MINI-PROJECT REPORT-I

Title   : Vibe Wave

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TABLE OF CONTENTS:

ABSTRACT:

The "Vibe Wave" project is a music platform where users can upload, download, and record music samples. It features both a website and mobile app, built using **HTML, CSS, JavaScript, Python, and MongoDB**. Users can access their music on any device, securely store it, and record new samples which is really helpful for emerging artist. The backend, powered by Python, handles file management and user sign-ins, while MongoDB stores user data and music. The front-end provides an intuitive interface, with the mobile app offering an optimized experience on phones and tablets.

SYSTEM ANALYSIS

Existing System:

Music platforms like Spotify, Apple Music, and Wynk Music let users upload and stream music, but they lack features like syncing across devices, recording custom samples, and managing music in a personalized way. Users often need separate apps for uploading, recording, and syncing, leading to a difficult experience. Privacy and security issues also arise with personal music files.

Proposed System:

Vibe Wave solves these issues by providing a single platform for uploading songs, recording samples, and syncing across devices. Users can access their music from any device they log into. The system is secure, with encrypted data storage and user authentication, ensuring privacy. It offers a seamless experience across both desktop and mobile devices.

SYSTEM REQUIREMENTS

Hardware Requirements:

- Processor: Intel Pentium 4 / AMD Athlon 64

- RAM: 4 GB or more

- Storage: At least 2 GB free space

- Display: Any standard resolution screen

Software Requirements:

- Operating System: Windows 10 or later

- Programming Language: Python (3.x version)

- Database: MongoDB

- Frontend: HTML, CSS, JavaScript

- IDE/Editor: Visual Studio Code

TASK/MODULE DESCRIPTIONS

Module 1: User Authentication & Profile Management

Secure user sign-up, login, password recovery, and profile editing.

Module 2: Song Upload & Download

Upload songs to cloud storage, download across devices, and sync libraries.

Module 3: Recording Music Samples

Record, save, and edit music samples for future use.

Module 4: Music Library Management

Organize songs and recordings with sorting,

filtering,and playlist creation.

Module 5: Cross-Device Synchronization

Sync music, recordings, and user data across web and mobile devices.

User Interface & Experience:

Responsive, user-friendly design for seamless navigation on web and mobile platforms.