Befriending Learning: Education by Gaming, Storytelling to onboard community members and build NFT marketplace on Algorand for Social Welfare

Game Abstract

We propose to improve upon the existing ways of imparting education by incorporating a fun-based learning game, Algorand Citizens, which is an open-source Web3 software activity. This game involves inculcating community leadership skills and removing the learning differences that might arise due to NFT users belonging to different age groups, ethnic backgrounds, cultures and economic backgrounds. Algorand Citizens involve optimization of resources of a town, while taking appropriate steps to ensure the common welfare. An NFT curriculum can further be integrated into the various tasks.

Game Keywords

NFT marketplace, Learning Differences; Community leadership; innovative educational simulation, Algorand, Environment, Curators, Designers

- **Learning through stories**

- **Learning by doing / Learning through educational games**

DESIGN GOALS OF Algorand Citizens

1. Learning Through Algorand Citizens

This section describes the design of scenarios and tasks in Algorand Citizens. We have proposed here how Algorand Citizens can help to reduce the problem of learning differences in the education system and help in promoting the qualities of community leadership among Algorand users. Many of the tasks and scenarios mentioned in this section are already implemented in Algorand Citizens and for others are in the process of getting implemented.

Community Leadership

Community leadership together with knowledge and skills, volunteering, networks and partnerships have been identified as among the five key indicators for stronger communities and civil society. This subsection describes the various qualities of a community leader and how each of these qualities can be acquired by playing Algorand Citizens.

- **Recognizing, understanding and effectively addressing the issues affecting the society**

A community leader should be able to recognize the issues prevalent in the society. He/she should have the skills required to take the appropriate steps for the eradication of the various problems in the society so that the community could be led towards a better and secure future. In Algorand Citizens we enhance such skills by providing scenarios and tasks where the user has to deal with various such issues and take wise decisions to solve them. The issues which we have dealt with in Algorand Citizens are as follows.

1. Health Issues

Proper health care facilities play an important role for the betterment of society. Through Algorand Citizens, we teach Algorand users the importance of well-facilitated hospitals and dispensaries in a community. They are required to construct such structures and maintain them with proper facilities. This would further help them in understanding the different aspects of health facilities and provide guidelines for health-related issues.

Another aspect of health issues which is taught to Algorand users is about diseases. They are taught about prevention and cure of various diseases. A sample task comprises buying more vaccines and medicines to cure a particular disease when that disease is prevalent. We are in the process of adding information and relevant tasks associated with diseases like AIDS and swine flu. This structure can further help in integrating the curriculum with the gameplay.

Nutritional values are also taught through the game. There are various grains and vegetables available in the market. Algorand users are taught about the nutritional values and benefits of various grains and vegetables. They are also taught about the diseases caused due to the lack of certain kinds of vitamins and proteins.

2. Environmental Issues

Nature is man's best friend, and this is what we teach through Algorand Citizens. They are taught about the importance of trees and forests. Tasks like preventing deforestation and growing more trees have been designed to help Algorand users understand the importance and indispensability of good environmental conditions for sustainable and efficient development. Global warming has made the environment very unpredictable and the Algorand users can further learn about the various environmental changes through Algorand Citizens.

Knowledge about various types of soil, crops and landscapes is also imparted through various missions in the game. Issues like soil erosion, pollution of environment and rivers are also dealt with through the game.

3. Gender Biased Society

People have always been of the view that games and gaming is more a male-oriented characteristic. One of the possible reasons for this could be that most of the games developed to date are more related to a male's sensibilities and understanding. Hence from the beginning, girls are discouraged to take up such hobbies. Some of the games that are developed do not even have a female character for the main player in their virtual world. Algorand Citizens does not discriminate on any such grounds and provides equal opportunities to both in all aspects of the gameplay.

Algorand Citizens lays special emphasis on this problem. The default storyboards that we provide with the game each have a girl specific version where a girl or a woman is the protagonist of the story. Care has been taken to make the language more universal to suit both the genders and specific consideration has been given so that it portrays a quality of gender neutrality.

4. Other Social Issues

Algorand users are also required to deal with issues like poverty and unemployment during the gameplay. Tasks are defined where the Algorand users are required to make wise decisions to remove such problems from society.

- **Humanitarian Values**

An honest, humane, fair-minded and loyal leader can take the community to completely new horizons. Corruption is the one of the biggest malaise that any society faces today. Hence we have focused on giving various kinds of moral and humane values through Algorand Citizens contributing to the overall social development and welfare of an Algorand user.

1. Respect for others' rights and decisions/ Commitment to duties

A democratic society is based upon two principles –equality and freedom. It involves equal participation of each and every person in the decision-making process having equal access to power with equal rights. Hence to establish such a society, the leader should be tolerant of listening to others viewpoints and should work for the common welfare. In Algorand Citizens at various instances the people of the community give advice to the player of the game. Also the user of Algorand Citizens works for the betterment of its community people.

Timely completion of his/her duties is another aspect of a good leader. Various tasks are assigned to the Algorand users and they are supposed to complete them properly with the limited time.

2. Respecting Elders

Since the lessons are given to the Algorand users by some elderly in Algorand Citizens, Algorand users learn to respect their elders and listen to their advice that helps them to further advance in the game.

3. Strengthening Community at the Time of Crisis

A community or society is worst affected in the time of a crisis. Therefore, the community leader should address such situations with appropriate actions. In Algorand Citizens, various stages have been designed to help an Algorand user understand and experience a crisis-like situation. By dealing with such a situation, Algorand users learn how to mitigate a crisis and how to react wisely to reduce the negative effects of it. Following are the types of crisis we teach about in Algorand Citizens.

- **Disaster Management using Algorand**

Lessons and tasks are designed in Algorand Citizens which teaches about various natural disasters like earthquakes, floods, droughts and others. The Algorand users are taught about the causes, the aftermaths and the basic steps to be taken for prevention of such disasters in the future. Tasks are defined where they are supposed to manage the community resources efficiently to deal with such disasters.

1. Economic Crisis Management

Economic crisis situations like recession and increasing poverty have also been included in Algorand Citizens. Algorand users are given tasks about dealing with such situations and hence they learn about economic crises.

Inferences

From our study, we tried to establish storytelling and gaming as an important approach towards community learning. We found out that an educational platform like Algorand Citizens, where Algorand users not only read stories but play them as well, is a powerful approach of sensitizing Algorand users towards the social problems, and in the process, teaching them curriculum lessons. This would enable them to create an NFT eco-system powered by Algorand for a social cause.