**Padre Conceicao College of Engineering**

**Department of Computer Engineering**

**Presents**

**Techyon 2023**

**9th ,10th 11th November**

**HackTech**

**Powered by**

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A National level Inter College Event

**Team Name:** Tech-Innovators

**Problem Statement Chosen:**

Create a platform that helps elderly individuals connect with their peers, access social activities.

**Abstract of Solution:**

The proposed website aims to bridge the social gap among elderly individuals by providing a dedicated platform, where they can connect with their peers and access a wide range of social activities. With the aging population, many seniors face isolation and loneliness. This offers a solution by facilitating meaningful connections and enhancing the quality of life for older adults. It offers a user-friendly interface for seniors to create profiles, connect with peers, and access social activities. The platform utilizes matchmaking features to help seniors find friends with similar interests and facilitates online communication, allowing them to chat and plan meetups. Additionally, This provides listings of senior-focused events and ensures safety measures for user protection. By promoting social engagement and companionship, this platform aims to enhance the overall well-being and quality of life for the elderly population.

**How will the solution help in real world:**

In the real world, a platform design to help elderly individuals connect with their peers and access social activities, and establishing connections with NGOs, holds immense potential for enhancing the well-being of seniors. Loneliness and social isolation among the elderly can lead to various health issues, both physical and mental. By offering a digital space for seniors to make friends and participate in social events, this solution directly addresses these concerns. Furthermore, collaborating with NGOs adds a layer of support, enabling access to crucial services, safety measures, and valuable community resources. Together, this platform creates a network of social interaction, emotional support, and safety for elderly individuals, improving their overall quality of life and ensuring they remain an active and integrated part of their communities.

**Brief of how your team will implement your solution:**

**Features:**

1. **User Profiles:** Elderly users can create profiles with information about themselves, including their interests, hobbies, and location.

2. **Matching Algorithm:** An intelligent algorithm suggests potential peer connections based on shared interests and proximity.

3. **Event Listings:** The platform lists various social events, workshops, and activities tailored to the interests of seniors.

4. **Messaging and Chat:** Users can communicate with each other through private messaging and group chats.

5. **Safety Measures:** Robust safety features, including user verification and reporting mechanisms, to ensure a secure environment.

6. **NGO Integration:** Collaboration with NGOs specializing in elderly care, enabling access to their resources, support services, and expertise.

7. **Community Forums:** Discussion boards and forums where users can share experiences, seek advice, and discuss various topics of interest.

8. **Calendar and Reminders:** A calendar feature to help users keep track of upcoming events and appointments.

9. **Feedback and Ratings:** Users can rate and provide feedback on events and connections to improve the platform continuously.

**Technologies to be used:-**

1. **Front-End Development:**

- **HTML/CSS:** For creating the website's structure and design.

- **JavaScript:** To add interactive features and improve user experience.

- **React or Vue.js:** JavaScript libraries for building user interfaces.

2. **Back-End Development:**

- **Server:** Node.js, Ruby on Rails, or Django for server-side logic.

- **Database:** PostgreSQL or MongoDB to store user data and activity information.

3. **Database Management:**

- **SQL Database:** Such as MySQL or PostgreSQL for structured data.

- **NoSQL Database:** Such as MongoDB for flexibility in handling unstructured data.

4. **User Authentication:**

- **OAuth or OpenID Connect:** For secure and easy user authentication.

- **JWT (JSON Web Tokens):** To manage user sessions.

5. **Real-Time Chat:**

- **Socket.io or Firebase Realtime Database:** For implementing real-time chat features.

6. **Mapping and Location Services:**

- **Google Maps API:** To integrate mapping and location-based features.

7. **Security and Encryption:**

- **HTTPS:** To secure data transmission.

- **TLS/SSL:** For secure socket layer encryption.

- **Web Application Firewall (WAF):** To protect against security threats.

8. **Feedback and Improvement:**

- **Analytics Tools:** Such as Google Analytics or Mixpanel to collect user data and behavior.

- **Issue Tracking:** Tools like Jira or Trello for managing user feedback and improvements.

9. **Hosting and Deployment:**

- **Cloud Services:** Such as AWS, Google Cloud, or Azure for hosting and scalability.

- **Containerization:** Docker and Kubernetes for container management.

- **Continuous Integration/Continuous Deployment (CI/CD):** Tools like Jenkins or Travis CI for automated deployment.

10. **NGO Collaboration:**

- **Integration with NGO APIs:** To connect with NGO resources and services.

11. **Data Backups and Recovery:**

- Regular data backup and recovery mechanisms to ensure data integrity.