# I, Game & Robot - AI-Land last battle

 $\underline{\text{Create its background, theme, narrative framework, concept, characters, plots, etc.}\\$ 

**Background** 

Theme

**Narrative Framework** 

Concept

**Characters** 

<u>Player - you who drives you NEV robo-vehicle - it's a vehicle you use to move throughout the city</u>

Al developer - a game narrator

Enemies - that could be bots if player-versus-computer (PVC) type

Other players - (if it's played together)

Plot

Define the game's type and provide core gameplay instruction, and a key aspect must contain how to customize robo-vehicle (NEV).

Game's type

Core gameplay instruction

Core game mechanics (=features)

Levels

Describe its genre conventions and define its concept art style using moodboard. It must contain a garage as its key scenario.

Provide a feasibility analysis report on persona, marketing, and gameplay research.

Persona

**Market** 

Marketing

Gameplay research

Strategies:

Besides, submit a development plan based on your feasibility analysis, including the development cycle, personnel, cost, and other development plans that may support.

<u>Development cycle</u>

Agile development

Technical requirements:

Personel

Cost

Create its background, theme, narrative framework, concept, characters, plots, etc.

# Background

The year 2022 in a random, nicely-cloudly agglomeration. The epochal change can be felt in the air. And the robo-vehicle you joined the party to be tested in real challenges.

# Theme

It's a subject, an intended experience for the players.

#### Casual game

Fully digital, Al-driven world of the future has their challenges to achieve in advance to make a smooth co-existance between robots, people and robo-vehicles possible. Players will become the creators and will be involved into introduction of robo-vehicles and their goal would be to teach and test Al so it can become fully independent and can help all habitants in the daily life. But, because it's a complete paradigm shift, the guiders of the traditional world like cars' manufacturers and other monopolists won't go away freely to lose their power and money. Also, they will monkey your efforts. But by engaging your creativity and supportive community, you have the power to win this battle.

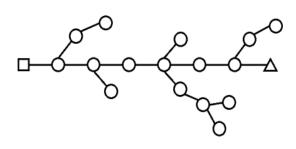
#### Narrative Framework

Narrative type: the string of pearls model

How to show and convey the narrative to the player: cutscenes and a text, dialogs between players, and also between a single player and an Al-developer (a in-story character) involved

Кеу:	
Gameplay	_
Story Event	0
Beginning	
Ending	Δ

String of Pearls:



The story should be told in a linear fashion but can be interrupted by player freedom at times. As the idea is that it's a role-playing game, the main story is linear, made up of separate sequences in the form of missions or quests. but the player should have the freedom through exploration and side quests that are given throughout the world, also there is no strict order of the missions to complete. So the linear story behind would be like the concept presented below, but as the players can explore the world, the game-end is not determined in advance, and the game can be completed in a few ways.

# Concept

The ultimate goal of the game is achieved a full level of autonomy of the NEV-robo-vehicle. The player achieves it once completed 4 levels of the game.

The upcoming world represented as the robo-vehicles on their way to become fully Al-driven, autonomous devices in a fully digital cities fights with the leftovers of the traditional world, personified as a traditional cars' manufacturers.

At the beginning of the game, the traditional's cars manufactures are in charge of creating and delivering all vehicles to the city. The latest technological discoveries, though, made possible for all ordinary people to start their own production of multi-functional robo-vehicles, which are also under tests to become fully Al-driven, autonomous devices.

Once the game is started, a player finds out that they have been chosen to supervise those tests, but although this ideas seems enjoyable itself, a player quickly finds out that autonomous, ordinary man-made vehicles are not the dream of those who keep the power and money in their hands, and are able to destroy all the efforts a player makes, so it is more difficult task than a player thought. But a player could use the power of community and engage more people into Al's training to become stronger and gradually gain the upper hand. It is an idea to start replacing paradigm where few monopolists in different industries (in our game case cars' industry) dictate the shape with a paradigm of mutliple, small creators, who can benefit from their creativity and ideas and move it to the real world

The game would follow one board style (with a possible change of the boardwhile progressing, eg. reloading the view with a new self-style's district with new missions available)with all tasks located there to keep the game simple and doable in a reasonable time. In the longer perspective, though the monopolists' predominance can be shown by splitting the city into areas which are under their control (eg. all districts have monopolists' color) which at the beginning of the game, basically means everything, but it doesn't have to be highlighted in such way. To make the game more visually-attractive to players, we can also design the city's district in their specific way with many local characteristics (eg. different style, different buildings).

To sum up, the concept is NOT about making a GTA-style game with a user's ability to drive through the whole city, but keep everything on one board AT A TIME.

Throughout the gameplay the idea is that the player teaches AI how to proceed, drive and do different tasks in the city, so basically it means that they need to train it by doing each road in the city and customizing the vehicle in a way so it fills the prerequisite to do any given city) In

that way, we would be able to give the players an overview of what obstacles we face in reality on the road to Al-driven world. Some examples may be: huge money resources are required, different road obstacles which needs to be solved so the robo-vehicles can become fully autonomous like detours, traffic lights, proper infrastructure and vehicles' communication, social attitude, other drivers' behaviour and the unpredictability of this, fast reaction, smooth and undisturbed connection between all vehicles, road signs and road rules, hackers activity) controlled vs uncontrolled condition troubles (pre-defined roads as a first step), worse weather conditions, etc.

