

**Democracy Routes – Whitepaper**



**A Project by Alessandro Aygun Suleyman Oppo**

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## **Introduction to Democracy Routes**

The "Democracy Routes" software (hereinafter referred to as DR) was born out of the desire to make consultative and decision-making processes more inclusive and efficient. This document aims to present in detail the operation, objectives, and benefits of this digital platform.

Democracy Routes is a software that aims to organize people participation in both synchronous and asynchronous ways, starting from a real problem.

It allows participants to be selected to focus and work on specific topics, based on skills and reputations.

Automatically the software will organize meetings between the members of a DAO/company/organization, until the specific problem is considered resolved.

The way to say "A problem is an opportunity", became even more true on Democracy Routes.

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## **Social-Historical Context**

Since the end of World War I, liberal democracies have seen a growing distrust among citizens, particularly noticeable since the 1990s. Recent national political elections in various European countries (Italy, France, etc.) have shown a low voter turnout, with abstention rates increasing year by year.

A sense of powerlessness is often widespread among the population: it seems that nothing changes, that political engagement, whether active or passive, is not significant for the citizens.

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## **Proposed Solution: target users**

The solutions offered by DR software are numerous and have been developed with specific use cases in mind, based on the unique characteristics of different segments of the population.

The software is incredibly adaptable, because it is user-centric and it's main scope is to resolve issues in a very analytical way.

Democracy Routes automatize a method of working, allowing synchronous collaboration on Round Tables, and asynchronous collaboration with the Routes.

### **For Youth**

Young people often want to change the world but may not know how. DR software aims to be a practical guide to understanding politics and the liberal democratic system. A journey towards change, teaching how to tackle the most difficult challenges of our times through linear and democratic paths. Young people are immediately included in consultative and, eventually, decision-making processes without any political theory.

### **For Citizens**

DR software acts as a bridge between institutions and citizens, allowing anyone to actively engage in political paths. The AI can create ad hoc routes, reducing the cultural gap between those who deal with politics and those who do not. The goal is to develop political skills within the population by making it stimulating.

The software enables political actions even for those unfamiliar with this world, helping identify the most suitable policymakers and/or those who have the skills to interpret the needs of the citizens and explain them to the policymakers.

### **For Policymakers**

Public opinion developed in Europe from the mid-18th century, expanding its scope and influence during the 19th and 20th centuries. It is especially with the advent of contemporary liberal democracies that it has gained the importance we recognize today.

Digital social aggregation tools, or so-called social networks, allow citizens to express themselves on political issues, providing policymakers with data to understand public sentiment on certain issues.

The DR software allows policymakers to channel the citizens' desire for change into specific "routes," increasing the effectiveness of proposed policies.

### **For Political Philosophers**

The DR software also serves as a platform where entire societies can be simulated, not only to predict public opinion but also to test new ways of managing spaces, resources, and political systems.

Several thinkers in the past and present have proposed new modes of coexistence among humans. Some of these systems remained theories without real-world application; others saw practical attempts but without long-term success.

The simulation section of the DR software allows for simulating various decision-making systems, from top-down to bottom-up, even experimenting with horizontal ones, leaving room for the political philosopher's imagination. It is hoped that new flexible systems will be discovered, which can vary depending on the decision that needs to be made.

### **For entrepreneurs**

Incredible collaboration augmentation, based on Round Tables between the members of the same company.

Every problem of the company can be discussed in Round Tables, several Round Tables form a Route. Transcriptions and summaries are done automatically, participants sign what they've said.

Collaboration is focused on problem solving of real issues for the company.

This allows the members of the company to continuously participate and contribute.

A problem could be "We need a software that makes X and Y."

### **Segmentation of problems**

The platform will proceed segmenting the initial problem in sub-problems.

Eg. Design, Technological Stack, Back end, Front end, hiring process, etc.

Different Sub-Routes are created, in a way that every team can reach a P2P collaboration.

### **Talent and skill oriented cooperation**

The software selects the people that have the right skills for taking care of a certain problem or sub-problem.

It means that the software will start organizing meetings between the member of a DAO/company/organization, without stopping until the specific problem is not considered resolved.

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## **The Democracy Routes Software**

The software introduces a revolution in decision-making paradigms through the use of innovative languages, similar to flowcharts, which allow the formulation of new decision-making models.

These NO CODE languages offer an intuitive graphical interface that enhances the logic of consultative/decision-making systems, eliminating the need for advanced IT skills.

### **Avoiding the Black Box - Transparency**

The growing concern about AI decisions, often difficult to explain and prone to replicating past patterns, is addressed with great attention in the design of this software. The distinction between generativity and creativity in AI is recognized. While AI can generate innovative solutions, it does not replace human creativity. Therefore, the software is designed to enhance human sensitivity and creativity, integrating it with AI's generative capabilities to overcome the limitations of both.

The software uses AI not as a black box but as a transparent and controlled tool. Each decision made by the AI is tracked and can be rigorously analyzed, ensuring that the AI serves the users by contributing transparently and openly to solving social issues. The processes are segmented, allowing precise monitoring of actions taken by both AI and human operators.

### **Blockchain and Security of Decision-Making Processes**

The software implements a blockchain-based system to ensure data integrity and prevent any form of manipulation of decision-making processes. Cryptographic functions enhance the transparency of operations, reducing human control to what is legally permitted. The blockchain serves as the cornerstone for ensuring data integrity in the software. All steps in the routes are immutably recorded on the blockchain, creating a chain of blocks that provides a reliable and tamper-resistant history.

### **Advantages and Benefits**

The benefits of using DR software in institutional or corporate settings are numerous. Whether consulting specialists, organizing thematic meetings, or finding an algorithm to facilitate specific conversations, DR can help make consultative and decision-making processes smoother.

DR offers advantages in terms of saved time and energy:

- Saved time during organization
- Fewer discussions related to decision-making processes
- Greater focus on the discussed topic
- Clearer understanding of the reasons behind institutional decisions
- Open synchronous and asynchronous discussions, with the possibility of intervention, contestation, and potential re-discussion.

The software can be integrated into existing applications and websites, such as those of institutions, associations, etc.

