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# **Legal Disclaimer**

Everything in this whitepaper should be read with attention. If there is still any doubt after reading through it, the reader should make their own informed judgment. This Whitepaper is a working document and is subject to changes and errors. Numerous statements within this whitepaper, as with any project at the concept phase, are forward looking. Due to this all of these statements are subject to change as work progresses and there is no liability on the team for any of the statements. A lot of times statements are future visions and future research, by its nature, is subject to change as developments or concepts are refined through the course of time.

Statements can also change due to external factors beyond the control of the Menzy team. The MNZ token, and any other associated systems are only utility tokens and should not be treated as securities or shares by any person wishing to hold the MNZ token. This litepaper or holding MNZ does not create a securities investment contract or entitle to any security/shares offering. Any possession of MNZ shall not grant any rights in any form to any user for including such as any rights of ownership, dividends, property or intellectual property, decision making, or any other rights such as of financial or legal nature, in Menzy.

As whitelisting will be selective, whitelisting sign up for the product or MNZ is not guaranteed entitlement to any product or token. Any sale may vary, owing to the country of citizenship or residence.

# 1. Introduction

Menzy is introducing a unique Move2Earn body movement count system for earning passive income in the form of MNZ Tokens. A lot of current Move2earn systems are step counts only but with Menzy we have developed a unique algorithmic system that detects any sort of activity or sport happening with the help of your mobile camera or a camera enabled device. Our system visually detects the activity being performed. Furthermore our software has the ability to identify the pose of an individual and the Menzy platform rewards the user for performing successful movements.

The pandemic and post time has led to a decrease of an active lifestyle. Working from home has become increasingly prevalent. To help people keep an active lifestyle with minimal effort and incentivise people with movement we have envisaged Menzy. All that Menzy needs is a camera device or gps-device such as your phone. The Menzy platform and algorithms then enable a seamless experience for an individual to earn while being active.

Menzy is a complete ecosystem where the Menzy (MNZ) Tokens which will have utilities such as staking, payments, transfers and base swaps, collateral for BNPL. An individual can use their MNZ Tokens for many more features and activities within the real world and the metaverse both. These are stored in the Menzy wallet post earning MNZ from different activities. This Menzy wallet app that uses 3D Facial Nodal

points that convert to your password hash. In other words, all blockchain assets stored on Menzy's software wallet app are secured and only accessible through facial biometric verification of holders.

The Menzy step mechanism enables individuals to earn passively by steps through just holding Menzy's unique NFTs. Each Menzy NFTs have their own unique features and functionalities in the Move2Earn arena where all Menzy holders will be able to compete with their fellow menzians in outdoor sports and physical activities such as running, squats, skipping, boxing, and so on. Not only that Menzians can compete with their fellow competitors in real world sports and physical athletes but can also avail Peer to Peer Virtual Training Consultation and connect with different crossfit qualified trainers from across the globe for training routines and plans.

# 2. Brief History of current systems

## 2.1 Overall landscape

This section covers the shortcomings of current products in the context of what Menzy aims to achieve. These opinions shouldn't be taken as criticism of any project but are solely mentioned with the intention for a comparative study in the context with what Menzy aims to establish. Given the nature of the Move to earn space newer projects might keep emerging and only the most prominent as of the time of publishing this whitepaper are mentioned.



The overall move2earn landscape and some of the key players within the space as of early 2022 are identified above. The most prominent one by market cap is Stepn which has an excess of 1 billion USD. Most of these projects reward the users based on the number of steps such as Stepn, StepBSC, Genopets, walken, spacexmove, fitmint, dose etc. All have a similar concept in terms of the activity which is: walking movement. A few are sports focused such as dotmoovs with football. These concepts also tend to come with their unique NFTs which are sometimes a type of shoe with associated features. Due to the purchase of the NFT some projects might have a high initial cost for the uptake of the system. Some are unique such as Metz having a cat trainer. Some of the concepts are pretty nascent at the moment and there is not much consolidation in terms of concepts or utility of the project post earning the token from the platform. A few like wirtual and Olivex are looking at embedding a bit of fitness within the metaverse. There are also concepts such as sweat mining which is the equivalent of mining using a form of physical exercise instead of POS/POW type systems.