Also an important aspect of the idea is a group of supporters mentioned at the beginning. Alone you are slow (=weaker) than your opponents. It means that once you task is done (=you completed teaching a robo-vehice a specific task so it's ready to do it on its own) they can easily manipulate the road to surprise the AI or can hack the software, so you have to repeat from scratch (of from some point) So in a game, the best way to stop your enemies is to build a network of supporters and share your efforts with them, as you would be able to share the resources and abilities with each other. It's crucial to highlight this social aspect of the cooperation to present that the community is the power itself, but also it should be possible to give users an ability to play, or at least start alone.

Apart from **core mechanics** which is **drive through the city** and do all city's daily tasks to reach the goal of being fully autonomous (a trained AI is ready to work fully independently) it's worth mentioning that we could conside an **alternative-mechanics** to achieve the same goal - eg. providing a player with a riddles to be solved which mimic the algrithmic problems regarding the AI that need to be solved. This concept, though, needs a target users' confirmation if it's appealing enough to be worth doing.

The idea with those small tasks to complete is because of the need to split a whole game into other smaller games inside the game. The smallest game loop is like a little thing that you do. This is supposed to be a part of a larger game loop that's still under development. In this way, it would be possible to provide a first version of this game quicker and then develop it with the help of DAO members (players)

# Characters

Player - you who drives you NEV robo-vehicle - it's a vehicle you use to move throughout the city

Player is responsible for two things:

- moving through the city and complete the missions using the NEV a robo-vehicle, which has to be customised.
  - Customizations includes not only the visual features but also the ones required to complete the missions. Eg. the road in under construction so you need a big, strong wheels to get there, or you have to deliver the blood/or organs to the medical center so you need to have a cargo space with a proper temperature.
  - Missions vary depending on the level achieved so the difficulty is supposed to progress, and there are three categories of the missions as mentioned above.

# - building the network of supporters to stop opponent's destructive actions and move faster

Opponets which can be bots can destroy what the player does, eg. a player thought a robo-vehicle to use road X which includes a roundabout, pedestrian crossing and the task was to deliver the groceries to an old lady, but once completed a bot-enemy puts a gate on the road (or hack a software), so AI gets lost and cannot move forward. So the player has to repeat the whole action again with this gate included this time, as long as he/she doesn't have supporters to help them. As the idea is that each player has it's own state of achievements (= level of autonomously) the more supporters you have you, you can apply the knowledge to your device (= restore the state of the game).

So not to let users to finish too quickly we can limit the "amount of experience" they can share with each other.

The supporters could be friends playing together, or the random people who are available in the DeautoVerse

Al developer - a game narrator

Al- developer is a bot, in-game character which is a call-friend of the player. He spends his days in a car's garage - debugging, coding and waiting for new bugs to solve them. He explains the tasks, and also can give hints to the player in case of troubles, and he also "solves" the riddles in an alternative game mechanics (the more below)

Enemies - that could be bots if player-versus-computer (PVC) type

Enemies are responsible for two things:

# destroying what a player does to slow you down (=slow the Al market launch)

eg. a player thought a robo-vehicle to use road X which includes a roundabout, pedestrian crossing and the task was to deliver the groceries to an old lady, but once completed a bot-enemy puts a gate on the road (or hack a software, so the user needs to repeat the action)

The traps may vary like eg. inability to detect unstandard and uncareful drivers, bad weather, huge traffic jams out of the sudden, road obstacles, any change on the given road

Other players - (if it's played together)

They have the same tasks what a main player. They can also build their network? (=to consider how many nesting levels we can create) The idea is that each player has it's own state of achievements (= level of autonomously) which they can transfer through the gameplay

### Plot

It would something between a basic story which shapes the gameplay and a story, which is revealed progressively to the players. So at first, there is a big goal (to reach full-autnomy of robo-vehicles), and to do that a player needs to accomplish a bunch of little goals first (test the vehicle in a road/task challenges), and the plot is the reason why the players do this, there isn't a whole lot of dialogue or exposition, but on the other heand we also want to surprise our users from time to time, so it's where the actions of the opponents are involved (the opponets can change the direction/progress of the game, stop a player out of sudden or make some other troubles a player needs to deal with.

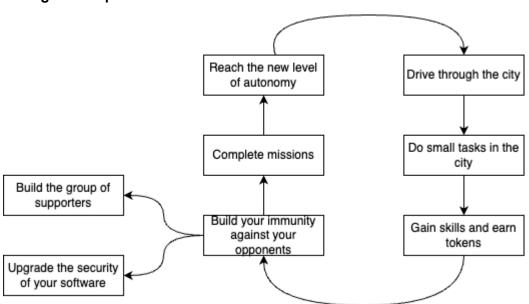
Define the game's type and provide core gameplay instruction, and a key aspect must contain how to customize robo-vehicle (NEV).

# Game's type

A role-playing game, but a casual one, so each action need to be separated and easy to do during the day-break (and it has to move the user forward) A plot seamlessly intertwined with gameplay.

# Core gameplay instruction

### Core game loop



The playing world will be a modern, digital city, with multiple screens representing the different places in a city to complete the mission. That being said, it means that the MVP of the game could include less levels which may evolve with a time.

