



## Course Name: Mobile Computing for Modern App Development

Course Code: ITA0306

### Q: Peer to Peer Interactions

Implementing peer-to-peer inter...	Reliable Connection Handling	Data Synchronization and Consistency	Security and Encryption
<p>← <i>Implementing peer-to-peer interactions in real-time in a mobile app</i></p> <p><b>Reliable Connection Handling</b></p> <p><b>Data Synchronization and Consistency</b></p> <p><b>Security and Encryption</b></p> <p><b>User Experience Design (UX)</b></p> <p><b>Scalability and Performance Optimization</b></p>	<p>←</p> <p><b>Reliable Connection Handling</b></p> <ul style="list-style-type: none"> <li>• Implement a robust connection handling mechanism to deal with scenarios such as device disconnections, network fluctuations, or interruptions</li> <li>• Ensures a seamless and reliable real-time experience by addressing common challenges in peer-to-peer networking</li> </ul>	<p>←</p> <p><b>Data Synchronization and Consistency</b></p> <ul style="list-style-type: none"> <li>• Develop a strategy for synchronizing data between connected devices to maintain consistency across the network.</li> <li>• Guarantees that changes made on one device are promptly reflected on all connected devices, supporting collaborative and synchronized interactions.</li> </ul>	<p>←</p> <p><b>Security and Encryption</b></p> <ul style="list-style-type: none"> <li>• Prioritize security by implementing encryption mechanisms for data transmitted between devices.</li> <li>• Protects sensitive information from unauthorized access, ensuring the privacy and security of user data during peer-to-peer interactions.</li> </ul>

User Experience Design (UX)	Scalability and Performance Optimiz...
<p><b>User Experience Design (UX)</b></p> <ul style="list-style-type: none"> <li>• Design an intuitive and user-friendly interface that clearly conveys the status of peer-to-peer interactions and provides users with easy-to-understand controls.</li> <li>• Enhances user engagement and satisfaction by offer</li> </ul>	<p><b>Scalability and Performance Optimization</b></p> <ul style="list-style-type: none"> <li>• Optimize the system for performance and scalability to handle an increasing number of connected peers efficiently.</li> <li>• Ensures the app remains responsive and reliable even as the user base and the number of simultaneous interactions grow.</li> </ul>