# 2.2 Comparative difference

There are significant differences between Menzy as an ecosystem and all the current prevalent major moves to earn. Some of the key Menzy

	COMPARISON	<b>6</b>	<u> </u>		STEP® APP	<b>(A)</b>
		Menzy	Stepn	Walkwithstep	Step.App	Genopets
	Activities	Walking, Running, Dancing, Gym - etc		Walking & Running	Walking & Running	Walking & Running
	Step Count					<b>~</b>
	Sensors Used	Camera + GPS, Pedometer	GPS & Pedometer	GPS & Pedometer	GPS & Pedometer	GPS & Pedometer
	Compete to Earn		50%	×	Running Competition	Yes (In battles)
	Al Pose Estimation		×	×	×	×
	Activity Classification Al	~	×	×	×	×
	Whole Body Movements		×	×	×	×
	Virtual Training		×	×	×	×
	Low Cost to use the app < \$100		×	×	In development	×
	Metaverse VR Integrations		×	( Y )	( Y )	×
	Token Utility (payments, swaps & Etc		50%	50%		In game
	Software Wallet	~	~	×		×

differentiators are mentioned:

# 3. Value Addition brought by Menzy

The Move to earn space is relatively new its current format and the some of the key issues that Menzy has postulated to solving are the following:



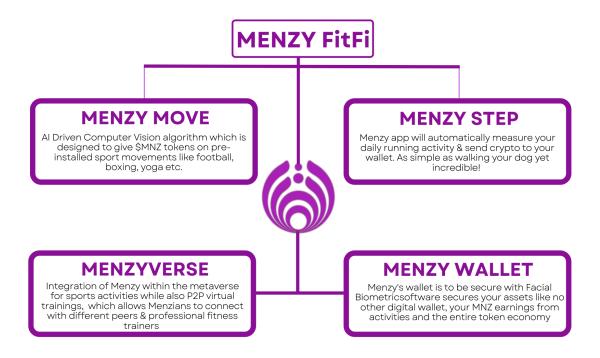
# 4. Core Values of Menzy

- 1) Incentivising blockchain investors and traders to maintain a healthy lifestyle and build a habit of walking, running, playing sports and generally being physically active throughout the day while they keep tabs on the market all day long.
- **2)** Owning your own progression is an important element of growth. Menzy aims to create a strong community and reward them for their participation in building a healthy ecosystem. Participants will be rewarded with MNZ tokens and much more directly for their engagement on the Menzy Platform.
- **3)** Maintain an immersive approach with a narrative that menzians experience in chunks every time they reach their target. Menzy move (Move2Earn feature) includes a daily target that you can achieve and unlock different features of the menzy application.
- **4)** Community for All;The beauty of the Menzy platform centers around the fact that anyone can sign up and participate in Move2Earn. No prerequisite required which makes it an open community for everyone.

# 5. System overview

With Menzy's Move2Earn you can earn passively by just walking, running and participating in other real world sports and activities. This enables a whole new paradigm for wallets where a wallet can keep increasing total assets over time while still being used for all other utilities:

- Showcase your skills and earn income in the form of MNZ Tokens by competing with other holders in different real world physical sports, games and activities. Menzy uses its AI based computer vision software that acts as a referee to assess your performance.
- 2. Ensure a healthy living by targeting your daily step count goals on the Menzy application and getting rewarded with MNZ tokens and unique digital assets for maintaining a healthy lifestyle.



# 6. The Menzy Eco-System in depth

# **6.1 Menzy Application**

A platform combined with NFTs, Move2Earn, Compete2Earn, FitFi and SocialFi. This platform allows you to maintain a healthy living and a source of motivation by getting rewarded for participating in real world physical exercise and activities.

Rewards include but are not limited to:

- Seasonal Exclusive NFTs
- MNZ Tokens
- FitBit Smart Watches
- Free training & consultation sessions with Professional Athletes.
- Free Gym Memberships in specific countries in the World.
- In-App Upgrades

Users will require to meet the following conditions get started on the Menzy Application:

- Android or iOS Smartphone GPS Location will need to be enabled for the game to track the movement.
- Metamask wallet (Connect to BSC Chain) in order to take rewards and NFTs.
- Stake \$MNZ Tokens in Stake Management to participate in Menzy Move.