At the beginning player creates a robo-vehicle and right after that it uses it to complete different daily tasks so to teach the vehicle how to navigate in the city and which customizations is needed to complete these tasks on its own in the future, as the main goal of the game is to make the fully-digital Al-driven city with the autonomous devices which can do the daily tasks for the people on their own. (It's the simulation of work on the implementation of Al worldwide)

**The road's challenges** would be the standard, like pedestrian crossing, bicycle path, traffic lights, road works, hole in the road, a high curb, lack of parking space, speed bump, wall, gate, etc.

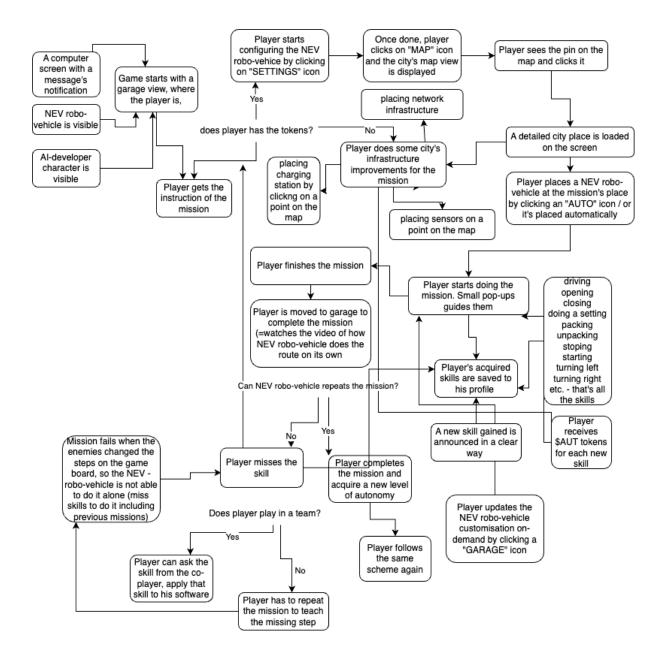
The daily tasks include different activities, like delivering letters and packages, delivering groceries, food, picking up a child to school, and adult to a work like a taxi, delivering an old lady to the market, transporting a blood or organs or medicaments, transporting a pet, etc, basically all city's activities which may be done by but not a big vehicle.

All tasks are located within one board and there could be multiple boards which represents different districts of the city. The may vary with the level, the background and they can be launched one by one to keep players' attention.

Completing each mission means that the player acquires a bunch of new skills, and awarded with an experience (=level of autonomy) which can be kept and transferred via gameplay (eg. if you play with your friends you can start from scratch or reuse the achievement you gained in a game previously)

Core game mechanics (=features)

https://bit.ly/3z5N96T



# driving by car and completing a mission (=learning a bunch of skills and earring \$AUT tokens)

Driving will be useful from the start to the end of the game, and be the key element in level.

The game consists of missions (eg. section of the road without traffic lights but with a roundabout and without pedestrian crossing so to deliver a small cargo to the post office) and skills includes like pulling off at the traffic lights, driving by the roundabout, stopping at the side of the road to collect the package, etc.

The missions have different levels of complexity depending on the road conditions and task's complexity. As the the main goal is to make the NEV-vehicle fully autonomous which will be able to complete daily tasks on its own, the user needs to teach it all the roads and all configurations in the city and how to customise itself to do the specific tasks and (so how to

overcome the obstacles which it can experience) So Eg. at the beginning the NEV-vehicle requires user's control, so the player is within the vehicle, and once a section of the road is done successfully it means that the NEV robo-vehicle gains a bunch of new skills and is able to repeat the road A to B all by himself, and progresses on the level of full autonomy.

Each skills mentioned at the beginning is recorded at the player's wallet and those are the skills the player can share with other users, or which build the level of autonomy (Each bunch of skillset) and \$AUT tokens are rewared which are needed to customize the vehicle for missions.

The example mission described above, the player does with a car by using buttons (left, right, brake, gas) and does what's is supposed to do by clicking on the notification/object/items showing up on the board (eg. clicking on the package/groceries/food which waits on the pavement to be taken and delivered to someone, or clicking on a person waiting for being picked up) All of those "extra actions" excluding driving and all related are supposed to by done by simply touching the screen/clicking. It's not previewed to make it more complicated.

The players also does all NEV robo-vehicle configurations required by clicking a "GARAGE" button (it opens a configuration panel which is located in a vehicle's garage)

The example for this could be that during cargo transport, the player needs to open the car's door to place the package and set the temperature if it is needed. The other samples are to stop in a specific place, look at the traffic lights color, and watch out for pedestrians.

Once did all the steps, the player is moved to the garage view, and a there is a quick video-recording displayed to the player which presents NEV robo-vehicle doing this task fully autonomously, but it still won't be able to complete the other ones until it has been taught to do so.

Mission can success as described below, but a mission on this stage can also fail. The reason why it can fail are a lack of resources to customize the vehicle or enemies' activity explained below.

### building infrastructure

On the board, players have to install energy stations, sensors, internet network transmitters and add solar panels. These operations can be done in the pointed-out places in the game, and and each of these investition cost some amount of \$AUT tokens, but on the other hand there are also the source of the \$AUT tokens as the return of the investment.