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### **Technical Considerations**

Currently, the technologies used for the prototype are the classic ones used for web applications. Various LLM (Large Language Model) AI models have been tested, from closed-source ones by OpenAI (ChatGPT 3.5/4) to various open-source models.

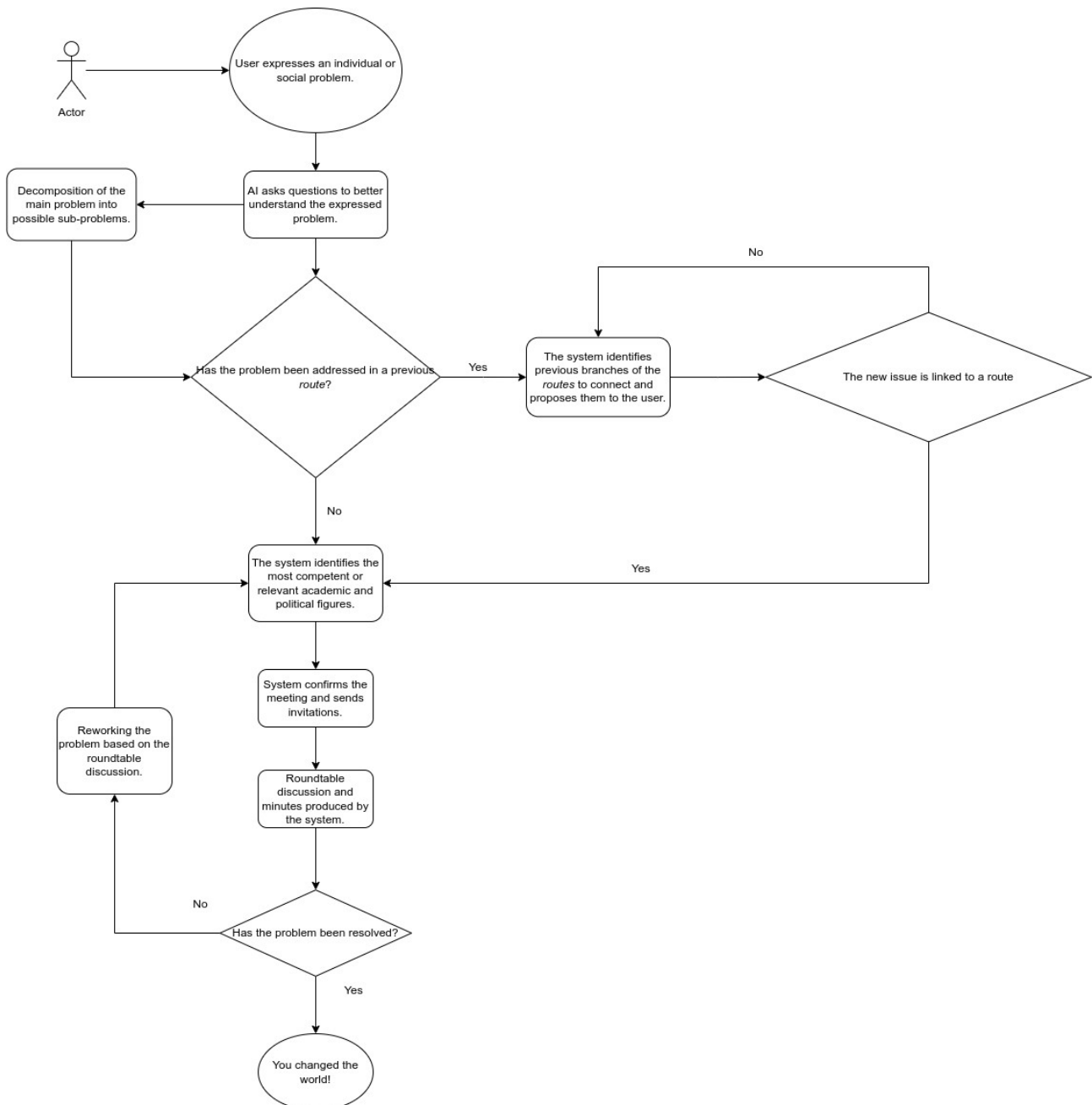
For a prototype or even an initial public use, closed-source models have proven to work perfectly. However, it would be desirable to have physical servers on which to install certified LLM models

when the software is used constantly by institutions, to minimize the possibility of external inferences.

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## The Flow – User Input

The flowchart explains how the user, starting from a problem close to them, can query the system via chat, writing what does not work for them. The system is user-centric: it starts from the user's needs, helping them solve the problem.



### Possible inputs:

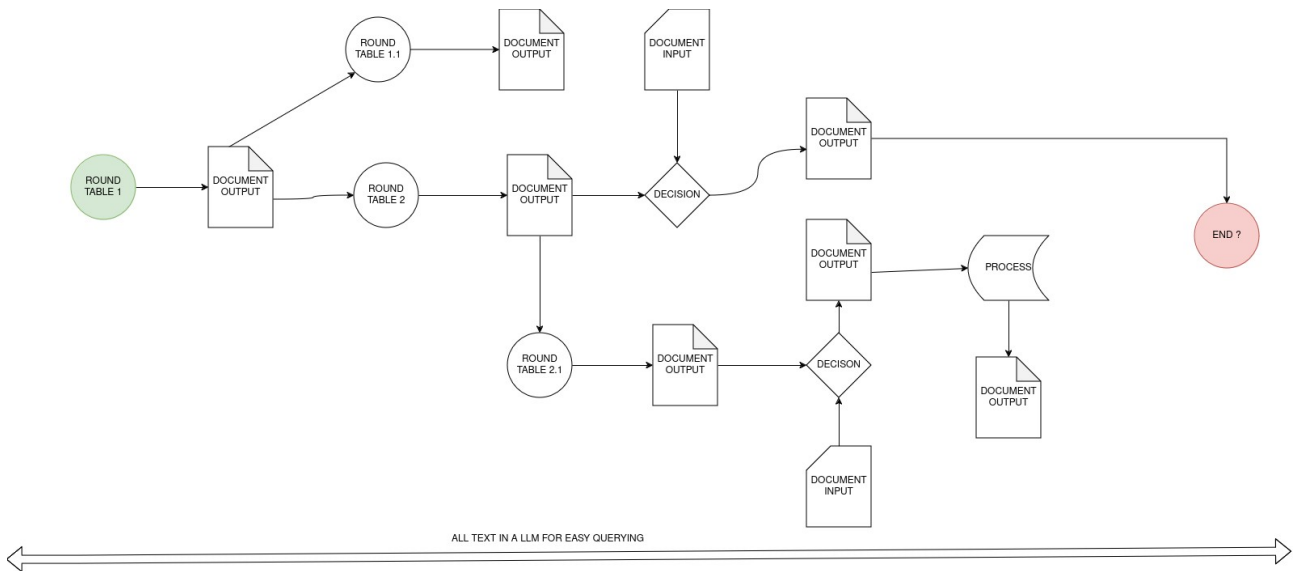
- "I notice a strong social polarization regarding issue X."
- "There are few public parks in my city."
- "I have difficulty socializing, I feel lonely."
- "I always argue with my brother."

