Deliverable #1 – Project Plan

1. Scope Statement
   1. In short, the project is an NFT (non-fungible token) decentralized application (Dapp). The application has three main stages: the frontend takes user input of a file and their crypto wallet address, the frontend then connects to the backend (the Ethereum blockchain) and then mints an NFT, and outputs a successful transaction and creation of the NFT on success. The client’s newly created NFT is the proof of digital ownership of their uploaded file.
   2. What type of platform must the software work with?
      1. Both the desktop application and the web-based application will require a network connection. The web-based application will be usable on any device with browser software in addition to the network connection.
   3. Will the software function as a standalone application on a given computer, or will it function over a network connection?
      1. This software will include both a desktop application as well as a web-based application that will run in the event the user system is not compatible with the desktop version.
   4. What other software, if any, must the software interact with?
      1. The desktop application uses no other software and relies on a network connection to connect to the Ethereum blockchain on the backend. The web-based application will require an internet browser for functionality.
   5. What programming language will be used for the project?
      1. C# for the backend of the desktop application
      2. Solidity for the creation of the NFT and smart contract deployment
      3. Javascript/Typescript for frontend
      4. HTML for frontend
      5. XAML for user interface
   6. Will the software use a graphical interface or a command line interface?
      1. Both applications, the desktop application and the web-based version, will include graphical user interfaces.