It adds a bit of complexity to the game, as the player need to assess what is needed and with a limited resources what would be the smartest investment. They allow to gather more data from the traffic lights, crossing, road traffic, and temperature, so they are required to move forward, and first of all, the AI needs all those third data providers to work (efficiently).

Charging stations are also required in the city to recharge the vehicle while playing a mission, as the level of energy is not enough to complete all tasks in a one missions.

Solar panels, while more expensive while investing, allow the player to charge the vehicle batteries without spending \$AUT token.

Costs may be lower with the other players in a shared game, as they don't need to repeat this in all city's mission, as some part of them is being done by other players.

#### vehicle's customization (to a specific mission's prerequisites)

Each mission is announced/showed with the prerequisite to complete it. It basically means that the player needs to have the sufficient founds to buy the special tools (=customizes itself) There is no strict order of the missions, but the only dependence here is that the more complicated it is, the more funds it requires.

### sharing skills with other players

While driving through the city on the board a player gains skills which are required to progress on the level of autonomy. A skill is every single thing which a NEV does, like starting, stoping, packing things on the board, driving ona side road, driving on a road with heavy traffic,

# achieving a level of autonomy for mission's completion (=for acquiring a bunch of new skills)

For each mission's competion a player gains a new level of autonomy. There should a predefined numbers of levels to the full autonomy eg. 7, so to be clear for the user how many of them it needs to achieve.

# collecting tokens on the road to can afford items in the marketplace to customise a device

The tokens would be placed in different places on the board, so that a player could collect them. Tokens will be also received by gaining a new skill,

#### **Alternate Mechanics**

#### solving riddles as a phone call to a friend (an Al-developer)

A player can teach the robo-vehicle a new skill also by implementing a proper software which is done by solving medium level quick and appealing puzzles which may be something like sudoku, maze, or similar. It could be only used once the mission is failed so not to repeat the steps on the board. (to be verified)

#### **Enhancement Mechanics**

moving faster

could be

higher amount of energy

independence of external resource of the energy (solar panels on the roof or something similar?)

independence of external Internet resources (internal Internet resource)

**Opposition Mechanics** 

# blocking your progress by your enemies

When a player teaches a robo-vehicle a new skill (the section of the road with a specific mission) its (a robo-vehicle) autonomy progresses. So, a **mission is completed while two conditions are met together** 

- 1) the robo-vehicle did a mission with a player,
- 2) it repeated it on its own, while the repetition is presented as a cutscene, a quick video-recording to the player, which shows the whole mission, but with a extra thing which wasn't there while teaching (eg. a fallen tree on the road, so if the robo-vehicle doesn't know how to overcome it it stops and the player needs to return to game to gain this skill, unless they could get and apply this skill from another player (awarded with a few tokens).

It means that the progress is stopped (a player cannot achieve a new level of autonomy, and it can also mean that they lose the time)

But it also means that the more supporters you have the quicker and easier you can compete the missions (because by loaning/sharing you can quicker gain the missing skill)

#### a virus

it means that the software of the robo-vehicle has been hacked and to retrieve it they need to pay the Al-developer to fix it, using their token, so it also slows them down, because tokens are needed to buy different things on the marketplace. During the gameplay a player can upgrade the NEV robo-vehicle software paying for it in a \$AUT tokens to become more immuned to the viruses.

A virus may happen in any time of the gameplay, and it is thrown randomly depending on the level of security.

#### a hacker attack

While progressing on the game, there is another trap which is set by the player's enemies, and it's a hacker attack.

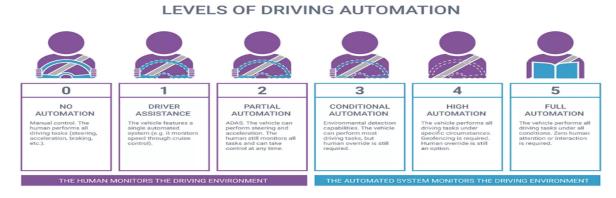
It basically means that the player is stopped in a gameplay for a some period of time, and can't do anythin, and the only way to progress is to have the co-player which can move forward independently (in that sense, the players are a team, which works together on a common goal to make NEV robo-vehice fully-autonomous.

The hacker attack happens randomly and it's announced to the user with a full-width screen pop-up red cross button.

The immunity from the hacker-attack is being build by upgrading to safer - and -safer software, but in contrast to a virus, there is no 100% certainty that it won't happen nonetheless.

#### Levels

The inspiration for this could be the levels of driving automation. 0 is where the player starts the game, while the level 5: full automation is our target.



Vehicles with Level 5 Autonomy are capable of driving fully autonomously in proper settings without the assistance or intervention of a human driver.

This concept would need to be a bit modified for the needs of this game though as the idea is that the NEV robo-vehicle increases the level of full autonomy after each mission completion but limited to only the place in the city and the tasks touched. Still it's worth considering to follow this number.

Describe its genre conventions and define its concept art style using moodboard. It must contain a garage as its key scenario.

