Department of  Information Technology

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Project Seminar on

# NFT MarketPlace ApnaMarket.NFT

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# Contents

1. Introduction

2. Literature Review

3. Methodology

4. Advantages of NFTs

5. What makes our Application unique?

6. Current Status

7. Bibliography

# Introduction

- NFT or "Non-Fungible Token" is a non-fungible asset that is unique and cannot be split.

- Non-Fungible - "Unique" and "not interchangeable"

- NFT can be connected to real-world objects

- NFT can have only one official owner

- The ownership can be sold to another person only then it will be reflected on Blockchain
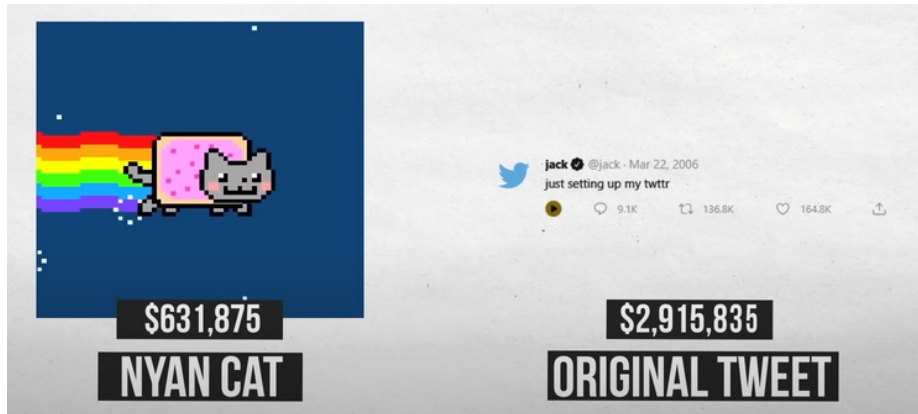
# Introduction

- The foundation of our idea is the usage of Blockchain and NFT technology for trade

- Trade Art "Music" "Graphic" "Painting"

- It providesa artist a solution to earn money - equity in term of streaming royalty

