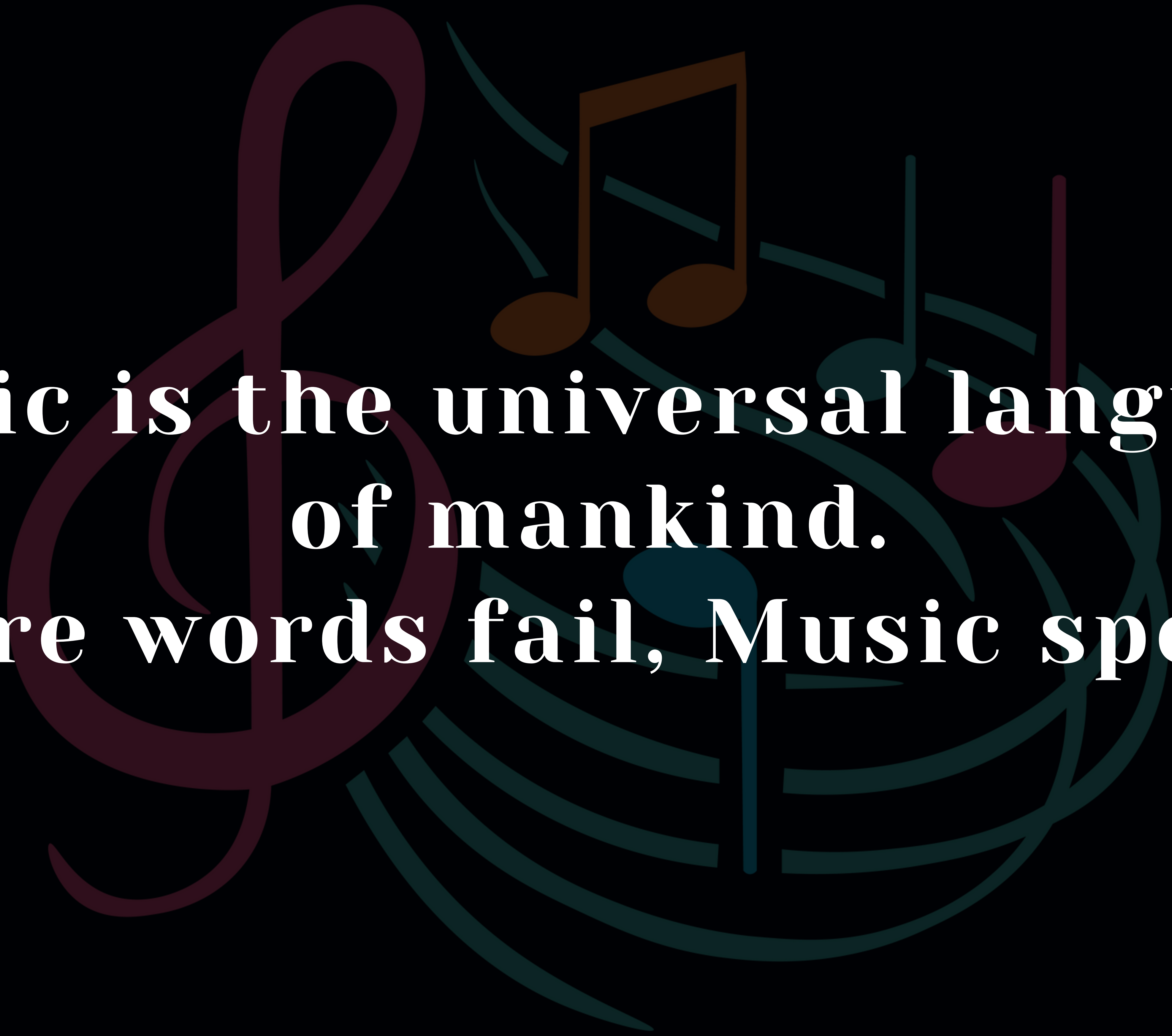

Music is the universal language
of mankind.
Where words fail, Music speaks.

Team BitBandits Present

VIBIN

Bringing people together!

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TechStack

Language: Java

Platform: Eclipse IDE

Wireframes: Figma

Data Structures : Binary Search Tree(BST), ArrayList, HashSet, Set.

Algorithm

Binary Search Tree (BST)

- The BinaryTree class represents a binary search tree where each node (TreeNode) has at most two children: a left child and a right child.
- The insert method inserts a new node into the binary search tree based on the username, ensuring that the tree remains a valid binary search tree.
- The findUser method searches for a user node in the binary search tree based on the username.

Tree Traversal

- The playRandomSong method demonstrates a form of tree traversal, where it randomly selects a child node (left or right) and recursively traverses down the tree until it reaches a leaf node (a node without any children).
- This traversal method is a form of depth-first search (DFS).

Algorithm

Other Algorithms

- The code includes methods for adjusting the volume of a song (adjustVolume) and finding the maximum number of common songs between two users (findMaxCommonSongs).
- These methods don't involve complex algorithms but rather perform simple comparisons and traversals.

Overall

- The code demonstrates the usage of BST data structure and basic tree traversal algorithms for managing a collection of songs associated with different users.

USP

USER TO USER ENGAGEMENT (within the App)

Based on the number of songs similar in each of the user’s playlists, we find similarities and rate their friendship level based on no. of common songs.

Users can also interact with their connections within the app by sending each other recommendations and maintaining a song streak that enhances their friendship level.

Working of App Through Wireframes and Github

Click to See UI!