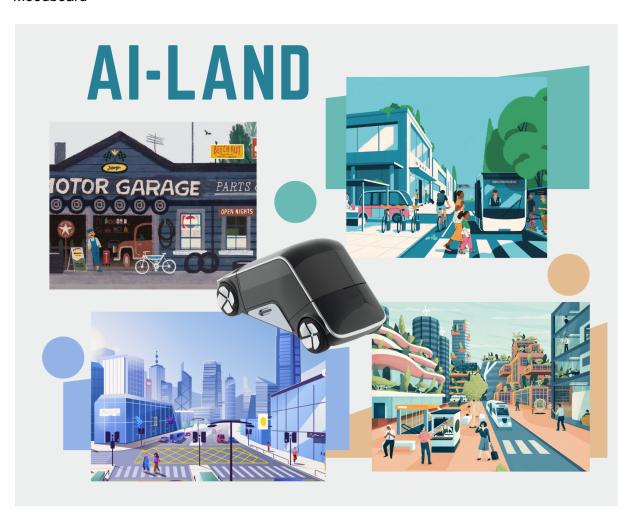
The gameplay happens on one board, which present the city view (3d view) as presented on moodboard. There could be multiple boards with different styles which would represent different places in the city

Art (should match the vehicle project and be easy and basic enough to be able to be used on mobile devices)

#### Initial ideas:

- a city view (roads, crossroads, traffic, etc)
- a garage with a AI station
- deauto included
- colors and shapes should match deauto.io design
- 2 hamburger menus on two sides? one to open panel settings on demand (seetings to customize deauto.io) the second (phone icon) to connect with an AI developer (q&A panel to receive the hints)
- Map view so we can check the city view

#### Moodboard



#### Resources:

All images from the moodboard are designed by other artists, found on Behance and Dribble, and they are only the inspiration how the authors of this game's idea see its design.

- 1) MUTI
- 2) FAGOSTUDIO, Agent Creaseanso
- 3) Flavio Remontti
- 4) Felic Art\*

# Provide a feasibility analysis report on persona, marketing, and gameplay research.

#### Persona

The first though about the gamer would be the statistic one, but the gamer nerd has nothing to do with today's modern gamer. Because the typical hobby gamer is on average 34 years old. And maybe surprisingly, but a half of all users are women. The development studios have long since stopped focusing on the youngest generation, but have primarily developed games that arouse interest in all age groups and generations. The mobile gaming gender split is 51% female and 49% male. 43% of women play mobile games more than five times a week, whereas only 38% of men play that often, as guoted by Forbes. Also gamers spend an average of 6 hours 20 minutes each week playing games. And 68% of mobile gamers play their favorite game every day, with an average of 47 minutes for one session, according to 2CV. The casual game, in 2020 dominated download activities, as according to AppAnnie. accounting for 68% of all mobile games, driven mainly by the popularity of easy-to-use games such as Among Us, ROBLOX and My Talking Tom Friends. On the other hand, core gamers generate 66% of ad spending and 55% of time spent on mobile games. For the purpose of the project, though it seems to be crucial to provide an easier and quicker to implement game without the huge story behind and complicated plots, still the one which gives the users fun. That's why the initial idea evolved:

### Market

It's around 1400 blockchain games in the industry, most are quite fresh, also many big players are involved yet, most games are the productions of the indie developers or small software team. Worth noticing that the mobile game industry itself is worth more than PC and console market together, while in numbers it's around 2.0b mobile gamers, so essentially every third to fourth person in the world. A mobile as a gaming platform dominates the gaming industry by every metric, active users, revenue and growth. It was expected for mobile gaming to generate revenues of \$95.4 billion in 2022 and account for almost half of the entire games market. This will be driven predominantly by smartphones, with revenues of \$79.7 billion by 2022, while analytics expect that up to 2024 the game industry will be worth around 218.7b \$ Although mobile is indeed still the world's

<sup>\*</sup>Garage's example may not look very modern, but that's the only one we found, and decided to move forward with this.

fastest-growing games market segment, growth is slowing in mature markets such as North America, Western Europe, and Japan. Emerging markets, including Southeast Asia, India, and Middle East & North Africa, will contribute most to the segment's growth. However, a range of other factors are also contributors, including more cross-platform titles, more smartphone users, and improvements to both mobile hardware and mobile Internet infrastructure, including the rollout of 5G networks. Moreover, the growth in mobile game revenues will continue to outpace growth on PC in the coming years, resulting in a shrinking PC market share toward 2022. Mobile will also outpace console's revenue growth; yet, console's market share will remain relatively static.

According to We Are Social and Hootsuite, 5.22 billion individuals have a mobile phone, accounting for 66.6% of the global population in January 2021. And this figure is increasing at a rate of around 1.8% per year. Meanwhile, the number of internet users globally has increased by 7.3% since 2020, to 4.66 billion. More than 90% of these major groups of internet users are also online gamers. In addition, 75% of these internet users use their smartphones to play video games. According to all estimates, there are roughly 3.5 billion mobile gamers.

According to AppAnnie, publishers released 2 million new apps and games in 2021. The total number of apps and games available on iOS and Google Play now exceeds 21 million. Consumers have shifted more of their entertainment and gaming to mobile devices. There were over 230 apps and games with yearly consumer spending above \$100 million, with 13 of them exceeding \$1 billion. This was up 20% from 2020, with 193 apps and games exceeding \$100 million in annual spend and only 8 over \$1 billion.