- "An open-source program should be created to monitor city pollution."

The system identifies the most suitable people and creates a Round Table to discuss the problem. Multiple Round Tables in succession form a Route (a democratic path). The system analyzes if the problem has already been addressed in other Round Tables and possibly links the current Round Table to a previous one belonging to other Routes. The system proposes to the user which Round Table to join, still allowing the user to create a new Route or join a Round Table of their choice. The system continues to organize Round Tables on a specific Route semi-automatically until the problem is eventually resolved.

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## Structure of Routes / Round Tables

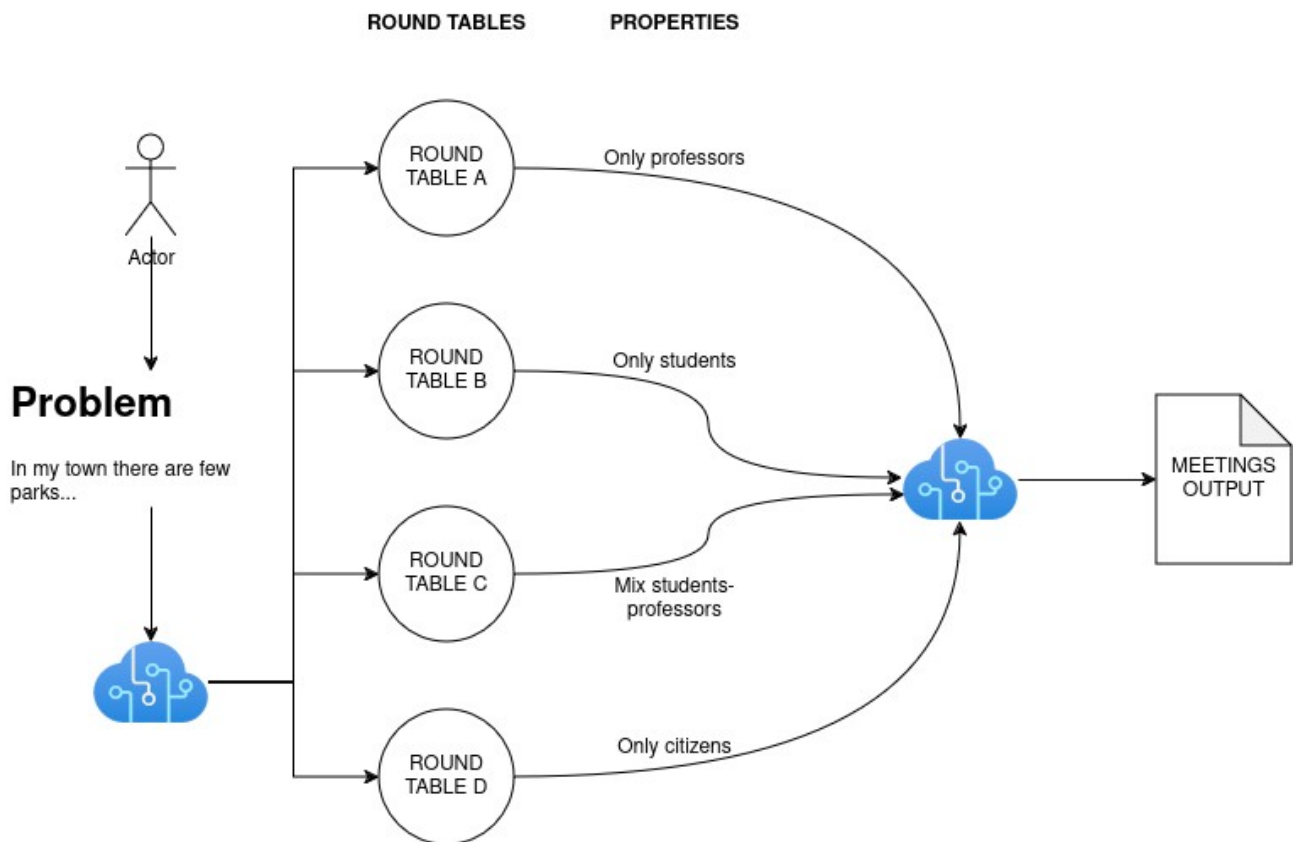


### Legend:

- **Round Table:** A round table where people with specific skills or sensitivity to the topic discuss the problem.
- **Document Output:** Minutes of the Round Table, prepared by STT (Speech To Text) systems, refined by AI, and "signed" by the round table participants.
- **Document Input:** Any document or text entered asynchronously to support or counter what has been said within a Round Table. Inputs can be comments or entire documents, theses, scientific articles, etc.
- **Decision:** When a decision needs to be made between multiple options.
- **Process:** Sometimes an investigation is necessary to delve into certain topics; other times unclear or "murky" issues arise that require an informal process.
- **ALL TEXT IN A LLM:** For each route (or problem), all produced texts, both input and output, are sent to an LLM system, which will be available to users for quick consultation on the data produced and entered in that specific route.

## Automatic Organizer

Decomposition of problems into sub-problems and multiple and parallel organization of Round Tables.



