FRONTEND ARCHITECTURE

1. Frontend Framework:

- **Framework**: **React.js** (for flexibility and interactive UI) or **Next.js** (for server-side rendering and enhanced SEO).
- **UI Components**: Use component libraries like **Ant Design** or **Material UI** for quick UI development and scalability.
- **State Management**: **Redux** for managing the game state across different screens and components.
- **Cryptocurrency Integration**: Utilize **Web3.js** or **TonWeb** to integrate with TON blockchain for handling NFTs and LongevityCoin (LONG) transactions.

2. Telegram Mini App Integration:

- **Telegram WebApp API**: Use **Telegram WebApp** to embed your game within Telegram and manage user sessions, game lifecycle, and in-app purchases.
- **Authentication**: Telegram provides built-in OAuth for user authentication and session management.

3. Game UI/UX:

- **Responsive Design**: Ensure the game is mobile-first, as users will primarily interact via Telegram on mobile devices.
- **Game Screen Flow**:
    1. **Home Screen**: Introduction to "Tap to Earn & Live Longer" concept with navigation to game modes.
    2. **Health Status Dashboard**: Display player's current lifespan, health status, and game level.
    3. **Card Collection**: Interface for viewing, trading, or upgrading **Healthy/Unhealthy Cards** and **Special Cards**.
    4. **Lifespan Booster**: Screen to apply NFTs or cards that improve health or longevity.
    5. **NFT Marketplace**: Users can purchase, sell, and trade NFTs using LongevityCoin.

4. Game Mechanics:

- **Timers & Tasks**: Track tasks related to hours, days, weeks, and months. Ensure accurate in-game timers.
- **Level System (LVL)**: Gamify health and longevity by giving users XP for completing health-based tasks or interacting with the game daily.
- **NFT & LongevityCoin Integration**: Users earn coins by completing tasks and can spend them in the game (e.g., purchasing boosters or cards).

- **Turbo Mode**: A feature where users can spend more resources (time, coins, etc.) to earn more quickly.

5. Crypto & Payment Integration:

- **TonWeb** or **Web3.js**: For managing in-game currency and NFTs. Users can buy, sell, and earn LongevityCoin (LONG) on the TON network.
- **Airdrop Feature**: Integration of airdrop mechanisms to reward users with tokens or NFTs as part of the game events.

6. Data Handling & User Experience:

- **Birth Date Input**: Allows players to input real-life birth data to estimate and track their in-game lifespan. Display countdowns or time remaining visually.
- **Health Data Upload (Stage 3)**: Option to upload health or wellness data to enhance gameplay and increase rewards.
- **Game Analytics**: Use tools like **Google Analytics** or **Amplitude** to track user interactions, game progression, and reward distribution.

7. Notifications:

- **Push Notifications via Telegram**: Remind users of pending tasks, upcoming lifespan events, and available rewards.

8. Multilingual Support:

- Use **i18next** for handling multiple languages to reach a global audience, especially for promoting the health-based nature of the game.