### **Project Description:**

The DOST application is a revolutionary Friend Finder platform designed to foster meaningful connections and build lasting friendships in today's digital age. With its intuitive interface and advanced features, DOST aims to provide users with a seamless and enjoyable experience for discovering like-minded friends, irrespective of geographical boundaries.

## **Key Features:**

- **1. User Profile Creation:** Users can create detailed profiles highlighting their interests, hobbies, and preferences, facilitating accurate friend suggestions.
- **2. Real-time Messaging:** The application features real-time messaging functionality, enabling users to communicate instantly and build connections with newfound friends.
- **3. Accessibility Features:** DOST prioritizes accessibility, with features such as speechto-text functionality to cater to users with diverse needs.
- **4. Dynamic Visualization:** The React charts dynamically visualize the distribution of developers across different domains, allowing users to see real-time updates of developer counts.
- **5. Email Integration:** The application integrates with an email service provider (SendGrid) to send automated emails containing user queries to the developers directly.

# **Technology Stack:**

#### 1. Frontend Development:

- React.js: For building dynamic and responsive user interfaces.
- HTML/CSS: For structuring and styling the application's frontend components.

#### 2. Backend Development:

- Node.js: For building the server-side logic and handling HTTP requests.
- Express.js: As the web application framework for Node.js, facilitating the development of RESTful APIs.

- MongoDB: As the NoSQL database for storing user data, profiles, and interaction histories.

#### 3. Real-time Communication:

- Socket.IO: A library for implementing WebSocket-based communication in the application.

#### 4. Security Measures:

- JWT (JSON Web Tokens): For secure authentication and authorization of users.
- bcrypt.js: For hashing user passwords and enhancing data security.

#### 5. Deployment:

- onrender: Render helps software teams ship products fast and at any scale. It host everything from hundred-line prototypes to with hundreds of services, all with a relentless commitment to reliability and uptime.

By leveraging this technology stack, the DOST application delivers a robust and feature-rich platform for users to connect, interact, and forge meaningful friendships in a secure and inclusive environment.

Dheeraj Sharma (2115800009)

B.Tech(Hons.) CS

3<sup>rd</sup> Year

Luvkush Sharma(2115800015)

B.Tech(Hons.) CS

3<sup>rd</sup> Year