Mobile games remain especially attractive to users as profits can be made not only because of e-sport tournament, but also play-to-earn, which exploded intensively recently or digital items selling.

The known issues which are mentioned, though are that a user **onboarding is too difficult**, **play-and-earn are considered as ponzi schemes**, **there is often a high entry price**, **and they are not fun**. Other issue involved into mobile blockchain developing to consider is also a Google and App's policy and that they both have extensively developed rules to secure their business model of in-app purchases. The so called "store tax" is a 30% cut that both Google and Apple charge their publishers for any in-app transactions. They slap this 30% tax on everything: subscriptions, in-app purchases and paid apps. To be prepared for a mass adoption of the people who are not necessairly thigly tied to the crypto industry it could be worth thinking about the alternative solutions apart from distribute it via Apple Or Google.

# Marketing

#### Gameplay research

The analysis taken to identity the main players in the industry clearly shows that no game with a similar gameplay exist, the most similar cryptocars is focused on the racing itself and all cars' customisation without a wider story behind. However, it has to be carefully taken into account, as some elements can be quite similar, no matter of the

Al-Land Battle narrative, to avoid repetitive things which may discourage users from take part in, and especially **offer them the better experience and more fair rules to join**. Below a brief description of the popular games on blockchain, as to provide an analysis of all is a huge task, but what is visible, though is that most of them, in their concept are similar **focusing mainly on collecting, looking after and battling**. The truth is though, that this kind of game is the easiest and quickest to implement, while the development on bigger titles is much longer. My neighbour Alice can be a good example, while the road map is designed until the end of 2023 (and it started in 2020) <u>Unfortunately, most of blockchain developers had zero game development experience</u> and presumed their games' tokenomic appeal was enough incentives to trump a fun gaming experience. Ultimately creating a rather infamous *boring* reputation for web 3.0 games. First, and foremost a game should be a <u>fun first</u>. The big challenge is to put a bridge between the reality and the crypto-industry, and touch non-crypto users which play to relax mainly.

Few examples of currently popular blockchain games, while most are in alpha, beta version and others don't even exist yet (but collected a lot of money on pre-sale)

<u>https://calvaria.io/</u> - a card battler with staking, a DAO, and a scholarship system, the game's narrative experience is one of its most compelling features, with a strong set of well-designed characters in a universe that represents the afterlife. Their main goal is to create a fun and accessible game that rivals the giants of the gaming industry with a sustainable and rewarding tokenomics model. Two versions of the game Free2Play and Earn2Play, in order to cover and attract the biggest market possible.

<u>https://tamadoge.io/</u> - a part of the tamaverse, enabling players to compete for rewards from a prize pool. The main idea to feed the pets, take care of them and provide them with toys until they grow

https://www.silks.io/ - first derivative play-to-earn metaverse that mirrors real-world thoroughbred horse racing. Silks brings public data and stats related to real thoroughbred racehorses like bloodlines, training progress, and racing results on-chain

<u>https://battleinfinity.io/</u> - it's a pool of different sport-related games, so users can join virtual teams of cricket, football, hockey, kabaddi, tennis, etc. They choose their favorite virtual players and compete against other virtual teams to earn rewards, based on the statistics derived from players' performance.

<u>https://win.luckyblock.com/</u>- the game to buy a lucky card and hold it until all the collection is sold in order to win the prize itself.

<u>https://grd.fan/</u> - cards collection game, with a huge effort to the art itself (the rarity oif cards, their uniqueness and style)

https://decentraland.org/ - amazing, evolving world where users can create, improve, challenge other users, ranging from a space adventure to a medieval dungeon maze to entire villages crafted from the minds of community members. The idea of the deauto metaverse could be based on the similar concept, first it would be a case that you enter this world being hosted by the big players, traditional cars manufacturers, but your optimal goal is to make a change in the world and move from the past to the bright future.

https://www.sandbox.game/en/ - in many ways it encourages and rewards players' creativity and gaming experiences. It was created to empower artists, creators, and players, and it is an excellent choice for Minecraft and Roblox users who want to play and feel rewarded. Over 140k avatars available, it's a world of multiple games inside, with users' ability to create their own games

<u>https://axieinfinity.com/</u> - create virtual monster-like pets called Axi, battles can be undertaken against bots — which are backed by smart contract technology to guarantee fairness, or other users of the game.

https://www.myneighboralice.com/ - the players buy and own virtual lands, collect and build items, and socialize with other players. The My Neighbor Alice game takes on similar concepts Farmville and Animal crossing and allows users to collect in-game NFTs as they own and manage their parcels of land (which are also represented by NFTs) in the My Neighbor Alice universe/metaverse. My Neighbor Alice is a social online game with focus on resource gathering, crafting and creative expression. Players build their own virtual lands, interact with neighbors, perform exciting daily activities and earn rewards along the way.

<u>https://www.cryptokitties.co/</u> - . the overarching concept with CryptoKitties is very similar to the classic Tamagotchi game. This is because CryptoKitties is home to virtual kittens that you have the capacity to breed.