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        NFT
       / | \
      /  |  \
   BUY  SELL  TRADE
```
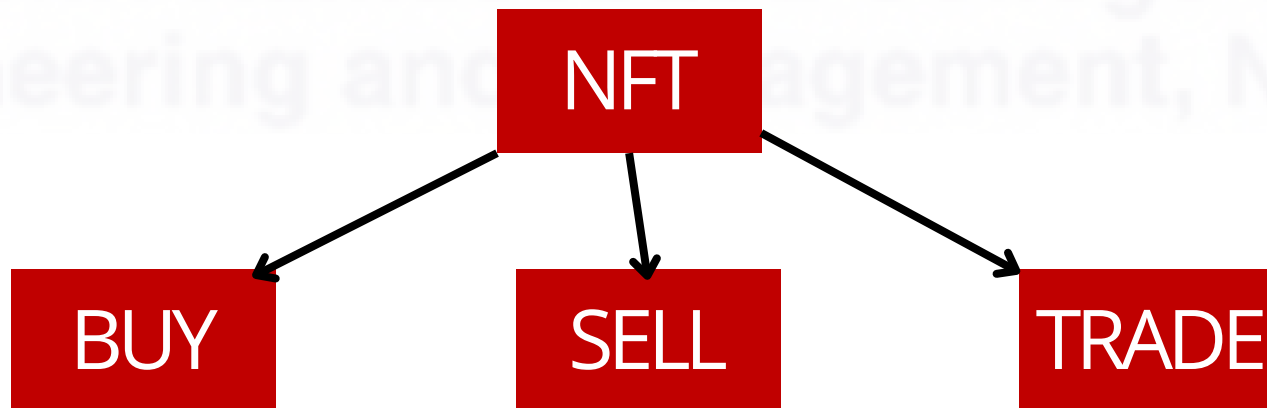
# Literature Review

# Literature Review

- Blockchain is a database that is consensually shared, replicated, and synchronized.

- Blockchain differs from centralized repositories in that it decentralizes the source of trust.

- The bank is not required as a trusted third party. "Conscienc "
- consensus mechanisms
  - proof-of-work (PoW)
  - proof-of-stake (PoS)

- Consensus mechanisms play an essential part of securing information by encrypting it and using automated group verification.

# Literature Review

- Non-Fungible Token or NFT is a non-fungible asset that is unique and cannot be split or non interchangeable.

- NFT can be connected to real-world objects. This enables authentication and tracking of the asset.

- NFT provides the person with full ownership of that unique asset verified through Ethereum blockchain.

- NFTs are different from Cryptocurrency as cryptocurrency is fungible while NFTs are not.

# Technology

- **Polygon** Framework: Polygon is a decentralized Ethereum scaling platform that enables developers to build scalable user-friendly dApps with low transaction fees without ever sacrificing on security.

- **Hardhat** : It is a Solidity development environment for our DApp.

- **Solidity**: It is used for writing smart contracts for NFTs.

- **Metamask**: It is a software cryptocurrency wallet that helps us interact with the Ethereum blockchain and make transactions.

# Existing NFT Marketplaces

- **OpenSea** is the first and largest peer-to-peer marketplace for crypto goods, which include collectibles, gaming items, and other virtual goods backed by a blockchain.

- **APENFT** aims to build a bridge between top-notch artists and blockchain and support the growth of native crypto NFT artists.

- **The Bored Ape Yacht Club** is a collection of 10,000 unique Bored Ape NFTs that are located on the Ethereum blockchain.

# **Methodology**

**Software Requirements:-**

- Metamask wallet browser extension

- Polygon framework

- Solidity language for writing Smart Contracts

- Next.js and Tailwind CSS ( For Frontend part)

- IPFS (For file uploads and downloads)

- Hardhat ( Dapp Development environment)

- Ethers.js ( For interaction with Smart Contracts)

- ERC721 Smart Contracts standard

# Advantages of NFTs

- Unique Ownership

- Verifiable Authenticity

- Direct Artist Compensation

- Traceable Ownership

- Accessibility

- Increased Value

- Transparency

# What makes our Application unique?

- Fantiger Is India's 1st Music NFT MARKETPLACE and Stands 1st as Top Indian NFT Project.

- Fantiger Works for 5 period of time only whereas we will keep it for x period of time which is upto the artist's or until the one is holding the NFT on platform. Fantiger works on INR/USD holding with polygon Blockchain whereas we will have. Direct crypto process as we can see it is more universally accepted.

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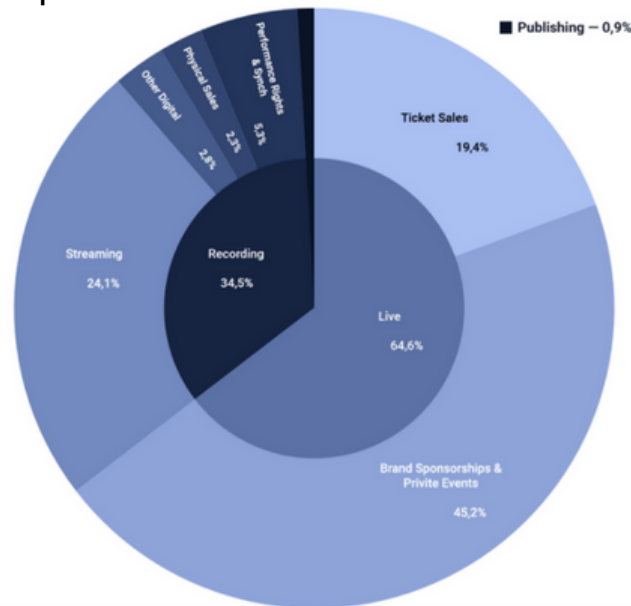


Indian Music Industry Revenue by Source, 2018

# Current Status

- We have learnt about the basics of Blockchain technology, NFTs, Smart contracts and read some white papers of the existing NFT marketplaces like APE NFT, BAYC, NFTfy.

# Bibliography

- APENFT. (2021, May). *APENFT White Paper V1.1* (V1.1). https://www.apenft.org/book/APENFT%20White%20Paper.pdf

- 101 Blockchains. (2021, August). *The Advantages of Non-Fungible Tokens(NFT)*. Diego Geroni. https://101blockchains.com/advantages-of-nfts/

- NARA(National Archives and Records Administration). (2019). NARA Blockchain Whitepaper. *NARA Blockchain Whitepaper*.

**Thank You...**