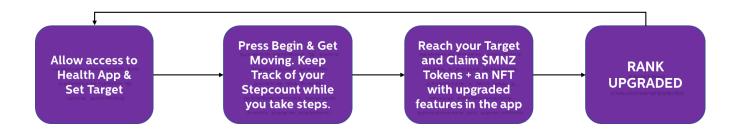
What benefits can the user get from making use of the app? Why should they download it?

- 1) The only Move to earn project which is more unique than just the Step count system. Stepn and step.app type of move to earn companies are only incorporating running/walking and earning. Menzy is not only creating a step + move/activity based earning but also creating a real world use case linked with blockchain where all trainers and trainees can connect with each other in a virtual fitness world and start physically training whilst they also earn passively in the form of MNZ Tokens.
- 2) They can learn any activity or sport such as pushups, skipping and so on, by connecting with different experts in the respective sport/activity.
- 3) They can connect with their fellow fitness enthusiasts and share various experiences. This way users get a real sense of socialising during while they explore more into the menzy fitness eco-system.
- 4) Last but not least, users can start using the app and earn passively through Menzy Step and Menzy Move with very little or almost no initial investment. Unlike Stepn and other Move to Earn projects, there is a high investment in NFT that users have to make in order to start moving and earning. However, with Menzy, there is no need to worry about initial investment in order to start moving and earning. This way, all kinds of users will be able to start earning passively without having to buy NFTs worth thousands.

### 6.1.1. Menzy Step- Standard

Is the simplest form of MovetoEarn and FitFi. All you need to do is own Menzy NFT's as a sign up fee and you're good to earn! Download the Menzy application from Play Store or from App Store, buy \$MNZ tokens and store them in your wallet. The Menzy app will automatically measure your daily walking or running activity and send crypto to your wallet. As simple as walking your dog yet incredible.

## **User Journey for Menzy Step- Standard**



## 6.1.2 Menzy Step- Premium

Menzy gives you access to different challenges and missions with which you can earn much more than standard targets.

### **Challenges and Features:**

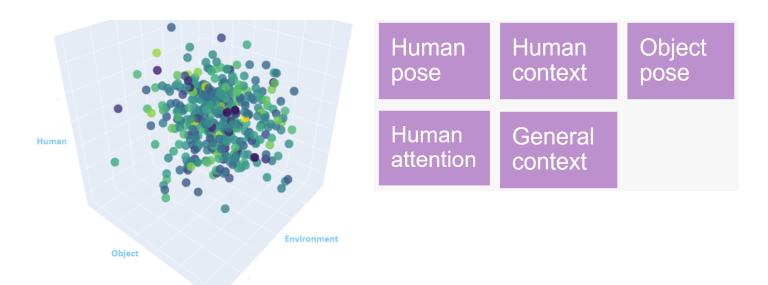
- Run or Jog at specific speed (No. of \$MNZ Tokens Earned = Avg
  Speed (m/s) during given time interval \* Current Rank (R) the mission criteria is based around distance, not performance, making it more accessible to a wide range of players.
- Run wherever you are indoors, outdoors or in a gym, your movement is not restricted to your location.
- Tracking and Statistics look back on your achievements and associated data such as distance, total steps, calories lost and so on.
- Sharing share your run progress with your friends.
- Google Fitness / Apple Health integration exports your health data to native operating system apps where it can be compared with other health data.
- Smartwatch App use your Smartwatch to pause missions and view your run statistics and progress.

### 6.1.3 Menzy Move

Unlike Menzy step, Menzy Move is the ability to undertake all major activities, sports infront of your mobile phone camera or laptop camera. Initially our AI system identifies the type of activity being performed. Rewards are ascertained according to the activity that is detected by the system. After that our AI based computer vision software acts as a referee rewarding you for physical body movements. You can undertake various activities for instance such as dribbling, squats, yoga, boxing etc.