<u>https://godsunchained.com/</u> - this particular title is focused on strategic NFT card games that are traded based on skill. Gods Unchained is a free-to-play tactical card game that gives players true ownership of their in-game items

https://0xuniverse.com/ - box universe is an ingenious blockchain-based game that takes players into space. The goal of the game is to conquer and colonize other planets by building spaceships to explore the universe. All planets have their own unique set of characters, resources, and elements, making each experience different. Collectables and their value earned through the game are stored on the Ethereum blockchain. As a result, players have easy access to their earnings.

https://spellsofgenesis.com/ - it is the first-ever role-playing game (RPG) in the cryptocurrency gaming market. This Bitcoin game includes the amusement components associated with trading cards as well as standard arcade features. Spells of Genesis is completely free, making it a great starting point for Bitcoin beginners.

#### https://cryptocars.me/

they take the form of automobiles. Like airplanes, they are part of a metaverse called CriptoCity. While the name can resemble a bit this game the main idea **evolves around the dynamics of fighting with other cars** in different PVC (player-versus-computer) and PVP (player-versus-player) scenarios. Its gameplay is simple, it really is a simulator in which you must click on the indicated button, then we wait a few seconds for the race or battle to be resolved. Then we will see the result of the earnings. The free option or the fast one that consumes a CCAR for each car you use.

Some elements of Al-Land battle can be similar in both games, so as already mentioned, it's important to be cautious while designing the detailed features.

Main features:

- after a few seconds of simulation your car will get experience for you, materials and CCAR. A common car gets between 20 and 30 CCARs per day.
- with the materials you can improve your car so that it gets more CCAR after each race and with these you can buy more cars that could have better statistics. This includes increased fuel capacity so you can train or fight more times per day for more rewards.
- the game allowed usmite leveling up our cars, which improves statistics, so to improve the car you need to keep competing in races or battles.
- the idea is to buy a car first, get CCAR and buy a new one as soon as you have enough tokens to get it. Following this dynamic It won't take long for you to generate enough money to start recovering your investment.
- also, if you decide to sell the car, remember that you can continue to use it for racing while it is on sale. So you can earn money until someone buys it.
- you must make sure every day to improve your cars with materials, to take advantage of the fuel to play and recharge it so as not to stop producing.
- it is also an option to make money buying and reselling cars, although the ideal may be to train and fight every day. Since the ROI (return on investment) is achieved in less than a month.
- to start the game though, it's necessary to do the investment, to buy a token, which is now around 500\$, so it's can be a obstacle for some users to even try, and it is excluding definitely a lot

# The similar game is <u>cryptoplanes.io</u> the same company which is a part of cryptocity metaverse.

https://www.illuvium.io/ - narrative-driven quest game where players can battle it out in the proving ground, open-world exploration, NFT creature collector and autobattler game built on the Ethereum Blockchain. Play-to-earn in a graphically-rich sci-fi adventure and conquer the wilderness to help your crash-landed crew flourish. It's the alien landscapes and uncover the cataclysmic events that shattered Illuvium. Discover, hunt and capture over 100+ Illuvials, deadly beasts who rule this alien world—each possessing hybrid synergies and unique abilities. Train and fuse your Illuvials into powerful evolutions to upgrade their power and value for you to build the perfect Illuvial team. Illuvium has studied good games and employs a unique lore-heavy approach.

<u>https://piratexpirate.io/</u> - Pirate X Pirate is a brand-new play to earn game that focuses on a pirate theme. players are required to build crews – which require both characters and ships, the main objective is to explore the virtual sea with your crew and defeat other players.

droeats - build restaurant to compete with another players, an easy to learn, riddled with various mechanics, base-building game. Users play as DroEats avatars, controlling their own restaurant. Through numerous activities, which are Free2Play friendly, players earn in-game Coins and develop their establishment. In DroEats you become the owner of your very own restaurant. The game focuses on building & upgrading tiles inside the restaurant and earning Coins (DroEats' ingame currency) through various mini-games.

The goal is more to play to have fun than simply play to earn. Mass market adoption is only possible if it would be easier enough for a standard users to join without the necessity to

have and experience or know the blockchain technology, also that's also the must-have for a new game studios to compete with bigger AAA studios.

While the top crypto games currently average around 500,000 to a million unique users monthly, according to DappRadar, games such as Fortnite, Minecraft, and Roblox attract millions every day. Simple mobile games such as Among Us and Candy Crush can fare even better and have attracted billions of downloads. So despite massive potential, crypto gaming has yet to attract either hardcore or casual gamers.

Also the concept play-to-earn while can be valid and appealing if designed properly it can't rest the only reason to try the game, so it is necessary to give the users fun.

There are multiple ways to attract users and keep their attention, and as it's seen the competitors follow various ones. Eg. cryptocars.io **added a survey about car's customization so users can decide which style would be the most appealing for them.** Surprisingly "muscle car" won, so it doesn't seem to be likely without it.

To follow this one of the first recommended strategy would be this, a survey directed to the potential players to get the answer from them. To be repeated and done respectively phase after phase. Then, but not less important, a narrative behind, how this game is different than any other game of the world and how **it fits with deauto.io values and ambitions.** Free2Play and a fun included could be ones of the asset to highlight, if such strategy is accepted. It's a potential to attract many non-crypto users.

