**Functional requirements and non-functional requirements for deliverable 2.**

**Functional requirements**:

1) User has 9 square boxes to choose for the first move.

2) As soon as user clicks on any square box it will display ‘X’ for the first move of first player and ‘O’ for the second player’s first move .Once the game started ‘X’ or ‘O’ will be displayed alternatively for each player.

3) User should have three options during the game so that he can reset, exit or start a new game.

4) User should be able to reset the game anytime during the game and it must clear the board of all the symbols or after the completion of the game user should get two options whether to exit or start a new game.

5) Tic tac toe is implemented using a java platform.

6) As soon as first player is able to make a single line of ‘X’ horizontally, vertically or diagonally or second player is able to make a single line of ‘O’ horizontally, vertically or diagonally, a dialogue box should pop up which should display who is the winner of the game and close the game.

**Non-functional requirements:**

1. **Performance**: System should be fast enough to display the user selection and it should not involve the delay of more than 1.5 seconds.
2. **Reliability**: System must be able to calculate the next move. As soon as any user is able to make same symbols in a row, column or diagonally it should seize the game.
3. **Scalability**: Tic tac toe can support all the future advancements keeping all the previous functionality.
4. **Usability**: As it automatically displays the symbols by clicking on any box so it’s easy to play.
5. **Testability**: As no major functionality is involved therefore it is easy to test.
6. **Portability**: System can run on different versions of the android.