## **Activity classification**

Our activity classification AI system detects the activity that is being undertaken by the user. We are initially using a base neural network classification system to detect activities on pre-trained data. In the near future technical work will be undertaken on the further conceptualization of the human, object and environment paradigm. We envisage that we can associate most human activities by understanding the pose, context, the type of objects around and the general context of the surroundings. This will give a great enough approximation to have a highly robust system for Menzy.



This activity classification system developed by Menzy is able to determine the type of activity being performed to initially identify and categorize the user. Furthermore based on the type of activity the reward structure is dictated to the user giving them earnings in the form of a multiplier based on how difficult it is to perform a certain activity. This directly correlates then to movements of the individual. It also helps in batching users for compete2earn according to users who are partaking in similar activities at that given point in time. Thus it enables an automated way for users to just turn on their app camera and start earning with movement without many hindrances. It creates a way of minimal effort for anyone with a camera enabled device to start earning.



Example of Menzy algorithm's automated Al activity classification.

#### Pose movements and rewards

The AI based pose estimation of Menzy accurately identifies the given joints of an individual user. Based on the joints and their movements Menzy has formulated a unique reward structure. This pose estimation acts like a referee understanding the behavior. Our software determines the exact coordinates of the joints and understanding of the human structure. It then uses the movement and other assessment factors developed by the Menzy team to calculate. The AI referee then rewards the user for their activity during that given epoch. During a competition epoch the pose difference is calculated at different times with linear intervals.







Menzy epoch

T=0s

T=5s

T=10s

An example of how Menzy's AI based system computes is displayed in the image above. The code identifies major structural joint points on the user. Amongst all the joint points that are identified two of the points AI and A2 are labeled above for illustrative purposes. Point AI at T=0 moves to the left after 5 seconds at T=5, showing movement occuring within the feet of the individual during the first 5 seconds duration. This movement distance of point AI is computed by our system. Similarly Point A2 moves from a point of more height at T=0s to a point of lower height at T=5s depicting that hand movement is incurred. The system similarly computes the movement distance for the joint point A2 during the time interval. This calculation is iteratively repeated for all the joints of the human body. The difference of all points from AI, A2.. An is then used as a basis for calculations of movement incurred.

## 6.1.4 Compete2Earn

Within Menzy Move Premium, menzians get to participate in Compete2Earn which is a multiplayer real world GameFi feature where all community members can compete with each other in different sport activities such as dribbling, flat races, skipping, hopping and so on. Players choose a challenge based on the category of activities they choose and connect with their opponent. Players will be matched against an opponent of a similar rank to theirs. At this point players will also be able to chat and see the stats of their opponent. Once the challenge is completed, the referee (Smart Menzy Bot) determines the winner who is provided with a number of MNZ tokens. Both players receive a number of Ranking Points depending on the relative margin between them.

## 6.1.5 NFTs - Your own NFT to particpate

Menzy NFTs will be available on the In-App Marketplace which would represent a futuristic 3D animated digital asset that holds your Identity in the application and that also acts as a membership non-fungible token through which menzians can get access to Menzy Move and other premium in-app features. These are initially 10,000 NFTs. Each NFT has its own unique trait and value in the Menzyverse. The NFTs will also be available on the other Marketplaces. The rarity chart displayed below shows our NFTs from entry level all the way to the most legendary.



# 6.1.6 In-App Marketplace

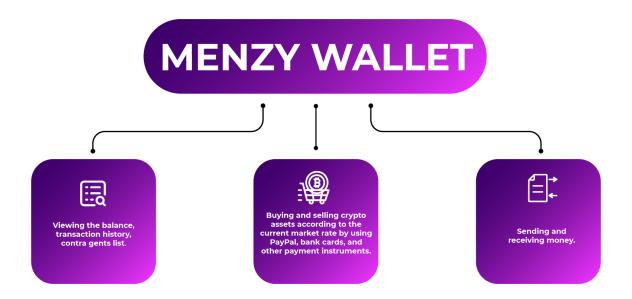
An NFT Marketplace where users can rent, lease, or trade their NFTs The filter function will be available in the marketplace to easily find the NFTs you want.