# what is the main thing that you want to communicate to your fans?

Sometimes that content takes shape by asking players how they'd response to in-game scenarios pulled from *it. It's* a building "big brain moves" that players can pull off in strategy games, and asking players what their next move would be.

It's a strong case for social media managers to not just know the audiences for their games, but to forge a relationship with the games themselves.

A non-zero amount of social media content *is* trend-chasing. You have meme templates. You have TikTok audio remixes. You have pop culture and current events. Plenty of social media brand managers in video games build content based on referential culture.

It's about identifying the areas where we have something unique that we can use to lean into it

If you are able to leverage the things that your game has, you can recreate [a meme or trend], put yourself into the conversation and make it your own. T

### Strategies:

- deauto.io sale
- airdrop

- auction
- stickers / shop with different products from the gameplay eg. https://t.co/8QPXIAwH44
- create a new tab on deauto.io page for a game, also add a notebook (diary)
- via FB or TwitteR, Instagram, TikTok fanpage (so to meet the players where they are instead of forcing them to use one platform)
- game industry platforms
- discord channels for players
- prepare a trailer
- medium articles
- we can reach game YT, streamers and email press
- twitter social campaign, talk to influencers, maybe reach partners' companies
- drops to people who will subscribe to your apha or even pre-alpha list
- pre-saling
- video content,
- tale of the dev team, diary
- live-streaming games-related content alone is consumed by over 600 million people worldwide. The pandemic has not just accelerated the growth of game players but also game live streaming audiences. In 2021, the worldwide game live-streaming audience reached 728.8 million, up 10.0% from 2020. They are on track for even more growth in 2022.
- in-game advertising researchers show that players are willing to view advertising if it means getting anything for free, according to 2CV. People prefer adverts in games to in-app purchases and game purchases, according to a Facebook gaming report.

Besides, submit a development plan based on your feasibility analysis, including the development cycle, personnel, cost, and other development plans that may support.

Development cycle

Agile development

Defining the scope of a gaming project in advance is a tricky business. The game's core mechanics, components, and features all have to be developed for the blockchain. It means that it's no longer working within the confines of traditional game design but instead exploring the uncharted shores of blockchain gaming. So all need to be done in a self-sustained, secure, and decentralized way. Making something function well technically is difficult enough to predict. But when does a game entice the player, when does it spark joy, when is it fun, when does it take the player to a place that he has never known but always wanted to be? This is the art of game creation and impossible to turn into a precise prediction of X many man months. However, there are some cutsoff which can be done to speed up the things, eg. review smart contracts for similar games and then reuse some parts. All of the blockchain things would be quite similart to what's implemented

in different games. Also another time-save is that we while developing UI/UX for the game, it's possible to code smart contract in parallel.

Then, testing concepts basically, no assumption, only testing. So many steps to reach the final goal, which also fits agile development. So small snippets which helps to test the initial idea, understand better what users wish. Also to confirm what should be the core of gaming experience. So in our case, even if the initial idea is to locate the auto in a digital city, with a bright design, but it should be verified by the end users if they like or not.

Those snippets really help understand how to move forward, and helps the community understand where to get to.

# Requirement analysis

- a. two or one platform, native solution or cross-platform: according to latest survey around 70% of mobiles use Android, so it would be more beneficial to start from this system, so Kotlin or Java as a base
- b. based on features and the plans to extend the game there is also a need to choose a proper platform to move forward. That should be a decision of devs. GameMaker Studio, Construct, Cocos2D, Love2d, Pygame, Unreal Engine 4, or Unity
- 2. Planning
  - a. prepare a story behind and all dialogs to implement
  - b. prepare characters
- 3. Software design such as architectural design
  - a.
- 4. Software development
  - a.
- 5. Testing
- 6. Deployment
  - a. alpha version (MVP) to deliver as soon as possible to test the concept in the real world
  - b. beta version
  - c. final product

# Technical requirements:

The necessity to choose a proper blockchain to avoid security issues of other unpredicted stories. Most probably a choice would be Ethereum blockchain network, and the 'Ethereum Virtual Machine' (EVM) and to implement a smart contract- the Solidity language.

Then a proper game framework to move forward, like Lisk, and then required tools like web3.js, Truffle or mobile specific ones.

#### Personel

1. Artists: for in-game assets, art deco, characters, and some environmental designs.

- 2. A web 2.0 game designer: who has successful web 2.0 games in their portfolio
- 3. Blockchain developers, smart contract developers, android, ios developers,
- 4. Social Community managers; web 3.0 community managers
- 5. Blockchain Games Writer/Games Writer
- 6. Project management (ideally with blockchain development experience)

# Cost

It depends on different factors first. These factors include Geographical location, Target Platform(Android or iOS), Integrated Technologies, App Complexity and App Design

Depending on the time, and the personnel costs. The cost of the blockchain-based game software for Android can range from \$45k to \$70/80k. It can take up to 4 to 6 months to establish an Android-based game platform. The price of the application is also influenced by how big the game is.

Considering all the factors, the cost of a blockchain game app development with all the advanced features and similar user interface is around \$50k to \$60k. The price can even go up.

You can continue to optimize your proposal by getting feedback from other participants/challenges. Must submit your WIP material EVERY Monday to support participants in the other challenges.