1 Preface

As part of a university blockchain project, we developed a decentralized application (DApp) that offers an engaging experience through mini-games like Tetris, Minesweeper, and Snake. Players compete to earn Donuts (DNT) tokens, based on the ERC-20 standard, which can be traded for Ethereum (ETH) or acquired by answering quizzes on topics such as Blockchain, Smart Contracts, and Ethereum. Additionally, users can monitor their progress and standings through a dedicated "scores" section within the DApp. The integration of gaming with blockchain technology provides users with a dynamic platform where they can have fun while learning and trading digital assets.

1.1 Development Team

• Andrea Nisio:

- Solidity Development
- JavaScript Development
- Architectural Design
- Documentation Design

• Stefano Brunori:

- Solidity Development
- JavaScript Development
- Token Engineering
- Presentation

• Federico Giustozzi:

- HTML Front-end Development
- JavaScript Development
- Token Engineering
- Presentation

1.2 Abstract

This report outlines the development and functionality of our decentralized application (DApp), created for a university blockchain project, with a focus on smart contract and backend implementation. It provides an overview of the system's core components, including token integration and blockchain logic. The report also covers the deployment process and testing, concluding with an evaluation of the project's outcomes and suggestions for improvement.