### 6.2 Menzyverse and Virtual Training

Within Menzy's own metaverse exists a peer to peer virtual training consultation platform which allows Menzians to connect with different peers and professional fitness trainers to gain training schedules, virtual demonstration and diet plans. Further work for the Menzyverse will be on the spectrum of VR integration for sports. This will enable a whole new world for activities to be undertaken with more cohesion in terms of other users being present during compete2earn activities. For example It could enable two people at disparate locations to run against each other within the metaverse on a treadmill. The applications are endless and the metaverse enablement with Menzy will be one of the additional components of the project as we progress further.

## 6.3 Wallet App

Menzy's wallet app is being built to utilize tokens earned from Move2earn activities. We are working on the software wallet to be secured with **Facial Biometric Verification technology.** This verification software secures your assets like no other digital wallet. With your MNZ earnings from activities and sports, you can use them for transfers. Furthermore with Menzy easy swaps you can quickly change your crypto from one form to the other or do quick payments within the metaverse or the real world all from your secure hardware wallet. The processes that Menzy has developed are simple and streamlined yet secure.



## 6.3 Anti-Cheating System

Three mechanics are used to stop spoofing in the Reward system, which includes the spoofer's account being penalized:

- Facial Recognition + Liveness Detection Software for invigilating activities.
- Smart activity detection + classification algorithm.
- GPS tracking.
- Motion sensor and health data.
- Machine learning algorithms to detect spoofing through data simulation.

Using devices that have been jailbroken, rooted, or with an altered OS will result in a non-functional interface.

# 7. In-App Economy

- 1. Marketplace Income: Purchase of Menzy Premium NFTs.
- 2. **Transaction Fee of Compete2Earn**: Players can compete with each other using their digital avatars and play real world activities with their fellow menzians. 2% of the Winning Pool is charged.
- 3. Marketplace Trading + Transfer of Assets: 2% Fees is charged on every NFT sale/purchase on the in-app marketplace and on every asset you transfer to a peer through your in-app wallet.
- 4. **Transaction Fee of Menzy Step and Move:** Upon claiming your reward for the targeted number of steps or movements, 5% of \$MNZ tokens earned through Menzy Step or Menzy Move is charged.

#### **\$MNZ VALUE FROM IN-APP ECONOMY**

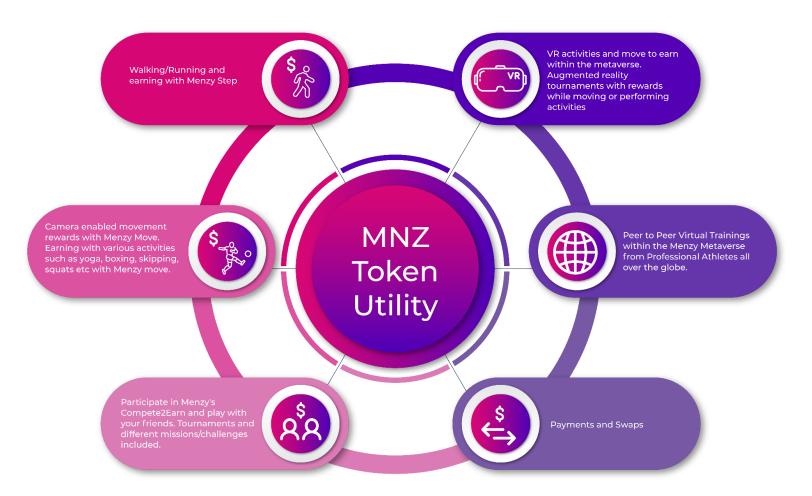
- 1. **Staking Rewards**: Up to 55% of tokens bought in the market are distributed to those who are stakers.
- 2. **Buy-Backs:** 40% of In-App income is dedicated to buying tokens on the marketplace.
- 3. **Locked Staking:** Tokens that are staked will require an 8 Days probationary period for exiting. This process of exiting comes with a 10% Fee on the principal amount that was staked.

## **\$MNZ UTILITY IN-APP**

Some utilities included but not limited to are:

- 1. **Staking** \$MNZ Tokens for earning significant returns. (Further Staking Yield and Numbers to be announced in Phase II)
- 2. **Unlocking** various perks in Compete2Earn and discounts on the In-App Marketplace.
- 3. Payments in Peer to Peer Virtual Training and Diet Consultation.