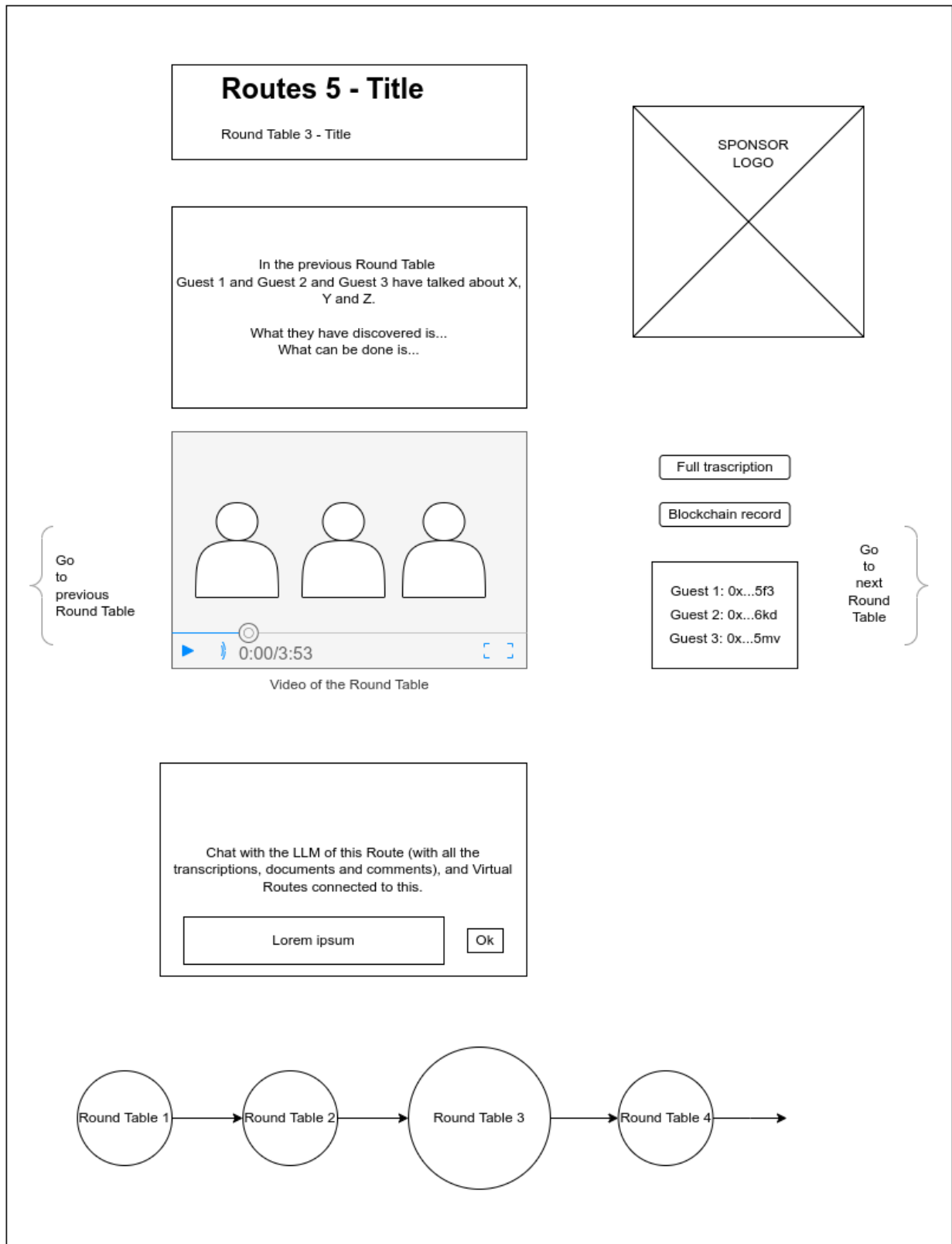
On a given problem, it might be interesting to hear what different groups of individuals can reflect on current topics in a completely different way. In some cases, participation based on gender or sex might lead to completely different results; or think about socio-economic class.

The AI part should be considered as an automatic organizer, an entity that, even in the absence of human input, continues the organizational processes that can lead to solving a specific problem, even breaking it down into sub-problems, and organizing specific Round Tables for the programmatic discussion of the selected topics.

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# Route/Round Table Interface

Possible mock-up of the Round Table consultation interface:

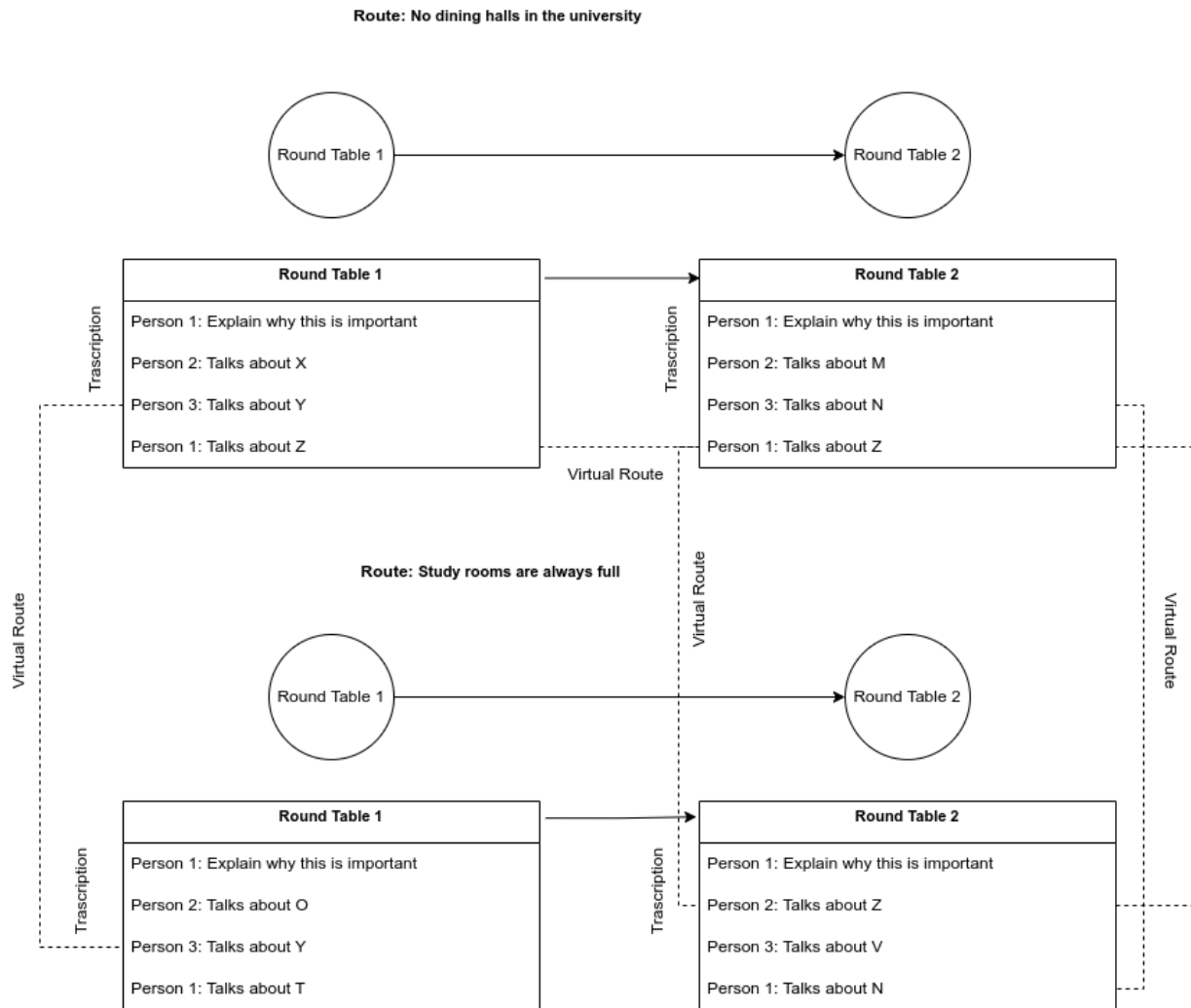


Legend:

- **Description:** Transcription of the Round Table
  - **Sponsor:** Possible sponsor giving prizes to those who engage in certain social areas (e.g., environment, social issues, etc.)
  - **Video:** Video recording of the Round Table
  - **Full Transcription:** Full transcription by STT (Speech To Text) software
  - **Blockchain Record:** The hash of the Round Table (i.e., transcription, video, etc.) is calculated and saved on the blockchain to show any changes.
  - **Chat with LLM:** Ability to chat with an LLM, whose context is given by all the data contained in that Route.
  - **Navigation:** Ability to navigate between the various Round Tables of a Route.
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## Virtual Routes

Virtual Routes are created by the system and link together all Round Tables with common topics. For example, "Route: No dining halls in the university" and "Route: Study rooms are always full" might have converging topics. People participating in the Round Tables are likely to talk about multiple themes, some of which might differ from the main focus of the Route. For instance, within the Round Table, topic Z might be discussed, linked to "lack of economic funds in the university," and perhaps topic Y might be "students always arrive late to class (due to lack of spaces)."



The system creates Virtual Routes, creating paths for secondary and not strictly relevant issues. Essentially, the following Virtual Routes would be created:

- Lack of economic funds in the university
- Students always arrive late to class (due to lack of spaces)

Virtual Routes can be consulted like normal Routes.

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## **Modules**

Many software solutions aim to facilitate consultative and decision-making processes, with minimal differences between them. The virtual environment allows collaboration on project participation issues.

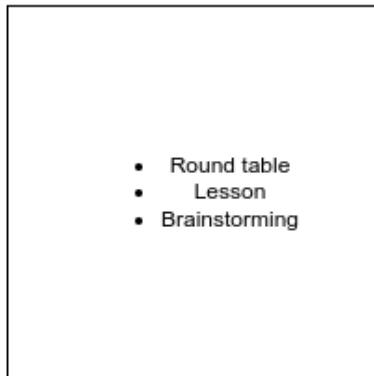
A software platform that hosts smaller platforms, integrated similarly to app stores and apps, or software integrated via plugins.

In this case, modules would concern the ways discussions occur within (or outside) the platform; modules regarding decision-making methods, and gamification-related modules to motivate users towards civic participation.

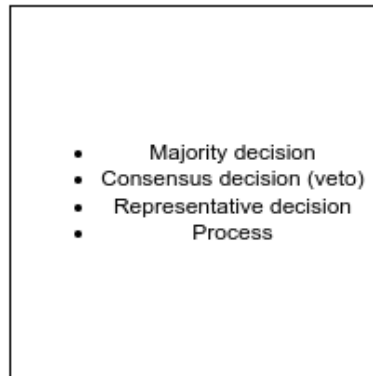
Modules, designed parametrically, help make the platform semi-universal, suitable for use by different entities, such as political parties, various institutions, and associations.

The modular structure allows easy integration of additional functionalities through the development of plugins/modules.

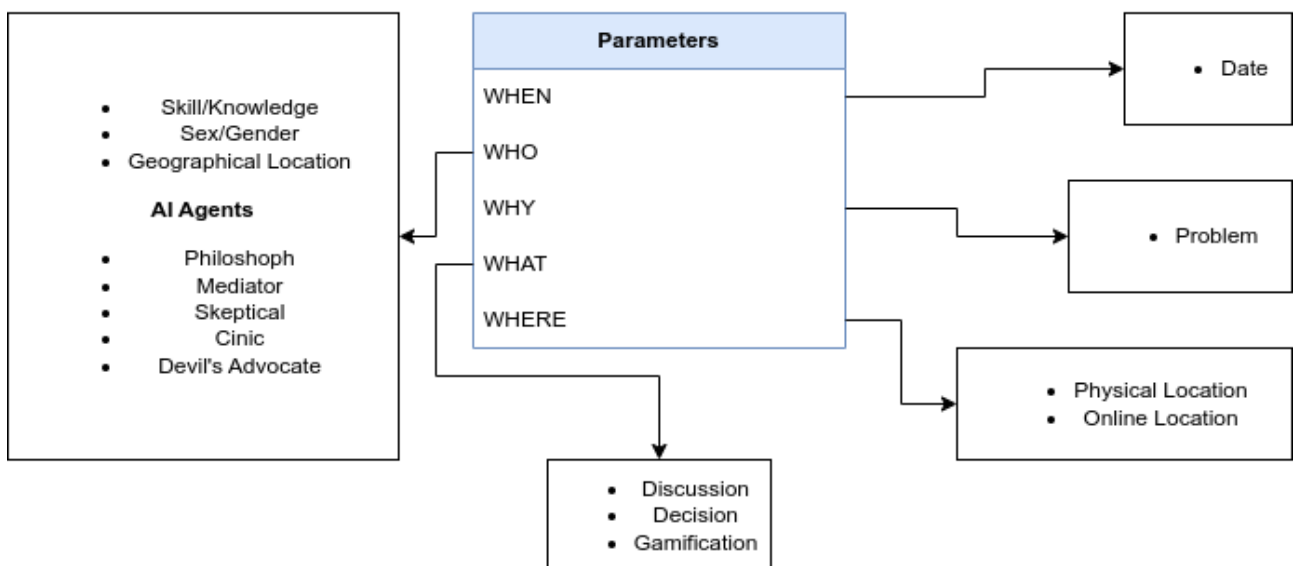
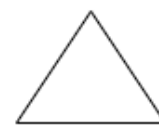
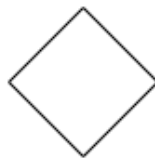
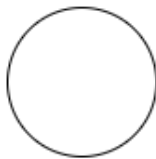
## Discussion



