# **Tactical TicTacToe ADR**

**Status: Accepted**

1. **UI toolkit: React Native Elements**

**Context:** The team must choose UI toolkit to make game’s (Tic Tac Toe) interface.

**Decision:** We select React Native Elements as UI toolkit.

**Rationale:** There are various reasons behind the use of React Native Elements as the UI toolkit. First, it offers a collection of pre-made, editable components that follow React Native guidelines, enabling a unified and aesthetically pleasing user interface. Second, it is essential for a game like Tic Tac Toe, where an easy-to-use user interface greatly enhances the enjoyment of the game. To further help with development and troubleshooting, React Native Elements features excellent documentation and community assistance.

1. **Navigation Strategy: React Navigation**

**Context:** The team needs to decide which Navigation Strategy they will use for Tic Tac Toe game.

**Decision:** We choose React Navigation as our Navigation Strategy.

**Rationale:** The choice of navigation strategy is React Navigation because of its broad use and adaptability. React Navigation's stack-based navigation mechanism is a good fit for handling several game screens and transitions in a Tic Tac Toe application since it meets very simple navigation needs. With a sizable user base and good upkeep, the library is guaranteed to receive regular updates and assistance. React Navigation's adaptability makes it simple to extend if the demands of the app's navigation change over time.

1. **Hardware: None (Basic device features only)**

**Context:** The team must decide on the hardware requirements for the game.

**Decision:** No additional hardware required.

**Rationale:** There is no need for extra hardware features like a speaker, fingerprint scanner, or GPS because the Tic Tac Toe app is so simple to use. Including superfluous hardware would increase the app's resource requirements and complicate the development process. Selecting for minimal hardware consumption simplifies the development process and guarantees wide compatibility with a variety of Android devices.

1. **Database Storage: Local (Encrypted)**

**Context:** The team must choose the database storage to store user data.

**Decision:** We decided to choose local storage with encryption.

**Rationale:** For ease of use and security, local game state storage and data encryption were chosen. There's no need for a sophisticated remote database because Tic Tac Toe only requires a minimal amount of game data. By eliminating dependencies and possible points of failure, local storage streamlines the architecture. An extra degree of security is added by encrypting the local storage, shielding game data from unwanted access. Data like signup and login details, player's name, and their score, etc. will be easily stored in local storage.