A detailed image of the token economy and its utilization is displayed below:



# 9. Tokenomic structure

<u>Token Name</u> Menzy

<u>Token Ticker</u> MNZ

Total Supply 2 Billion tokens

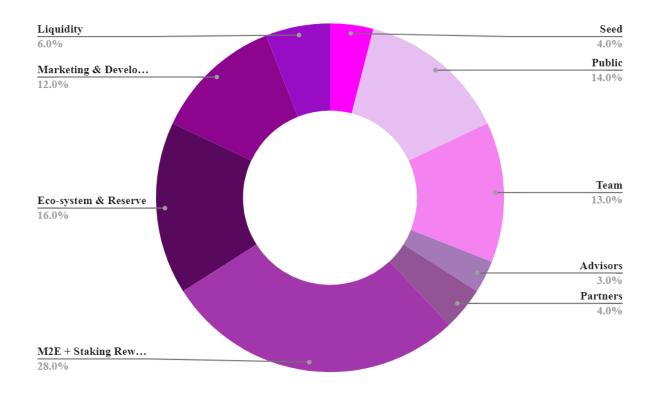
Supply Fixed

# 9.1 Token allocations

Menzy has the native token termed 'MNZ' that has utility which spans multiple facets. The token is used as a base to power the complete eco-system. MNZ usage is for but not limited to:

The MNZ token will be distributed and used according to set proportions. A high proportion of tokens are being used by the community and the ecosystem. A small proportion of the tokens have been kept aside for the team which is necessary to build and sustain a highly complex product and project like Menzy. These set proportions cater for the needs of the eco-system while also keeping a set amount for development which is necessitated to get resources and build a complex project as Menzy. These defined proportions are displayed in the Figure below.

# PERCENTAGE ALLOCATION

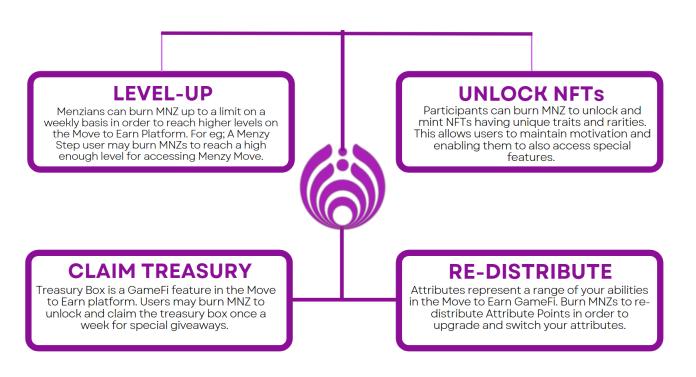


# 9.2 Token vesting periods

We have devised a fair structure of the MNZ token with a long locking period. These have a very long vesting period ensuring the team stays determined within the project leading it to achieving its long-term goals as per the defined roadmap. The vesting periods for the team tokens have a high cliff ensuring that the team stays consistent with developing the product. A maximum of 2 billion tokens will ever be created.

Allocation	Percent	Token	Price	TGE Unlock Rate
Seed	4.00%	80,000,000	\$0.0043	5.00%
Public	14.00%	280,000,000	\$0.0060	15.00%
Team	13.00%	260,000,000		0.00%
Advisors	3.00%	60,000,000		2.50%
Partners	4.00%	80,000,000		0.00%
Move-to-Earn + Staking Rewards	28.00%	560,000,000		0.00%
Eco-system & Reserve	16.00%	320,000,000		0.00%
Marketing & Development	12.00%	240,000,000		0.67%
Liquidity	6.00%	120,000,000		25.00%

## 9.2 MNZ TOKENOMIC



# 10. Roadmap

#### 2022.06

- Website, Whitepaper, Socials and Audit + KYC released.
- Initiation of technical development of the wallet app, integration with Marketplaces.
- Al Computer vision software development for measuring **Menzy Move**.



- Completion of Facial Biometric Software for In-App Wallet Security.

- Formulation of pose estimation rewards.
- Menzy Step development commenced for all menzians.
- \$MNZ Private Sale + Public Sale.