## Decision



## Gamification



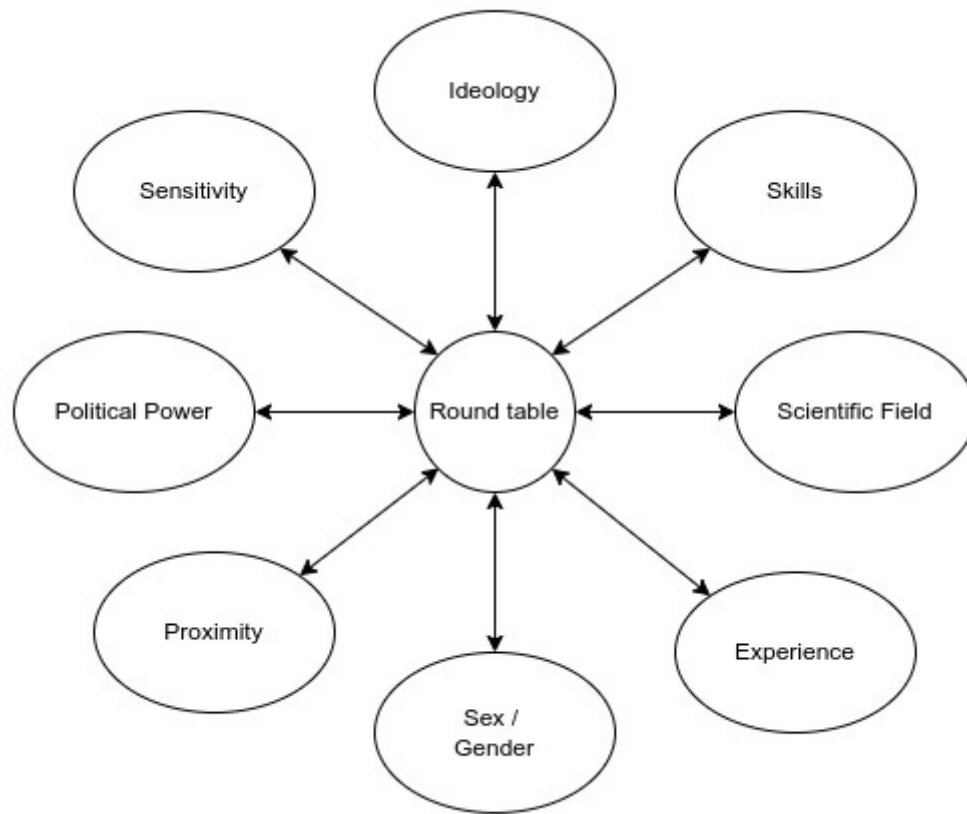
### Possible modules:

- **Civic Participation:** Modules that facilitate easier access to politics for citizens. E.g., Democracy Routes.
- **Consultative:** Modules that aid in the discussion phase. E.g., Democracy Routes, Bias recognition, Aikiwiki.com.
- **Deliberative:** Modules implementing different voting systems, e.g., fractal voting systems, quadratic voting system, delegating voting system, eVocracy.org, Electric.vote.
- **Gamification:** Modules that stimulate participants to engage.
- **Legal:** Systems for drafting legal documents.
- **Transparency:** Modules for state transparency, AI agents analyzing state activities, e.g., Software Nomine.

- **Information:** Modules providing information systems before and after consultative and/or deliberative activities.
  - **Social Polarization:** Modules reducing social polarization through algorithms organizing discussions among people with different opinions on a specific topic.
  - **External modules:** Interfaces allowing software integration with existing platforms. E.g., development of specific APIs, but also modules for web3 integration, e.g., Ethereum for DAOs.
  - **Graphical interface:** Modules should be easily installable and configurable even by non-technicians, in a no-code manner, following a flow structure.
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## Properties

A scheme highlighting possible properties belonging to an individual to be selected for participation in a Round Table.



### Properties:

- **Ideology:** Political ideology, which could be suitable for contributing to a specific discussion.
  - **Skills:** Specific skills or knowledge necessary for the discussion.
  - **Scientific Field:** Academic or work specialization.
  - **Experience:** Personal experience providing a different viewpoint (e.g., an emigrant, someone with particular experiences).
  - **Sex/Gender:** Gender and sex, considered when discussing certain topics.
  - **Proximity:** Geographic proximity is important for spatial issues.
  - **Political Power:** Holders of political power.
  - **Sensitivity:** A particular sensitivity can make significant contributions (e.g., a vegetarian person; someone attentive to certain rights).
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## **Gamification**

To incentivize democratic participation, gamification mechanisms have been identified to further motivate citizens.

## **Daily Leaderboard**

Each username is associated with an alphanumeric string, e.g., 0x...4fm, and a leaderboard shows the most active users or those who have achieved particular goals.

