

### **Functions;**

*updateAssetFundingRecieved()  
updateAssetEthAddress()  
updateAssetCreatorAddress()  
updateAssetGeoLocation()  
updateAssetDescription()  
addAssetImage()  
updateAssetImage()  
removeAssetImage()  
updateAssetFundingRequired()  
updateAssetFundingDeadline()  
updateAssetFundingComplete()  
updateAssetLive()  
removeAsset()  
addAssetFunder()  
updateAssetFunderAddress()  
updateAssetFunderOwnership()  
removeAssetFunderAndOwnershipStake()*

## **Stake Collection**

### ***Schema;***

_id:	:String, Unique. Ether address 0x0f.a.....
period:	:Number
unlockTime:	:Number. Epoch
creationTime:	:Number, Epoch
maxMultiplier:	:Number
userStakes :	:[]. Weird object -TODO

### ***Functions;***

removeStake()  
updateStakePeriod()  
updateUnlockTime()  
updateCreationTime()  
updateMaxMultiplier()  
deleteUserStake()

### ***Password Salting;***

generatePasswordSalt()  
validatePasswordHash()  
grabUsersPasswordHash()

### ***Authy; - TODO***

sendAuthyToken()

### ***Getters;***

getUserEthAddressFromEmail()