#### 2022.09

- Menzy receives strategic investments from specialized IDO platforms.
- Complete technical development of Menzy step -> Rollout of Menzy App.
- Giveaway quarter (FitBit Smartwatches fully integratable with Menzy Step and Menzy Move).
- Collaboration with Cross-Fit & Professional Athletes from all over the world.
- Further anti-cheat systems implemented(ML, and vision based both)
- Menzy Move development trialed for all menzians.
- Release of Compete2Earn within Menzy Move.

#### 2022.12

- Release of Digital Avatars + NFTs with specialties in the Menzy Ecosystem.
- Completion of Menzy In-App Marketplace.
- Research commenced to Improve AI activity classification algorithms with human pose, object and environment context.
- Rollout of Menzy In-App Wallet with various unique features and functionalities such as facial recognition based transaction authorisation in the blockchain space.
- Bug Fixes + Testing GPS inaccuracies and system cheating for Move2earn.
- Partnership with Global Gym franchises for acceptance of membership through Menzy Platform. Gyms incentivising Menzy.

#### 2023.03

- Integration on binance DIX and Dapps login protocol
- Collaboration with other wallet apps for subscription of run-time Facial Biometric and KYC solutions.
- Integration of swapping and trading.
- Upgrade In-App Wallet to Multi-chain.
- Upgrade In-App Marketplace to Multi-chain.
- Community Event (Expected Date: 21st December 2022)

#### 2023.06

- BNPL Development -> Buy Now Pay Later DeFi for Menzy holders.
  Anyone holding MNZ Tokens may avail BNPL services for products on all marketplaces in the blockchain space.
- Touch Tap and Pay for easy transfers.
- Hosting a Hackathon for welcoming users to spoof Menzy Move or Menzy Step.
- SocialFi Element commenced for all menzians. (Given that the community consists of more than 50K members)

#### 2023.09

- Enabling all features of the Menzy ecosystem including but not limited to; wealth management module and Menzy's very own metaverse focused on well-being and fitness of all holders.
- Rollout of Menzyverse -> Menzy's very own metaverse for virtual training, fitness and social competitions between users. Embedding VR based fitness competitions.

#### PRODUCT ROADMAP

**June - September** (StepCount system, Pose Estimation + Activity Classification Algorithms integration in the Application)

**September - December** (Converting the entire menzy application into an Augmented reality based frontend for Menzy Step + Menzy Move)

**Jan - March** (Live Activity Classification based games and Live Competitions/Tournaments with fellow Menzians over the application in an augmented reality environment)

**April - August** (Live streaming among community friends and staking MNZ Tokens in Tournaments and Competitions on participants of the Tournament/Competition).

**September-January** (First Phase of AR-VR based Metaverse Integrations on both Mobile + Web App: connecting all the modules mentioned above in the MENZYVERSE)

# 11. Conclusion and further work

In this paper we have proposed a novel approach to move to earn systems. To the best of our knowledge this is the first time that a move to earn system encompasses so many different activities using an Al based system rather than just GPS steps. This enables users to earn rewards based on full body movements and a huge variety of sports and workout activities not limited to only walking/running. We have also described our system and structure of the whole Menzy platform in detail including Menzy step and Menzy move. Another key component that was detailed was the token utility post earning the token from either steps or with performing other activities. We believe amongst many factors the utility is also what gives Menzy long term intrinsic value for recurrent use of its ecosystem.

For further research we are exploring how we will embed our compete to earn systems within the metaverse for a more immersive experience. We are also looking at using human context, general pose, and object pose to more accurately identify an activity happening in a given scene at a given point in time.

Menzy is on a journey to make working out, exercising, walking, running more financially rewarding/fun enabling a healthy & sustainable lifestyle to people across the globe.

As we commence further on the development of our system we would love to hear feedback on the concept, technical details or other aspects of this lightpaper. For that we would really appreciate it if you get in touch with us on the links below. If you are looking to participate or purchase MNZ tokens please join our telegram as all information related to the sales and listings will be done via our official accounts.

Telegram: https://t.me/menzy\_official

Twitter: <a href="https://twitter.com/MNZtoken">https://twitter.com/MNZtoken</a>

Medium: https://medium.com/@Menzy

Email: <a href="mailto:support@menzy.io">support@menzy.io</a>