## Daily Leaderboard

### Community Pillars

People who attend the most meetings (N° Round tables)

1. 0x...4gf - 8
2. 0x...fj3 - 8
3. 0x...k2d - 7
4. 0x...ll3 - 7
5. 0x...2k1 - 6

### Consensus Ambassadors

People who have managed to get along with others who had different opinions

1. 0x...4xx - 5
2. 0x...fr4 - 5
3. 0x...hhj - 4
4. 0x...lmf - 4
5. 0x...n23 - 3

### Mediation Champions

People who have successfully mediated between multiple parties

1. 0x...k66 - 6
2. 0x...0g4 - 5
3. 0x...54j - 4
4. 0x...lm4 - 4
5. 0x...kl3 - 4

### Opinion Explorers

People who have not managed to get along with others who had different opinions

1. 0x...4gf - 6
2. 0x...fj3 - 5
3. 0x...bb1 - 5
4. 0x...lvb - 5
5. 0x...b3y - 4

### Truth Guardians

Latest validators

1. 0x...jj2 - 6
2. 0x...oop - 5
3. 0x...kee - 4
4. 0x...lf5 - 4
5. 0x...Jjd - 4

### Locals Truth Guardians

Latest validators in your area that you may know

1. 0x...211 - 6
2. 0x...fj3 - 5
3. 0x...ffG - 4
4. 0x...rr5 - 4
5. 0x...lL1 - 4

Possible Categories:

- **Community Pillars:** People attending the most meetings (N° Round Tables).
  - **Consensus Ambassadors:** People managing to get along with others with different opinions.
  - **Mediation Champions:** People successfully mediating between multiple parties.
  - **Opinion Explorers:** People who have not managed to get along with others with different opinions.
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## **Feed**

It is important to be able to consult and learn about new Routes or Round Tables so that people can check what has been discussed or what topics have been addressed, and contribute with messages or by participating in subsequent Round Tables.

# Feed

Search for Routes or Round Tables

## New Routes

Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Subscribe

## New Round Tables

Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Subscribe

## Successful Routes

Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Subscribe

## Never ending Routes

Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Subscribe

## Round Table near you

Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



Route: Title  
Round Table: Title  
N°n



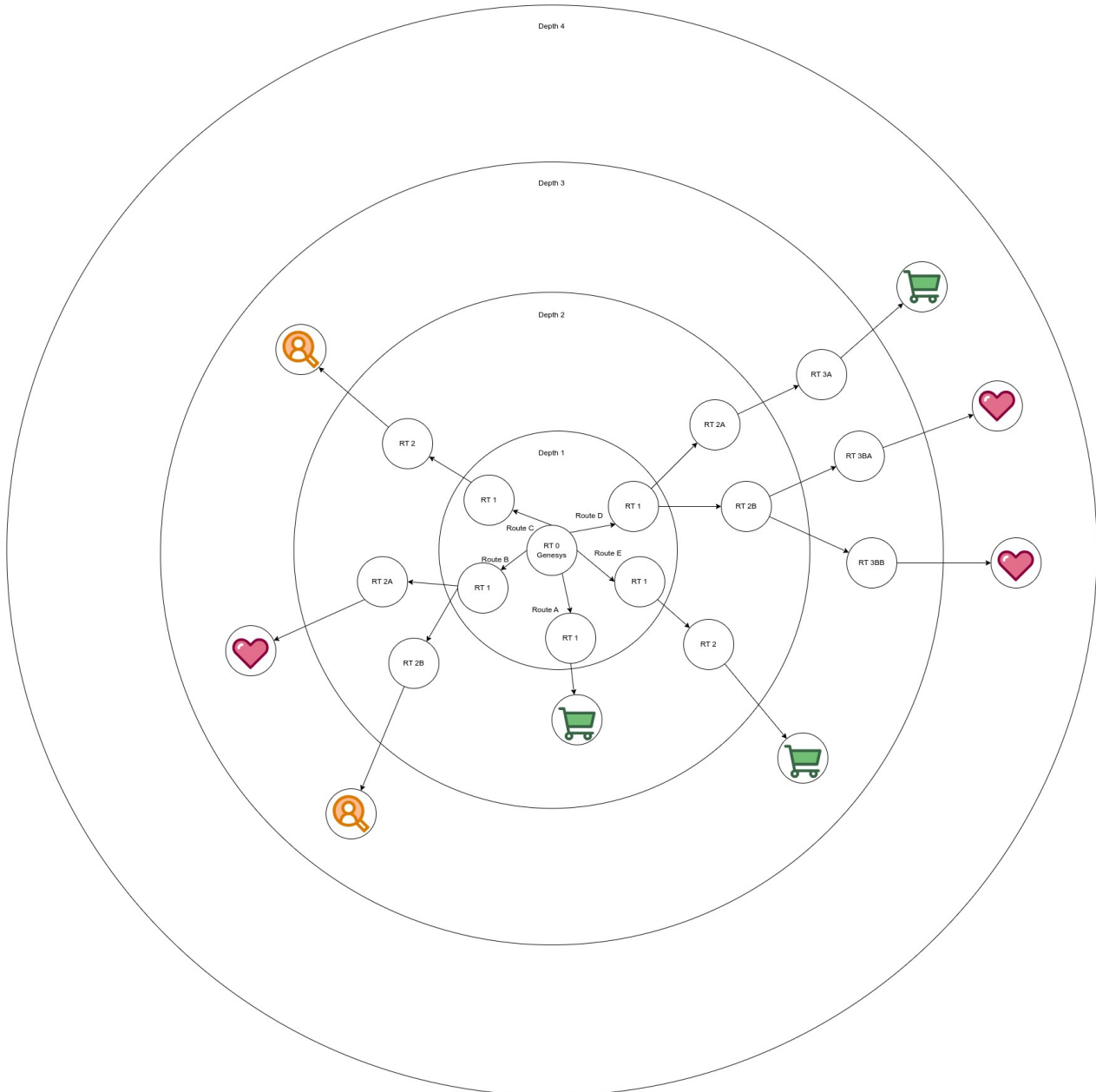
Subscribe

**Possible Categories:**

- **New Routes:** All the new Routes created in the last 24 hours.
- **New Round Tables:** All the Round Tables created in the last 24 hours.
- **Successful Routes:** Routes that have resolved a problem in the latest 24 hours.
- **Never Ending Routes:** Routes that have accumulated more than X Round Tables.
- **Round Tables Near You:** Round Tables addressing geographically relevant topics.
- **Inflamed Round Tables:** Round Tables with strong polarization.
- **Round Tables for You:** Round Tables that might interest the specific user.

## Gamification Explorer

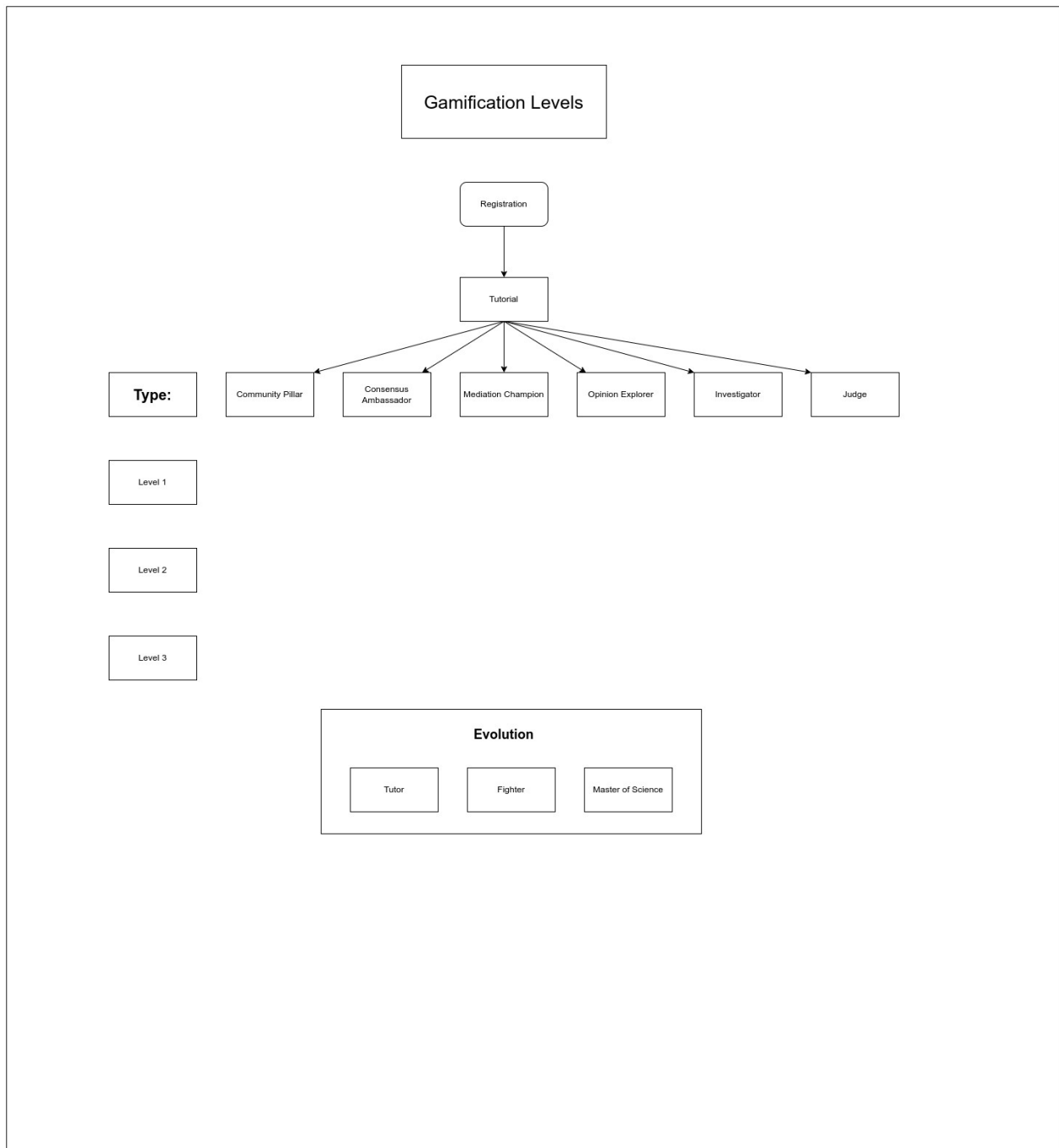
It is important to motivate users to tackle even the most difficult Routes. Therefore, sponsor rewards are assigned algorithmically (or decided on specific management Routes). The goal is to incentivize participation on the platform with rewards granted by sponsors.



## Gamification Levels

Gamification can also work by assigning specific tasks and allowing participants to level up based on the actions performed on the platform. Leveling up or assuming a certain role involves additional functionalities and/or responsibilities.

The previously mentioned categories could represent levels and paths that unlock objectives. This way, the user is encouraged to act as a mediator in some contexts, while in others, the goal is to find innovative, even original, ideas.



### Categories:

- **Community Pillars:** People who attend the most meetings (N° Round Tables).
- **Consensus Ambassadors:** People who have managed to get along with others who had different opinions.

- **Mediation Champions:** People who have successfully mediated between multiple parties.
- **Opinion Explorers:** People who have not managed to get along with others who had different opinions.

## Conclusions

In conclusion, the Democracy Routes project represents an innovative and necessary step towards revitalizing democracy in the digital age. Through advanced technologies like artificial intelligence and blockchain, the software offers a unique and transparent approach to civic participation, political consultation, and decision-making system simulation.

Democracy Routes positions itself as a bridge between citizens, policymakers, and political philosophers, encouraging more active and informed participation in public life. The success of Democracy Routes will depend on its adoption and integration into the social and political fabric. The initial launch phase, through crowdfunding, and subsequent partnerships with companies and institutions emphasize the importance of a collective approach to realizing this vision. As we approach the potential of a more inclusive and participatory democracy, the role of individual citizens becomes even more crucial.

It is time to act. Technology offers powerful tools, but it is people, with their choices, actions, and voices, who determine the course of our society. Democracy Routes invites each of us to reconnect with the essence of democracy: the power and responsibility to shape the future. Join us on this journey towards a more dynamic, transparent, and participatory democracy. Together, we can chart new routes towards a democratic future that truly reflects the will and needs of everyone.

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## References

Citations, sources, and references used in the whitepaper.

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## Contacts

Contact information for further questions or insights.

For information:

- Official website: [democracyroutes.com](https://democracyroutes.com)
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